

## HERD BEHAVIOR AND INFORMATION ADOPTION BY THE INSURANCE BUYERS: EVIDENCE FROM AN EMERGING ECONOMY

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ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: Sep 17, 2021 Revised: Oct 10, 2021 Accepted: Dec 20, 2021 Available Online: Jan 5, 2022</p> <hr/> <p><i>Keywords:</i> Behavioral finance, Irrational Behavior, Insurance buyers, Herd behavior, Elaboration likelihood model, Homophily theory, Information adoption model, G Power 3.1.</p> <hr/> <p><i>JEL Classification:</i> D91, G22</p>	<p>Most of the literature on insurance buying behavior explains the phenomenon by considering the traditional determinants of risk and return. This paper aims to investigate the role of reviews by insurance policyholders in influencing others to adopt a specific life insurance policy. Data from 271 insurance buyers were collected using a questionnaire specifically developed for this study. The questionnaire was developed using recognized scales. The information adoption by the insurance buyers has been explained through the theoretical lens of the information adoption model and herding. The proposed model was estimated using Structural Equation Modelling Technique. The results indicated that the information usefulness mediates the effects of argument quality and source credibility on information adoption by the insurance buyers. The results also showed that herding mediates the impact of source credibility on information adoption but attitude homophily and background homophily have no role in mobilizing information adoption. This study has implications for academicians and insurance policymakers. This study is the first of its kind that investigates insurance adoption from the perspective of central and peripheral routes of information processing path and herding. It also contributes by examining the mediating role of information usefulness and herding in explaining the process of insurance adoption.</p>

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### 1. INTRODUCTION

Life insurance is a long-term financial contract. It is unique in its nature because the insurer invests and somebody else might get the benefit. In the past few years, investment in life insurance has grown sharply. However, this increasing trend is restricted to developed economies. Insurance penetration is very thin in developing countries where the premium to GDP ratio for life insurance is just 0.57 percent (Insurance Association of Pakistan, 2020) as compared to the global average of 6.3 percent (State Bank of Pakistan, 2021; OECD, 2021). Despite the unexpected occurrence of chronic diseases, pandemics, and other natural disasters, the shortage and disparities in demand for insurance have been recognized widely in recent studies (Corcos, Montmarquette, & Pannequin, 2020; Dragos, Dragos, & Muresan, 2020).

The research on insurance buying behavior recognizes the effects of behavioral factors on insurance demand in addition to the factors identified by the traditional economic theories for a perfectly informed and rational homo economicus. The behavioral factors that influence an individual's decision include emotions, framing, loss aversion, ambiguity, and reference points. Besides the behavioral factor, these studies also emphasize the significance of economic, and socio-demographic characteristics in explaining the individual decision to buy a life insurance product.

Due to immense development in the telecommunication sector and immersion of e-commerce, the adoption of information regarding any product or service has become strongly dependent on the quality of reviews or feedback from the previous users. This aspect is gaining importance in explaining the adoption behavior of the customers (Hussain, Ahmed, Jafar, Rabnawaz & Jianzhou, 2017; Ismagilova, Slade, Rana, & Dwivedi, 2020; Lee, 2014; Wu & Lin, 2017). These studies identify argument quality and source credibility as the key determinants of information

adoption. Multiple studies have highlighted the role played by herding in influencing information adoption (Cai, Han, Li, & Li, 2019; Casavecchia, 2016; Chang, McAleer, & Wang, 2020).

The objective of this study is to investigate the behavioral factors that explain the information adoption by insurance buyers in an emerging country. Precisely, the impact of behavioral factors such as the quality of the argument, credibility of the source from where the information is collected, perceived usefulness of information and herding on information adoption by the insurance buyers is investigated. From the perspective of insurers, people can be classified as insured (those who have insurance), potential insureds (those who are seeking information to buy the insurance, and those who do not want to buy insurance (Dragos, Dragos, and Muresan, 2020). This study examines the process of information adoption by the insured through the theoretical lens of the Information Adoption Model (IAM) (Sussman & Siegal, 2003). This model describes how the information received influences the thinking process of an individual. The process of information adoption by the insureds is explained through this model. It is theorized that the information by the reviewers (people who have already purchased insurance policies) affect the thinking process of the potential insurance buyers through two routes, namely the central and the peripheral routes (explained in Section 2.1).

This study contributes to the existing literature in four ways. First, the study explains the information adoption behavior of insurance buyers in a country with a very low insurance penetration in terms of central and peripheral cues. Secondly, it examines the role of homophily theory in explaining the information adoption process. Thirdly, it contributes by examining the mediating roles of information usefulness and herding in describing the information adoption process. Finally, it contributes by using structural equation modelling (SEM) to estimate the proposed model. Data from 271 insured individuals were collected through a semi-structured questionnaire specially developed for this research study. The findings of this study confirm that information adoption by the insured is influenced by the central and peripheral routes of information passed on by the insureds in the form of reviews. The results confirm that the effects of argument quality and source credibility on the adoption of insurance information get mediated by the level of usefulness of information. The results also confirm that herding mediates the impact of source credibility on the adoption of insurance information by the insureds. However, the data did not provide any evidence to support the impact of attitude homophily and background homophily on information adoption by the insureds. The following section presents the theoretical background of the hypotheses conjectured in this study. It also presents the theoretical model proposed and tested in this study.

## 2. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

In this study, we explain the process of adoption of insurance information through the theoretical perspectives of the information adoption model (IAM), herd behavior, and the homophily theory.

### 2.1 Central and peripheral routes, information usefulness, and information adoption

Sussman and Siegal (2003) presented the information adoption model (IAM). This model seeks to explain the process of information adoption by taking strands from the theories of adoption of behavior and the theory of informational influence. Theories that explain adoption of behavior include theory of reasoned action (Ajzen, Fishbein & Heilbroner, 1980), theory of planned behavior (Ajzen, 1991), and the technology acceptance model (Davis, 1989). These theories explain that the beliefs of an individual determine the adoption of a behavior. The influence of information explained by IAM is derived from Elaboration Likelihood Model (ELM). This model explains the impact of information on the thinking process of an individual. It states that the information is processed through two routes, namely central and peripheral. If the information undergoes a careful and thoughtful process, it takes the central route but if the source of information is given more importance, instead of the information itself, it follows the peripheral route.

According to IAM, the individuals consider usefulness of information (IU) as the key determinant of information adoption (IA). The usefulness of information (IU) is assessed through two routes, central and peripheral. If the receiver of the information gives more importance to the content of the information, he is using the central route to assess the usefulness of the information, whereas if the receiver gives more importance to the form in which information has been passed on, the peripheral route is followed. According to IAM, argument quality (AQ) takes the central route to determine the usefulness of the information. By argument quality, we mean the strength to argue

with a message. The dimensions of accuracy, consistency, completeness, and objectivity of the argument's quality shape the perception of information usefulness. Based on this explanation, we hypothesize that:

*H1: AQ is positively associated with IA*

Source credibility (SC) is the second determinant of information usefulness. It is defined as the trust of the receiver of information towards the source of information (Petty & Cacioppo, 1986). It is an important factor in determining the usefulness of information particularly when the information is related to a serious matter like investing in an insurance policy (Kang, & Namkung, 2019). Trustworthiness, reliability, and expertise are the main dimensions of source credibility that determine the level of usefulness of information perceived by the recipient. When the receiver considers a piece of information useful for him, he adopts it along with the suggestions and opinions about it (Hu & Yang, 2020; Hussain, Ahmed, Jafar, Rabnawaz & Jianzhou, 2017; Cheung, Lee, & Rabjohn, 2008; Sussman & Siegal, 2003; Zhu, Chang, & Luo, 2016; Tseng & Wang, 2016; Gunawan & Huarng, 2015; Chen, Chen & Hsu, 2011). Chen and Ku (2013) and Alpar, Engler, and Schulz (2015) used the ELM to explain behavioral loyalty and perceived usefulness and confirmed that information is processed through the central (argument quality) and peripheral (source credibility) routes.

IAM has been used extensively to explain the information adoption behavior of the hotel searchers (Hu, & Yang, 2020), students (Shen, Cheung & Lee, 2013), tourists (Lee, 2017; Filieri and McLeay, 2014), online social communities (Cheung et al., 2009), restaurant-goers (Salehi-Esfahani, Ravichandran, Israeli, & Bolden III, 2016) and general consumers (Shen, Zhang, & Zhao, 2016; Wang, Fan, & Bae, 2019). However, the literature that explains the process through which the insurance buyers adopt information about a specific insurance policy remains scant.

According to Shen et al. (2016), the perceived usefulness of information plays a pivotal role in driving people to adopt the information. Studies based on IAM provide sufficient evidence to support that argument quality, information usefulness, and source credibility play a vital role in the adoption of information (Kang & Namkung, 2019; Hussain et al., 2017; Lee, 2017; Shen et al., 2016; Salehi-Esfahani et al., 2016; Sussman & Siegal, 2003). Based on the findings of these studies, this study attempts to examine the direct and indirect associations of argument quality and source credibility with the adoption of information of an insurance policy. Following the IAM, the role played by the usefulness of the information in explaining the impact of argument quality and source credibility on information adoption is also considered. The proposed theoretical model is presented in Figure 1. Hence, we hypothesize that:

*H2: IU significantly mediates the relationship between AQ and IA*

*H3: SC is positively associated with IA*

*H4: IU significantly mediates the relationship between SC and IA*

## **2.2 Herding effect, source credibility, and homophily dimensions**

Herding is defined as the decision to passively follow the behavior of others and dismissing one's personal information (Camara, 2017). People try to mimic others' behavior particularly when they have to make investment decisions (Asad, Khan & Faiz, 2018), particularly when there are information asymmetries (Li, Rhee & Wang, 2017; Shah et al., 2017). Herding has been classified as rational and irrational. Herding caused by correlated information, and observational learning is called rational herding. Herding is termed irrational when economic agents follow others' decisions as a popular choice or a social norm (Li et al., 2017; Wang, Guo, & Sun, 2019).

Under information asymmetries, less-informed individual insurance buyers follow the information shared by sources perceived as reliable by the recipients of the information. These recipients also follow fads or popular choices and represent irrational herd behavior. The process of following popular choices has two dimensions. First, the decision-maker discounts his private information or belief. Secondly, he imitates others whom he thinks are more reliable and similar to him (Banerjee, 1992; Sun, 2013). The latter part can be explained with the help of homophily theory. Homophily is the tendency of individuals to associate with similar others. According to Homophily theory, individuals with a similar culture, demographic background, values, or attitudes tend to show affinities towards a certain behavior (Shen et al., 2016; Kets & Sandroni, 2019). Some scholars have observed strong influence of affinities on financial decision-making (Calvó-Armengol et al., 2009), and the information diffusion (Golub and Jackson, 2012).

Recent studies based on homophily theory identify two non-orthogonal antecedents of homophily. These are attitude homophily and background homophily. Attitude homophily is defined as the level to which a person believes that his attitude, preferences, and values are like the other person. On the other hand, background homophily is defined as the level to which a person perceives that the other person is like him in terms of his social class, income group (McCroskey, McCroskey & Richmond, 2006; Ladhari, Massa & Skandrani, 2020).

Kets and Sandroni (2019) investigated the concept of homophily and concluded that attitude homophily is a primary determinant of social interaction. Shoulders and Smith (2018) also studied the role of attitude homophily and stated that students' perception of attitude and background homophily help in determining the teacher's credibility. According to Chen (2008), collective opinions from individuals with similar preferences are more perceived as more informative and analytical. Levin and Cross (2004) highlighted that people who have the same values are expected to trust each other more as compared to others with opposite values. Hence, we can theorize that insurance buyers tend to trust that information sources more whom they think have similar values as evidenced by the research studies of Banerjee (1992), and Shen, Zhang, and Zhao (2016).

According to McCroskey et al. (2006), the information from sources with a social status and economic situations similar to those of the recipient of the information is considered to be reliable, and trustworthy. Blanchard and Markus (2004) showed that trust and identification in a social group are positively related. Hence, the individuals tend to trust the information received from sources that are recognizable in their social groups by discounting their personal information. The actions become more highlighted and obvious when all individuals in a social group track and appreciate the information source that has similar social background persistently. Based on the theoretical foundation discussed above, we theorize that source credibility, attitude homophily, and background homophily influence information adoption by insurance buyers. We also propose that herding mediates the impact of reviewers' credibility, attitude homophily, and background homophily on the information adoption by the insurance buyers (Figure 1). These propositions can be framed as:

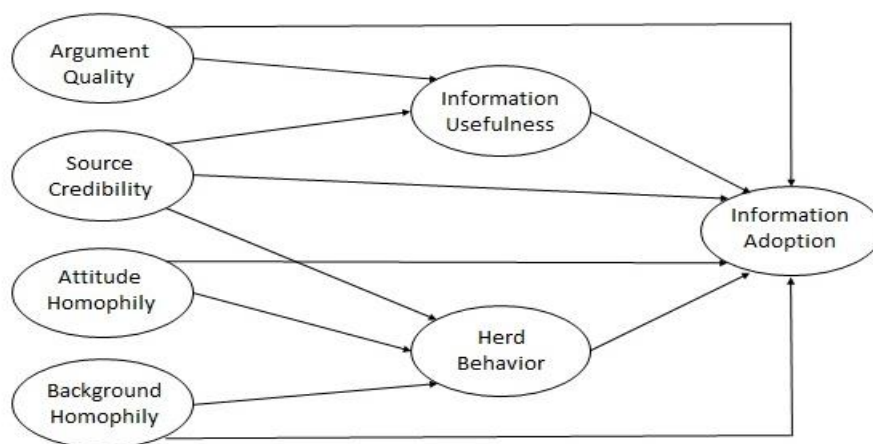
**H5:** Herding significantly mediates the relationship between SC and IA

**H6:** AH is positively associated with IA

**H7:** Herding significantly mediates the relationship between AH and IA

**H8:** BH is positively associated with IA

**H9:** Herding significantly mediates the relationship between BH and IA



**Fig. 1.** Theoretical model

### **3. RESEARCH METHODOLOGY**

The theoretical model proposed and tested in this study is provided in Figure 1. To reach the insurance buyers and get the desired information, three steps were followed. First, a comprehensive review of the literature was done to identify the factors that explain the process of adoption of information regarding insurance. In the second step, we have developed a questionnaire using recognized scales, and in the final step, we have used this questionnaire to collect data from the insurance buyers.

#### **3.1 Participants and procedure**

500 individuals were randomly selected from the list of life insurance buyers provided by EFU Life Assurance Limited (EFU LAL). The insurance company was chosen randomly from the seven life insurance companies operating in Pakistan. The lists of life insurance policy buyers for 2019 were obtained from the head office of EFU LAL situated in Lahore. The policyholders selected on a random basis were contacted and requested an appointment. A brief introduction of the researcher and research was also provided in the telephonic conversation. Each respondent was visited in person and requested to fill in the questionnaire specifically developed for this study. The responses were collected in January and February 2020. Data from 271 respondents were used for the estimation of the proposed model.

For the determination of the sample size G Power 3.1 sampling tool was used (Faul, Erdfelder, Buchner, & Lang, 2009). Assuming the effect size ( $f^2$ ) of 0.15, alpha of 0.5, power of 0.95, the suggested minimum sample size was 89. The rule of thumb suggested by Hair, Babin, Anderson, and Black (2018) is to have at least five observations for each item. This makes the minimum sample size of 150 observations ( $= 5 \times 30$ ). The rule for the sample size for CFA and SEM based on Monte Carlo Simulations suggests the use of 3 indicators for each latent variable with the number of observations greater than 200. Monte Carlo simulations with this restriction on the sample size always converge resulting in a proper solution (Kyriazos, 2018; Kelloway, 2015). Our sample with 271 responses satisfies all three criteria for the determination of sample size.

The demographic analysis of the respondents indicates that most of the respondents were males (90.4 %). 52.8 % of the total respondents were married, one was divorced and the remaining 46.9% were single. 54.6 percent of the total respondents were from the age category of 20 to 40 years. The remaining 45.4% of respondents were above 40 years old. Most of the respondents (41.7%) were working in the finance and accounting departments. 19.2% were from the sales and marketing departments. The remaining 39.1% were working in Production and Engineering, Human Resource, Research and Development, and other departments. 56% of the total respondents were having graduate degrees. The remaining 44% were having post-graduate degrees.

#### **3.2 The questionnaire**

The questionnaire developed for this study comprises two sections. Section I contains questions based on the demographic information of the respondents. Section II includes thirty questions developed to measure the seven variables woven together to explain the information adoption process (See Figure 1). The questionnaire was refined after conducting a pilot study. For pilot testing, ten respondents were asked to fill up the questionnaire.

#### **3.3 Measures**

To measure argument quality, four questions were used. The first two questions were taken from Park, Lee, and Han (2007) and Sussman and Siegal (2003). The remaining two items were developed by the researchers (AQ12\_c and AQ12\_d). For the measurement of source credibility, we have used five questions. The first four questions were taken from the scale prepared by Sussman and Siegal (2003). One question "I follow the recommendations of the information sources," was developed by the researchers. The scale for information usefulness developed by Sussman and Siegal (2003) was used to measure this variable. This variable is measured through three questions.

The scales for attitude homophily and background homophily adapted from Brown and Reingen (1987) and McCroskey et al. (2006) were used in this study. Five questions were used to measure attitude homophily and five questions were used to measure background homophily. Herd behavior scale adapted from Luong and Ha (2011) was used for the present study. This variable was measured using five questions. Information adoption was measured using



the scales developed by Liang, Ho, Li, and Turban (2011) and Watts and Zhang (2008). This variable was measured using three questions.

For all seven latent variables, a 5-point Likert scale ranging from 1 “not at all” to 5 “to a great extent” was used. The variables that form the proposed model, their definitions, all the items used to measure these variables, and the sources from where these items were adapted are provided in Table 1.

**Table 1.** Constructs and items used in the questionnaire

Construct	Definition	Item	Adapted from
Argument Quality	The extent to which the receiver of the argument considers it complete, correct, and consistent.	AQ12_a: The information provided is complete.	Sussman and Siegal, (2003) and Park et al. (2007).
		AQ12_b: The information provided is accurate.	
		AQ12_c: The information provided is objective.	AQ12_c and AQ12_d are developed by the authors
		AQ12_d: The information provided is consistent.	
Source credibility	Individual’s perception of the credibility of information sources instead of the content itself.	SC12_f: People from whom information is received are knowledgeable on this topic	Sussman and Siegal (2003)
		SC12_g: People from whom information is received are experts on this topic	SC12_j is developed by the authors.
		SC12_h: People from whom information is received are trustworthy.	
		SC12_i: People from whom information is received are reliable	
		SC12_j: I follow the recommendations of the information sources	
Information usefulness	The level of perceived value and usefulness of the received information.	InU_a: The information you receive from external sources is valuable.	Sussman and Siegal (2003)
		InU_b: The information you receive from external sources is informative.	
		InU_c: The information you receive from external sources is helpful.	
Attitude homophily	The extent to which a person considers that his values, preferences, and attitudes are similar to another person.	AH12_o: People from whom information is received share my values.	Brown and Reingen, (1987) and McCroskey et al. (2006).
		AH12_p: People from whom information is received have a lot in common with me.	
		AH12_q: People from whom information is received have almost the same preferences as mine.	AH12_q, AH12_r, and AH12_s are developed by the authors.
		AH12_r: People from whom information is received do not have a lot in common with me.	
		AH12_s: People from whom information is received have almost the same attitudes as mine.	
Background homophily	It indicates the similarities in social background.	BH12_k: People from whom information is received come from the same social group to which I belong.	Brown and Reingen, (1987) and McCroskey et al. (2006).

		BH12_l: The background of people from whom information is received is similar to mine.	
		BH12_m: People from whom information is received have almost the same economic situation as mine.	BH12_k, BH12_m, and BH12_n are developed by the authors.
		BH12_n: People from whom information is received are from my social class.	
		BH12_o: I follow the recommendations of the information sources that I know for many years.	
Herd behavior	The decision to disregard his own (personal) information to follow the behavior of others.	Her10_u: Other investors' decision of choosing a life insurance type has an impact on my decision of buying a certain investment decision.	Luong and Ha (2011).
		Her10_v: I believe other investors' decisions are more credible.	Her10_v is developed by the authors.
		Her10_w: Other investors' decisions of investing in a certain life insurance policy have an impact on my investment decisions.	
		Her10_x: I usually respond according to the variations in other investors' decisions when there is a change in the financial situation.	
		Her10_y: Other investors' decisions about insurance have an impact on my investment decisions.	
Information adoption	The process in which the investor perceives the information useful and adopts it to enhance their knowledge to make rational decisions.	InA_a: I observe the investment experiences of other insurance buyers when I have to purchase insurance for myself.	Liang, Ho, Li, and Turban (2011); Watts and Zhang (2008).
		InA_b: I have asked other insurance buyers to give me suggestions before I purchased the insurance policy for myself.	
		InA_c: The life policy I have bought was recommended by other insurance buyers.	

## 4. DATA ANALYSIS AND RESULTS

### 4.1 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was performed to analyze the structure, measurement properties, and dimensionality of factors. The results of EFA were also used to eliminate some items with low or cross-loadings. Table 2 presents the results of EFA. Data adequacy was tested in two steps. First, the normality of each item was assessed by calculating the coefficients of skewness and kurtosis. The values for skewness and kurtosis indicated an acceptable approximation of normality. Second, we estimated the Kaiser-Meyer-Olkin Measure to test sample adequacy. Its value was 0.816, indicating that the sample is adequate. This was substantiated by a significant value of Bartlett's Test of Sphericity with Chi-Square (406) of 5735.569 ( $p < 0.000$ ) (Hair et al., 2018). These criteria led to a seven-factor solution explaining 68.05% variation.

**Table 2.** Results of Exploratory Factor Analysis

Constructs	Items	Components	Cronbach's alpha >0.7				
Herd	Her10_u	.616	.827				
	Her10_v	.584					
	Her10_w	.823					
	Her10_x	.800					
	Her10_y	.549					
Information usefulness	InU_a	.768	.873				
	InU_b	.901					
	InU_c	.837					
Argument quality	AQ12_a	.823	.860				
	AQ12_b	.865					
	AQ12_c	.773					
	AQ12_d	.547					
Source credibility	SC12_f	.998	.896				
	SC12_g	.744					
	SC12_h	.635					
	SC12_i	.915					
	SC12_j	.639					
Background homophily	BH12_k	.914	.960				
	BH12_l	.943					
	BH12_m	.913					
	BH12_n	.931					
Attitude homophily	AH12_o	.948	.918				
	AH12_p	.644					
	AH12_q	.798					
	AH12_r	.870					
	AH12_s	.947					
Information adoption	InA_a	.818	.875				
	InA_b	.916					
	InA_c	.784					
Eigen value	6.02	5.09	3.20	2.49	2.23	1.56	1.20
Variance %	20.784	17.575	11.038	8.608	7.690	5.402	4.139



According to Hair et al. (2018), factor loadings above 0.5 are satisfactory. Following this criterion, we have taken five items for herding with Cronbach’s alpha of 0.827. The factor loadings varied from 0.549 to 0.823. For information usefulness, three items with factor loadings of 0.768, 0.901, and 0.837 were taken. The value of Cronbach’s alpha for the three items used to measure information usefulness was 0.873. All four items are taken for measuring argument quality qualify with factor loadings ranging from 0.547 to 0.865. The value of Cronbach’s alpha for argument quality was 0.86. All five items taken to measure source credibility have factor loadings greater than 0.6. The Cronbach’s alpha value was estimated to be 0.8965 for the items used for source credibility. For the measurement of background homophily, five items were used. One item BH12\_o was dropped due to factor loading less than 0.5. The other four items have been considered with Cronbach’s alpha value of 0.96. Five items with factor loadings greater than 0.5 qualify as measures for attitude homophily. Its Cronbach’s alpha value was 0.918. Three items qualify for the measurement of information adoption with factor loadings greater than 0.5. The Cronbach’s alpha value for the items used to measure information adoption was 0.875. For a construct to be internally consistent or reliable, its Cronbach’s alpha must be greater than 0.7 (Nunnally, 1978). Following this criterion, it can be stated that the scales used for the measurement of all seven variables are internally consistent and reliable.

**4.2 Confirmatory Factor Analysis (Measurement Model)**

Next, we have done the confirmatory factor analysis (CFA) to examine the uni-dimensionality and validity of the measurement model. The measurement model was estimated using AMOS v-24. The final version of the measurement model was achieved after dropping AH12\_r due to factor loading less than 0.6. For evaluation of the model fit, we have followed the standard presented by best practices (Hair et al., 2018; Gaskin, 2016). To determine construct validity, we have assessed convergent validity and discriminant validity by calculating correlation coefficients between constructs. These values are given in Table 3. Common method bias-adjusted values of mean and standard deviation are presented in columns 2 and 3 of Table 3. Common method bias is discussed in Section 4.3. The values of correlation indicate that the constructs that are theoretically associated with one another show high correlation and the variables that are not theoretically associated have low or no correlation coefficients. This ensures the presence of convergent and discriminant validity. Furthermore, for the assessment of convergent and construct validity, we have calculated average variance extracted (AVE), and composite reliability (CR) values. These values are presented in the last two columns of Table 4.

**Table 3.** Discriminant Validity

Construct	CMB adjusted values		IA	AH	BH	SC	Herd	AQ	IU
	Mean	S.D.							
IA	2.9959	.8993	<b>0.841</b>						
AH	3.5671	.9864	0.007	<b>0.860</b>					
BH	3.5745	1.0171	0.002	0.362	<b>0.919</b>				
SC	3.3348	.9096	0.230	-0.084	-0.035	<b>0.812</b>			
Herd	2.6669	.6181	0.268	0.044	0.120	0.260	<b>0.721</b>		
AQ	3.2001	.9781	0.095	0.036	0.148	0.038	0.633	<b>0.783</b>	
IU	2.8326	.9502	0.380	0.106	0.105	0.184	0.366	0.303	<b>0.837</b>

Note: The bold values in the diagonal are the square root of average variance extracted (AVE) for each construct. The values of correlations between constructs are reported below the diagonal.

If the value of AVE for a construct is greater than 0.5, it means it possesses convergent validity. Similarly, if the value of CR for a construct is greater than 0.7, it shows internal consistency and constructs validity (Netemeyer, 2003). Cronbach’s alpha values (given in Table 2, last column) also represent internal consistency. The values of AVE, CR, and Cronbach’s alpha ensure the scales used to measure all seven variables possess convergent and

construct validity and are reliable (Hair et al., 2018; Gaskin, 2016). To ensure the discriminant validity of a construct, the square root of the AVE for each factor must be greater than the correlation between that construct and any other construct taken in the model. The values of square roots of AVE of each construct and the corresponding values of correlation (bold values in the principal diagonal) are presented in Table 3. These values indicate that the constructs used possess sufficient discriminant validity (Fornell and Larcker, 1981).

Table 4 presents the results of the measurement model. It shows that the loadings of all items used to measure the seven variables being studied were greater than 0.6, the AVEs of each construct were greater than 0.5, and the CRs were higher than 0.7 (Hair et al., 2018).

**Table 4.** Measurement Model

Variables	Items	Standard factor loading (Estimates)	Standard deviation	t-value	AVE >0.5	CR >0.7
Herd	Her10_u	0.668	1.014		0.521	0.812
	Her10_w	0.786	1.105	10.442		
	Her10_x	0.708	1.039	9.697		
	Her10_y	0.719	1.161	9.813		
Information usefulness (IU)	InU_a	0.782	1.310		0.700	0.875
	InU_b	0.893	1.283	14.811		
	InU_c	0.832	1.240	14.213		
Argument quality (AQ)	AQ12_a	0.854	1.241		0.613	0.863
	AQ12_b	0.817	1.263	15.273		
	AQ12_c	0.791	1.169	14.659		
	AQ12_d	0.655	1.134	11.466		
Source credibility (SC)	SC12_f	0.908	1.431		0.659	.905
	SC12_g	0.786	1.437	16.175		
	SC12_h	0.731	1.204	15.556		
	SC12_i	0.945	1.275	24.267		
	SC12_j	0.651	1.198	12.937		
Background homophily (BH)	BH12_k	0.888	1.199		0.845	.956
	BH12_l	0.968	1.141	26.577		
	BH12_m	0.922	1.093	23.92		
	BH12_n	0.897	1.164	28.89		
Attitude homophily (AH)	AH12_o	0.923	1.088		0.739	.933
	AH12_p	0.655	1.283	13.362		
	AH12_q	0.869	1.216	21.648		
	AH12_r	0.852	1.100	22.056		
	AH12_s	0.966	1.012	30.079		

Information adoption (IA)	InA_a	0.838	1.135	0.707	.878
	InA_b	0.908	1.134	16.334	
	InA_c	0.77	1.182	14.233	

### 4.3 Common method bias

The estimated model was tested for common method bias (CMB). This was done to check whether variations in responses are due to the questionnaire used or due to the actual tendency of the respondents to behave in the theorized way (Gaskin, 2016; Podsakoff, MacKenzie, Lee & Podsakoff, 2003). For this, the method proposed by Archimi, Reynaud, Yasin, and Bhatti (2018) was employed. This method is based on the common latent factor (CLF). This method involved estimation of a modified measurement model. The actual measurement model was modified by introducing a latent factor in the model (see Fig. 2). Then the chi-square difference test was done to test whether the unconstrained model and the model with the CLF are same. The result of the Chi-square difference test turned out to be significant implying that method bias does occur in our measures. Some of the regression weights changed dramatically i.e., the deltas were more than 0.2. Based on these results, the model with CLF was retained for our structural model (by imputing the factor scores in AMOS in the presence of CLF), which provided CMB-adjusted values.

The values of model fit indicators were  $\chi^2 = 403.989$  with  $df = 299$  and  $\chi^2 / df = 1.3$  ( $p < 0.001$ ). Goodness of fit index (GFI) = 0.908; Incremental fit index (IFI) = 0.979; Comparative fit index (CFI) = 0.979; Normed fit index (NFI) = 0.925; and root mean square error of approximation (RMSEA) = 0.036. The model fit parameters are in the acceptable range. The multi-collinearity of the constructs was also examined. The results showed that the variance inflation factors (VIF) ranged from 1.25 to 2.58, which were far below 10 as indicated by prior research. Hence, the variables of the study do not show evidence of multicollinearity (Hair et al., 2018; Gaskin, 2016).

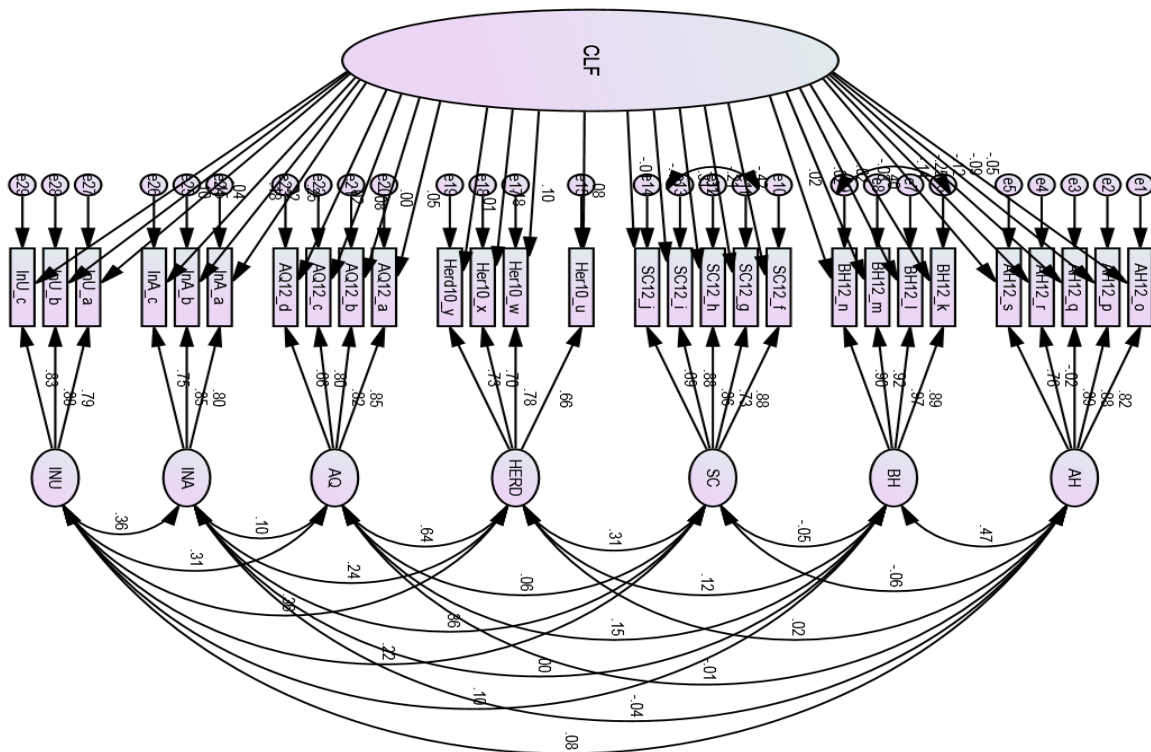


Figure 2. Common latent factor

#### 4.4 Structural Model

The structural model was estimated to test the proposed theoretical model given in Fig. 1. The model fit values<sup>1</sup> suggest that the model fits the data well with  $X^2/df = 1.39$ ;  $p < 0.001$ ,  $CFI = 0.970$ ;  $RMSEA = 0.042$ ,  $SRMR = 0.037$ ;  $P\text{-Close} = 0.109$ . To assess whether IU mediates the impact of AQ, and SC on IA and Herding mediates the impact of SC, AH, and BH on IA, we have estimated two models. The results of the two estimated structural models are presented in Table 5. First, we have estimated the model given in Figure 1 without including the two mediators, namely IU and Herding to estimate the direct effects of AQ, SC, AH, and BH on IA. The results showed that AQ is directly and significantly related to IA with  $\beta = 0.082$  and  $p < 0.05$ . This provides evidence that H1 is accepted. The results also showed that SC is positively and significantly related to IA with  $\beta = 0.261$  and  $p < 0.05$ . This result supports the suggested H3. However, the direct effects of AH and BH were estimated to be positive and negative with coefficients of 0.045 and -0.005 but both effects are insignificant indicating that AH and BH do not influence information adoption by the insurance buyers. These results suggest that H6 and H8 were rejected.

Next, the proposed model given in Fig. 1 was estimated by including IU and Herding as the mediators. The model fit values indicate that the estimated model is a good fit with  $X^2/df$  (p-value) = 1.66 (0.00),  $CFI = 0.976$ ;  $SRMR = 0.037$ ;  $RMSEA = 0.039$  and  $p\text{-close} = 0.901$ . For the estimation of direct and indirect effects with mediators, the bootstrapping analysis was done using 2000 subsamples. The analysis found that the direct effect of AQ on IA became insignificant with  $\beta = -0.06$  and  $p > 0.10$  but the indirect paths (AQ  $\rightarrow$  IU and IU  $\rightarrow$  IA) were estimated to be positive and significant with  $\beta = 0.26$ ,  $p < 0.01$ , and  $\beta = 0.28$ ,  $p < 0.01$ , indicating that IU fully mediates the effect of AQ on IA. This result supports the suggested H2. The direct effect of SC on IA in the model with mediators was estimated to be  $\beta = 0.18$ ,  $p < 0.01$ , and the indirect paths of SC  $\rightarrow$  IU and IU  $\rightarrow$  IA were estimated to be  $\beta = 0.18$ ,  $p < 0.01$ , and  $\beta = 0.28$ ,  $p < 0.01$ . These results show that IU partially mediates the effect of SC on IA. This result confirms the theorized H4. With the introduction of Herding as the mediator the direct effect of SC on IA reduced from  $\beta = 0.261$ ,  $p < 0.01$  to  $\beta = 0.18$ ,  $p < 0.01$ . The indirect paths were estimated with  $\beta = 0.24$ ,  $p < 0.01$  (for SC  $\rightarrow$  Herd) and  $\beta = 0.13$ ,  $p < 0.01$  (for Herd  $\rightarrow$  IA). These results indicate that herding partially mediates the effect of SC on IA. This result confirms the suggested H5. The results also show that neither AH and BH have any significant effect on information adoption, nor do they influence IA through Herding. The estimated direct effects of AH and BH on IA were  $\beta = 0.045$ ,  $p > 0.05$ , and  $\beta = -0.005$  and  $p > 0.05$  respectively. The direct effects of AH and BH with Herding as the mediator were estimated to be  $\beta = 0.02$ ,  $p > 0.05$ , and  $\beta = -0.03$ ,  $p > 0.05$ . The paths showing the effect of AH on IA via were estimated to be  $\beta = 0.06$ ,  $p > 0.05$ , and  $\beta = 0.13$ ,  $p < 0.01$ . These results confirm that H7 was rejected. The paths representing the effect of BH on IA via Herding also show an insignificant relationship between BH and Herding with  $\beta = 0.04$ ,  $p > 0.05$ , leading to rejection of H9.

**Table 5.** Standardized Regression and Mediation Analysis

	Direct $\beta$ without Mediator	Direct $\beta$ with Mediator	Indirect $\beta$	Mediation type observed
AQ – IU – IA	0.082**	-0.06	0.26***X0.28*** =0.0728	Full Mediation
SC – IU – IA	0.261***	0.18***	0.18***X0.28*** =0.0504	Partial Mediation
SC – Herd – IA	0.261***	0.18***	0.24***X0.13*** =0.0312	Partial Mediation
AH – Herd – IA	0.045	0.02	0.06X0.13*** =0.0078	-
BH – Herd - IA	-0.005	-0.03	0.04X0.13*** =0.0052	-

<sup>1</sup>  $X^2$  = Model Chi-Square;  $df$ =degrees of freedom;  $CFI$ =Comparative Fit Index;  $SRMR$  = Standardized Root Mean Square;  $RMSEA$ =Root Mean Square Error of Approximation;  $p\text{-close}$  = a "p-value" for testing the null hypothesis that the population  $RMSEA$  is no greater than .05.

## **5. DISCUSSION**

This study elucidates the information adoption process by insurance buyers in the context of an emerging economy. The process explained validates that people use information through central and peripheral routes to decide whether they will adopt a certain insurance policy but the information processed through peripheral routes carries more weightage in shaping the decision in favor of an insurance policy. Zhu et al. (2016) investigated the influence of C2C communication on purchase decisions and found similar results. Findings of this study showed that source credibility (peripheral route) has a relatively greater effect on information adoption as compared to the effect of argument quality (central route). Another important dimension explored is that for the peripheral route, the effect of knowledge and reliability of the reviewer were considered to be more important as compared to the other factors measuring source credibility. The impact of the central route is weaker but significant. For the central route, the completeness of information was valued the most among factors used to measure argument quality.

This study affirms that information usefulness evaluation has a direct and significant effect on information adoption. This result is consistent with the findings of Filieri et al. (2018), Ismagilova et al. (2020), Sussman and Siegal (2003), and Zhu et al. (2016). The main purpose of people seeking information from previously insured individuals is to collect details about their life insurance policies. They assess the argument's quality and the credibility of the individuals from whom the information is collected. These two factors help in shaping the perception of whether the collected information is useful for them or not. The results suggest that insurance buyers in Pakistan are likely to adopt external sources reviews that have a greater argument quality and higher source credibility. It is also observed that if the information is perceived to be useful, it is adopted by potential insurance buyers. Hence, the perception of information's usefulness positively mediates the impact of argument quality and credibility of the reviewer on the adoption of information by potential insurance policy buyers.

In addition, the insureds sampled in this study stated that insurance buying is a ramification of herding also. Being a developing country, the level of financial literacy is very low among the people of Pakistan. Moreover, the insurance sector is not developed so there are severe asymmetries in information about the insurance sector and the various products it offers. Hence, people follow others whom they consider credible or reliable. This study also accounted for the impact of attitude homophily and background homophily on information adoption by potential insurance buyers. The results showed that the information seekers follow the advice or opinion by the reviewers in adopting a certain insurance policy by considering the factors such as quality of argument and credibility of the reviewer without considering that the reviewer has attitude and/or background similar to theirs.

Insights from the framework of the insurance adoption process discussed above have theoretical and practical implications. This study contributes theoretically by presenting a theoretical model that explains the insurance adoption mechanism by uniting the IAM and the herd behavior. The model may help the researchers to have a deeper understanding of the insurance adoption process. They can extend the model to explain the effect of other behavioral biases not taken in this study. This study has practical implications for policymakers to increase insurance penetration in Pakistan. The study highlights the significance of reviews by the insurance policyholders in influencing the insurance adoption by the potential insurance buyers. Another important dimension explored is the presence of herd behavior among the policyholders. This information can help the policy developers in developing strategies to take advantage of the herd behavior among the potential insurance buyers.

## **6. CONCLUSION**

This study explains the insurance policyholders' adoption process. This empirical investigation is a cross-sectional study based on a sample of 271 insurance policyholders living in a developing country with a very low insurance penetration. The data was collected through a questionnaire administered randomly. The study has several novel contributions. First, the results of the study show that the argument quality and credibility of the reviewers play an important role in determining whether the information shared by them is useful or not. If the information is considered useful it is adopted by the potential insurance buyers. Second, if the source is considered credible, people follow the information shared without evaluating its pros and cons. This indicates that there is herd behavior among the potential insurance buyers. The results also show that herd behavior mediates the effect of source credibility on

the insurance information adoption process. Fourth, the results show that people follow the information shared in the form of reviews without considering the reviewers having the same attitude and background as theirs.

This study has several limitations also. First, 90 percent of the total respondents from whom the data was collected are males. A study based on data with almost equal representation from both genders may have some interesting insights which are missing in our study. Secondly, for a better understanding of the insurance adoption process, some more behavioral biases can be considered.

## REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I., Fishbein, M., & Heilbroner, R. L. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall.
- Alpar, P., Engler, T. H., & Schulz, M. (2015). Influence of social software features on the reuse of business intelligence reports. *Information Processing & Management*, 51(3), 235-251.
- Archimi, C. S., Reynaud, E., Yasin, H. M., & Bhatti, Z. A. (2018). How perceived corporate social responsibility affects employee cynicism: The mediating role of organizational trust. *Journal of Business Ethics*, 151(4), 907-921.
- Asad, H., Khan, A., & Faiz, R. (2018). Behavioral Biases across the Stock Market Investors: Evidence from Pakistan. *Pakistan Economic and Social Review*, 56(1), 185-209.
- Banerjee, A. V. (1992). A simple model of herd behavior. *The quarterly journal of economics*, 107(3), 797-817.
- Blanchard, A. L., & Markus, M. L. (2004). The experienced "sense" of a virtual community: characteristics and processes. *ACM Sigmis Database: the database for advances in information systems*, 35(1), 64-79.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer research*, 14(3), 350-362.
- Cai, F., Han, S., Li, D., & Li, Y. (2019). Institutional herding and its price impact: Evidence from the corporate bond market. *Journal of Financial Economics*, 131(1), 139–167. <https://doi.org/10.1016/j.jfineco.2018.07.012>
- Calvó-Armengol, A., Patacchini, E., & Zenou, Y. (2009). Peer effects and social networks in education. *The Review of Economic Studies*, 76(4), 1239-1267.
- Camara, O. (2017). Industry herd behaviour in financing decision making. *Journal of Economics and Business*, 94, 32-42.
- Casavecchia, L. (2016). Fund managers' herding and the sensitivity of fund flows to past performance. *International Review of Financial Analysis*, 47, 205–221. <https://doi.org/10.1016/j.irfa.2016.07.006>
- Chang, C. L., McAleer, M., & Wang, Y. A. (2020). Herding behaviour in energy stock markets during the Global Financial Crisis, SARS, and ongoing COVID-19. *Renewable and Sustainable Energy Reviews*, 134. <https://doi.org/10.1016/j.rser.2020.110349>
- Chen, C. D., & Ku, E. C. (2013). Bridging indistinct relationships and online loyalty: evidence from online interest-based communities. *Online Information Review*, 37(5), 731-751.
- Chen, C. W., Chen, W. K., & Hsu, Y. Y. (2011). The Study of eWOM Adoption Model. *Marketing Review/Xing Xiao Ping Lun*, 8(2), 175-196.
- Chen, Y. F. (2008). Herd behavior in purchasing books online. *Computer in human behavior*, 24(5), 1977-1992
- Cheung, C. M., Lee, M. K., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research: Electronic Networking Applications and Policy*, 18(3), 229-247.
- Cheung, M. Y., Luo, C., Sia, C. L., & Chen, H. (2009). Credibility of electronic word-of-mouth: Informational and normative determinants of on-line consumer recommendations. *International journal of electronic commerce*, 13(4), 9-38.
- Corcus, A., Montmarquette, C., & Pannequin, F. (2020). How the demand for insurance became behavioral. *Journal of Economic Behavior & Organization*, 180, 590-595.



- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Dragos, S. L., Dragos, C. M., & Muresan, G. M. (2020). From intention to decision in purchasing life insurance and private pensions: different effects of knowledge and behavioural factors. *Journal of Behavioral and Experimental Economics*, 87, 101555. <https://doi.org/10.1016/j.socec.2020.101555>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Filieri, R., & McLeay, F. (2014). E-WOM and accommodation: An analysis of the factors that influence travelers' adoption of information from online reviews. *Journal of Travel Research*, 53(1), 44-57.
- Filieri, R., Hofacker, C. F., & Alguezaui, S. (2018). What makes information in online consumer reviews diagnostic over time? The role of review relevancy, factuality, currency, source credibility and ranking score. *Computers in Human Behavior*, 80, 122-131.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Gaskin, J. (2016). *Structural equation modelling in AMOS*. YouTube Videos: Gaskinations.
- Golub, B., & Jackson, M. O. (2012). How homophily affects the speed of learning and best-response dynamics. *The Quarterly Journal of Economics*, 127(3), 1287-1338.
- Gunawan, D. D., & Huarng, K. H. (2015). Viral effects of social network and media on consumers' purchase intention. *Journal of Business Research*, 68(11), 2237-2241.
- Hair, J. F., Babin, B. J., Anderson, R. E., and Black, W. C. (2018) *Multivariate Data Analysis* (6th ed.). Prentice Hall.
- Hu, X. S., & Yang, Y. (2020). Determinants of consumers' choices in hotel online searches: A comparison of consideration and booking stages. *International Journal of Hospitality Management*, 86, 102370.
- Hussain, S., Ahmed, W., Jafar, R. M. S., Rabnawaz, A., & Jianzhou, Y. (2017). eWOM source credibility, perceived risk, and food product customer's information adoption. *Computers in Human Behavior*, 66, 96-102.
- Insurance Association of Pakistan (IAP) (2020). *IAP Year Book 2019-20*. <http://www.iap.net.pk/Displaypage.aspx?ID=7>
- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*, 53.
- Kang, J. W., & Namkung, Y. (2019). The information quality and source credibility matter in customers' evaluation toward food O2O commerce. *International Journal of Hospitality Management*, 78, 189-198.
- Kelloway, E. K. (2015). *Using Mplus for Structural Equation Modeling*. Thousand Oaks, CA: Sage.
- Kets, W., & Sandroni, A. (2019). A belief-based theory of homophily. *Games and Economic Behavior*, 115, 410-435.
- Kyriazos, T. A. (2018). Applied psychometrics: sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology*, 9(08), 2207.
- Ladhari, R., Massa, E., & Skandrani, H. (2020). YouTube vloggers' popularity and influence: The roles of homophily, emotional attachment, and expertise. *Journal of Retailing and Consumer Services*, 54, 102027.
- Laumann, E. O. (1966). *Prestige and association in an urban community: An analysis of an urban stratification system*. Indianapolis: Bobbs-Merrill.
- Lee, Y. C. (2014). Impacts of decision-making biases on eWOM retrust and risk-reducing strategies. *Computers in Human Behavior*, 40, 101-110.
- Lee, Un-Kon. (2017). International Tourism Advertisements on Social Media: Impact of Argument Quality and Source. *Sustainability*, 9: 1537. <https://doi.org/10.3390/su9091537>
- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11), 1477-1490.
- Luong, L. P., & Ha, D. T. (2011). *Behavioral factors influencing individual investors' decision making and performance*. *Survey of the Ho Chi Minh Stock Exchange*, Umea School of Business.
- McCroskey, L. L., McCroskey, J. C., & Richmond, V. P. (2006). Analysis and improvement of the measurement of interpersonal attraction and homophily. *Communication Quarterly*, 54(1), 1-31.
- Netemeyer, R. et. al, (2003). *Scaling Procedures: Issues and Applications*. SAGE.

- Nunnally, J.C. (1978). *Psychometric Theory*. McGraw-Hill.
- OECD (2019). <https://stats.oecd.org/index.aspx?queryid=25444>
- Park, D. H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International journal of electronic commerce*, 11(4), 125-148.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In *Communication and persuasion*. Springer, New York, NY.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Salehi-Esfahani, S., Ravichandran, S., Israeli, A., & Bolden III, E. (2016). Investigating information adoption tendencies based on restaurants' user-generated content utilizing a modified information adoption model. *Journal of Hospitality Marketing & Management*, 25(8), 925-953.
- Shen, X. L., Cheung, C. M., & Lee, M. K. (2013). What leads students to adopt information from Wikipedia? An empirical investigation into the role of trust and information usefulness. *British Journal of Educational Technology*, 44(3), 502-517.
- Shen, X. L., Zhang, K. Z., & Zhao, S. J. (2016). Herd behavior in consumers' adoption of online reviews. *Journal of the Association for Information Science and Technology*, 67(11), 2754-2765.
- Shoulders, C. W., & Smith, L. (2018). Impact of Teacher Attire on Students' Views of Teacher Credibility, Attitude Homophily, and Background Homophily within School-Based Agricultural Education Programs. *Journal of Agricultural Education*, 59(2), 275-288.
- State Bank of Pakistan (2021). <https://www.sbp.org.pk>
- Sun, H. (2013). A longitudinal study of herd behavior in the adoption and continued use of technology. *MIS Quarterly*, 1013-1041.
- Sussman, S. W., & Siegal, W. S. (2003). Informational influence in organizations: An integrated approach to knowledge adoption. *Information systems research*, 14(1), 47-65.
- Tseng, S. Y., & Wang, C. N. (2016). Perceived risk influence on dual-route information adoption processes on travel websites. *Journal of Business Research*, 69(6), 2289-2296.
- Wang, L., Fan, L., & Bae, S. (2019). How to persuade an online gamer to give up cheating? Uniting elaboration likelihood model and signaling theory. *Computers in Human Behavior*, 96, 149-162.
- Wang, W., Guo, L., & Sun, R. (2019). Rational herd behavior in online learning: Insights from MOOC. *Computers in Human Behavior*, 92, 660-669.
- Watts, S. A., & Zhang, W. (2008). Capitalizing on content: Information adoption in two online communities. *Journal of the association for information systems*, 9(2). <https://aisel.aisnet.org/jais/vol9/iss2/3>
- Wu, T. Y., & Lin, C. A. (2017). Predicting the effects of eWOM and online brand messaging: Source trust, bandwagon effect and innovation adoption factors. *Telematics and Informatics*, 34(2), 470-480.
- Zhu, D. H., Chang, Y. P., & Luo, J. J. (2016). Understanding the influence of C2C communication on purchase decision in online communities from a perspective of information adoption model. *Telematics and Informatics*, 33(1), 8-16.