

Millennial Consumer's Skepticism towards online shopping decisions

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Abstract

The paper focuses on proving the multidimensionality of the measure of skepticism and its relationship with online shopping decision making. The concept of Consumer skepticism, a relatively new one, if understood can help businesses cope with uncertainty, challenges of consumer resistance and doubts to benefit the overall industry. However, the idea of online decision making is still relatively new in academia. As a result, robust studies on predictors are needed to support the hypothesis. The purpose of this study was to investigate the relationship between online shopping decisions and customer uncertainty. The purpose of this study was to provide anecdotal evidence on consumer skepticism influences online decision-making. The theory of cognitive dissonance (Festinger, 1957) and the (Howard & Sheth, 1969) model of form the theoretical underpinning of the present study. Data collected from 428 respondents from various location in north India. Results of factor analysis (EFA & CFA) and structural equation modeling revealed that consumer skepticism is negatively associated with the online purchase decision. The paper concludes with theoretical and Managerial Implications.

Keywords: consumer skepticism, online decision making, cognitive dissonance theory, black box model, and Structural equation modeling.

INTRODUCTION

I The business environment today is VUCA (volatile, uncertain, complex and ambiguous). To survive and thrive appears as a challenge to every industry and for e-commerce more-so. The nature of online purchase activities makes its process different from that of a traditional one (Mason, 1998). In this atmosphere of change and limited resources, it is essential to face the demanding customers. The consumers are susceptible and cautiously demanding. The

presumption that customers react to any knowledge in a deterministic or standardised manner ignores evidence of the constructive nature of learning and individual variance in information processing and effect, resulting in attitudinal (and behavioural) heterogeneity among customers. (Brian Wynne, 1996). According to many reports, risk assessments are affected more by ideological differences than by expertise. (e.g., Sjoberg, 2003; Slovic, 1998).

The present paper focuses on proving the multidimensionality of the measure of skepticism and its relationship with online shopping decisions. The background develops its basis from the literature review, conceptual definitions and exploratory methodological work to identify dimension and items applied in subscales. The construct of skepticism is based on theory and specifies the structure. The researcher's decision, which involves the collection of measurements and wording of objects included in the scale, defines the measure's accuracy.

The construct's name, as well as the names of each subscale or dimension, have an effect on possible interpretations of the definition. The extraction method evaluates correlation and covariance's among all the scales.

The Cognitive dissonance theory It relates to every individual's expectation related to the purchase decision made. When an online shopping website does not meet the conjecture, the consumer will disbelieve any information received. Various social psychological studies of persuasion, learning, and risk provide empirical evidence that related information can be processed differently depending on cognitive skills, prior experience, beliefs, worldviews, and wider social and institutional influences. (Pidgeon et al., 2003) (Petty & Cacioppo, 1986). The causes of scepticism and confusion go beyond the reasons specifically stated by numerous experts in previous studies (e.g., unreliable facts, untrustworthy information sources; (Whitmarsh, 2011) and are not the result of a lack of expertise or misunderstanding (Royal Society, 1985). Howard-Sheth model of consumer buyer behavior- The current study focuses on adding to the perceptual reaction of individuals which governs the decision-making process (Howard, 1969). This decision-making model focuses on the process which starts when the buyer exposes to a stimulus. As a result of the given stimuli, Confusion occurs, which leads to exploring for information. The data gathered depends upon the interactions between perception and motivation. Put, the search for information and outcomes undergo filtration through perceptual bias (which is an outcome of confidence, knowledge, need and motives). The final purchase decision depends on the interaction between brand comprehension, the belief, trust in the purchase decision and

purchase intention. The actual purchase relies on the buyer's purposes and inhibitors, which he confronts. In this case, perceived skepticism toward online shopping and websites. The proposed hypothesis of the relationship, the null being H01: Consumer Skepticism has no relationship with online shopping decision and the alternate Ha1: Consumer Skepticism has a relationship with online Shopping decision.

Data analysis and results

The independent variables were subjected to principal component analysis (PCA) during the initial data analysis. PCA, or principal component analysis, was used to analyse interdependent correlations and describe them in terms of their underlying dimensions or variables. The procedure entails (1) searching for highly correlated items, (2) to extract certain items and organise them into smaller classes of variables, and (3) to determine the classification accuracy (Hair et al. 2010). Each data set was given a simple factor structure using the Varimax orthogonal rotation process. The rotation is advantageous, according to (Hair et al., 2010), since it redefines the dimensions to allow sufficient distinctions in the definitions.

The importance of factor loadings was used to assess the number of factors to hold. The absolute value of .50 was used to determine the significance of factor loadings. Loadings of +/- .50 or more have a noticeable effect (Hair et al., 2010). To boost the factor structure, cross-loading items were also removed.

The actual 20 items in five ratings of consumer uncertainty were reduced to 16 items in four aspects due to PCA. The KMO value is .859, which is more than the allowable limit of 0.5. (Court, 2013). With the empty view that the link matrix is a proprietary matrix, Table 1.1 also includes a test of Bartlett's Sphericity (Bartlett, 1937). Findings indicate that testing is important (p.001); thus, the experimental element was used.

Table 1.1 *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.859
Approx. Chi-Square	

	2052.025
Bartlett's Test of Sphericity	
df	
Sig.	153

	.000
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In order to obtain eigenvalues for each item in the data, an initial analysis was run in spss. Four variables had eigenvalues greater than 1 according to Kaiser's criteria, and together they clarified 65.053 percent of the variance.

Table 1.2

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.523	36.237	36.237	4.523	36.237	36.237	3.411	20.503	20.503
2	2.903	11.571	47.808	2.903	11.571	47.808	2.849	17.795	38.298
3	1.830	10.499	58.307	1.830	10.499	58.307	2.750	14.656	52.954
4	1.531	8.836	67.143	1.531	8.836	67.143	2.135	12.099	65.053

The elements that cluster on the same factor suggest that factor 1 represents Impulsive buying behavior, factor 2 Social risk, factor 3 represents entrustment and dimension 4 is suspicion. These four extracted factors explain 65.053% of the variability in the scale of consumer skepticism towards online shopping decision which is more than half of the variability. The table below explains the variance explained by each factor and cumulative variance (Child, 1990).

The correlation analysis of the covariates with each extracted component is shown in Table 1.3. Typically, each variable is heavily weighted in one component and lightly weighted in the others. The elements having a value less than are the factor loading in each factor. Using the suppress smaller values function in spss, 5 (field, 2013) were removed from the loadings table. The remainder values loaded entirely in each of the four factors presented below. These are the core factors, which used as the final items after data reduction or exploratory factor analysis.

Table 1.3

FACTORS	Loadings			
IMPULSIVE BUYING				
I shop online to make myself feel better	.845			

Online shopping websites are my favorite pass time	.749			
Online shopping websites should be used by everyone	.716			
I buy products from online shopping websites even if I don't need them.	.799			
SUSPICION				
I feel online shopping websites are generally truthful about the performance of their products.		.863		
Online shopping websites are worth time and effort.		.798		
Online shopping websites provide me with many options to choose from.		.749		
ENTRUSTMENT			.779	
I think online shopping websites never play with our emotions.			.773	
I feel online shopping sites never cheat.			.769	
I feel discounts offers help consumers save a lot of money.			.729	
Online shopping websites try to think about consumer benefits.			.711	
I think Online shopping websites always deliver what they promise.			.779	
SOCIAL RISK				
I think people who shop from online websites consider themselves smart.				.802
Online shopping websites make false claims to mislead consumers				.710
I think online shopping sites influence us in ways we are not aware of				.735
I consider online shopping websites to be a nuisance and a waste of time.				.806

The measurement's inherent accuracy dependability is good, according to reliability tests, with alpha coefficients far exceeding the stated cut-off of .70 (Nunnally, 1978). Table 1.4

shows the components of the economic scepticism scale, as well as the scaling means, variance and standard deviation, and reliability coefficients for the judgement construct.

Table 1.4 *Descriptive Statistics of all variables, correlation and Cronbach alpha*

Variable	Mean	Standard Deviation	Cronbach alpha α
Impulse Buying	2.98	.844	0.811
Entrustment	2.93	.874	0.701

Suspicion	3.62	.844	0.843
Social Risk	3.58	.646	0.802

Measurement Model

As a preliminary research, AMOS 21 Confirmation factor analysis (CFA) was used to evaluate the magnitude and relevance of the measurement factors that link to simultaneous variable comparisons (Anderson & Gerbing, 1988; Bollen, 1989). Since the author did not find any studies on consumer scepticism in the sense of online shopping, a CFA was performed for the construct of consumer scepticism before testing a complete measurement model. As a result, market skepticism's goodness-of-fit was contrasted to an alternative model. To become more specific, Calculating for goodness-of-fit determined (1) a one-factor model of employee happiness, (2) the first four-factor framework with four latent variables (impulse purchasing,

suspicion, deliberate tort, and social risk), and (3) a second-order four-factor model with four latent constructs.

An appropriate model analysis of the various models to assess consumer uncertainty is shown in Table 1.5. In terms of overall equity indicators, all three models showed positive similarities with the data. The chi-square difference between the one-dimensional model and the four-order model of the first order was statistically significant, indicating that the improvement of 2 counts was statistically significant ($2 = 78.56$, $df = 6$, $p.001$). The chi-square difference between the single element and the second-order of the four models was also significant, resulting in a decrease in five degrees of freedom ($2 = 9$, $df = 5$, $p.001$).

Table: 1.5 Overall Fit Indices for Alternative Models of the consumer Skepticism Construct

Model Element	First-order one-factor model	First-order Four-factor model	Second-order four-factor model
χ^2	191.402	239.959	182.402
Df	104	98	99
χ^2/df	1.84	2.44	1.84
RMSEA	.036	.058	.044
CFI	.964	.945	.968
NFI	.908	.911	.932
TLI	.934	.932	.961

RMSEA = root mean square error of approximation; CFI= comparative fit index; NFI = normed fit index; TLI = Tucker-Lewis index

Complete Measurement model

Figure 1.2 depicts the standardized loadings of scale items. Table 1.6, reports the full

measurement model consisted of two constructs 21 measurement items and five factors. These five factors include four sub-constructs of skepticism and decision making

Table 1.6

FACTORS	Loadings
Construct 1 – Skepticism	
Impulsive Buying	0.745
Suspicion	0.758

Entrustment	0.73
Social Risk	0.861
Construct 2 – Decision Making	
The online website is not useful while making important purchase decisions.	0.786
While shopping online, I do not understand things easily.	0.78
Online shopping websites delay my decision making.	0.664
I will not recommend online shopping websites for my friends	0.759
I am not likely to make another purchase from Online shopping websites	0.765
Note: Given factor loadings were found to be significant at $p < .001$	

Assessment of research model fitness

(Hooper, Coughlan, & Mullen, 2008) categorized the quality of indicators by (1) the overall equity, (2) the ascending equity, and (3) the parsimony equity to assess the suitability of the proposed model.

The goodness-of-fit indicators used (Hu & Bentler, 1999) The analysis uses four tests to validate the Absolute Fit index. (1) Chi-square / degree of freedom (X^2 / df), with a value of less than 3.0; (2) RMSEA, with a value of less than 0.08 indicating positive balance (Hu and Bentler, 1999); (3) GFI, with a value of 0.90 or more indicating the positive balance (Bentler,

1999); and (4) AGFI, with a value greater than 0.80 indicating an acceptable equity in the model (Bentler, 1999). (MacCallum & Hong, 1997). The CFA model results for Amos' second consumer uncertainty program are $X^2 / df = 1.196$, $RMSEA = 0.036$, $GFI = 0.960$, and $AGFI = 0.934$, indicating equity quality in consumer uncertainty scales. Second, NFI, CFI, and related Fit indicators are all incremental fit indices (RFI). These appropriate indicators should have values higher than 0.90 threshold (Hu and Bentler, 1999). $NFI = 0.908$, $CFI = 0.964$, and $IFI = 0.965$ results obtained using Amos. Overall, the findings suggest that the design of the proposed scale effectively reflects the constructive relationship.

Table 1.7 *Correlations Matrix*

	Mean(SD)	Cronbach	AVE	CR	Skep	C_DM
Con_Buy_Skep	3.28(.63)	0.874	0.51	0.81		
Decision Making	2.52(.933)	0.866	0.57	0.87	-.606	

Quality data, composite reliability analysis, correlation, and quadratic similarity of the variables tested in this study are shown in Table 1.7. The structural AVE was greater than the recommended value of 50, indicating that the combined tests explained more than half of the structural variability (Fornell & Larcker, 1982). To assess the validity of the discrimination, the quadratic correlation (R^2) of the simulated properties is compared with the AVEs of each concept (Fornell & Larcker, 1982). Disclosure validity is satisfied when the R^2 between the two

properties is less than the AVE of each concept (Fornell & Larcker, 1982). All the requirements were met, indicating that both builders share their ratings with higher diversity than other buildings. The combined reliability of market uncertainty and decision-making was 0.874 and 0.87, respectively, in addition to the average cutting value of 70 (Bagozzi. & Richard, 1977). The final evaluation of the measurement model had excellent data similarity ($RMSEA = .041$, $GFI = 0.937$, $CFI = .965$, $NFI = .920$, $TLI = .960$; $CMIN = 307.967$, $df = 181$, $p.001$).

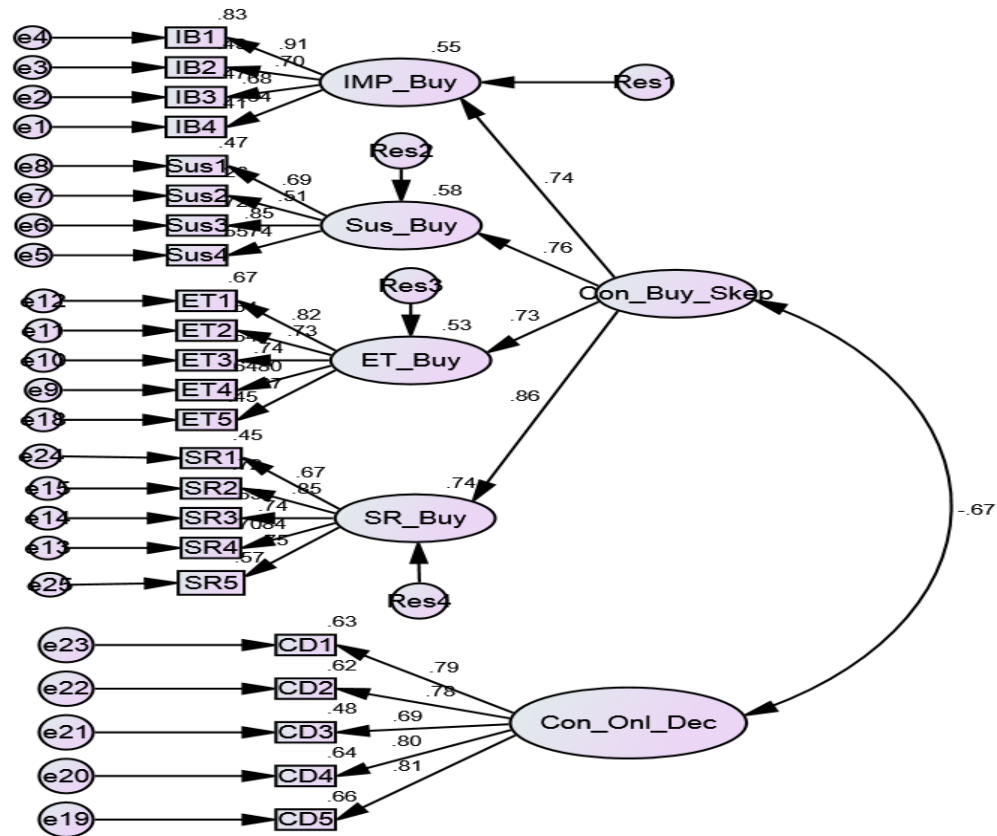


Figure 1.1

Structural Model and Relationship Test

The full structural model was tested using structural equation modelling analysis after both the measurement and structural models suggested a hypothesised relationship between consumer scepticism and online decision making. The original model was then updated based on the results' adjustment indices. The original proposed model's overall fit indices showed that it was a good fit.

Skepticism and decision-making were found to have a significant relationship. The findings of this study support the hypothesis that consumer scepticism has a negative effect on consumer decision-making.

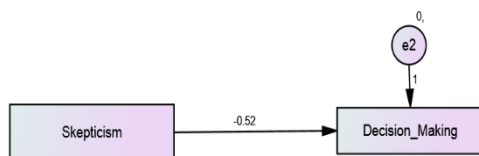


Figure 1.2

Figure shows the path coefficients and associated t-values obtained during the structural model test. Consumer scepticism, according to Hypothesis H01, has little impact on online purchase decisions. Results of the structural equation model fail to accept hence reject the null hypothesis ($\beta = -0.52$, $t = -11.19$, $p < .001$), indicating a negative relationship.

Discussion

The objective of this study was to understand two research problems: The first being the concept of millennial skepticism in an online shopping environment and second to test if a relationship between millennial consumers skepticism and online shopping decisions exist. The literature review helped the researcher understand the concept of skepticism. The process of decision making requires a choice set, an, i.e., set of alternatives before a choice. The entry to a consideration set reflects effort (cost-benefit trade-offs). Decision makers do not possess the same amount of knowledge about options until the decision made. The considerations set is affected by contexts such as

intended use and retrieval cues (Ratneshwar & Shocker, 1991). The nomological model suggested by (Obermiller and Spangenberg, 1998) in the field of advertising indicates the basic implications of scepticism in terms of confidence and avoidance actions. By drawing on the findings of the previous research, the current study shows that consumer scepticism decreases consumer decision-making and reduces the impact of cognitive assessment. Various studies support the alternate hypothesis of current research. These studies depicted the correlation between general skepticism and negative work attitudes (D.Guastello et al., 2003; Guastello & Pessig, 1998). The "no-logic" reasons behind online shopping are considered acceptable and most of the time without realization of consequences. Psychological traits like self-monitoring, emotional intelligence, price consciousness, and self-control inhibit impulse buying lead to increased skepticism. The sub-constructs of skepticism include impulse buying, suspicion, entrustment, and social risk are perceived to measure consumer doubts towards the usage of online shopping websites. Amos, (2014) suggested impulse buying as a temporary situation instigated by persuasive communication by the sellers. The doubt in the mind of consumer increases invariably by the recurring and wide range of discount offers and the profit margin of the online shopping websites become the reason for this. Impulsive consumers may often act upon incomplete information — a skeptical mind doubts the unproven. Given the suspicion, in the minds of consumers, they tend to question the intention of the online retailer. The dimension of mistrust can lead to a firm, absolute convictions, denial of information, resistance and general distrust. In a study conducted on preteens, the consumers altogether avoided the situation when they became skeptical (Shapiro and Freeman, 2014).

Over time consumers tend to trust responsibly with personal intuition, observation and practical experience (Barry, 1987). Level of trust is always presumed to begin at zero. Entrustment is an incremental process which has been studied as a trust over the years by many researchers who have proven that trust built over time is the result of the seller's choice to reciprocate cooperation and meet expectations. The fact that building trust responsibly can lead to dissonance, hence skepticism. A Study

conducted by (Alba and Hutchison, 1987) empirically proved that familiarity reduces skepticism. Active consumers tend to feel responsible and have a strong influence on the success and failure of an organization (Chun and Davis, 2001). The online reviews shared by such consumers may lead many consumers to become passive. The outcomes of a study (Sher and Lee, 2009) revealed that passive consumers who cast doubts on trust tend not to use online websites. According to (Mitchell & Greatedorex, 1993) the dangers that the product usage could bring with itself ill effects like an individual's safety, physical health, and wellbeing. Hence influence on society forms a relevant part of consumers being skeptical about their choices and decision. Consumer skepticism is affected by a compound trait known as social risk. Individuals, particularly those with low consumption participation, may not have engaged in sceptical thought processes in the consumption context, but when in a group environment, they appear to become sceptical in their consumption patterns. Though another study conducted to measure skepticism in different cultural and subcultural factors (Huh et al., 2010) reported individualistic people to be more skeptical than collectivist.

Implications of the Study

Despite the abundance of practical literature on customer decision making and millennial skepticism, a few academic studies have attempted to unveil a process that explains how consumer skepticism predicts online shopping decisions. The present study empirically proved the adverse effect of consumer skepticism on online shopping decisions. As a result, the findings of this study suggest that consumer skepticism is a realistic and theoretically important construct that deserves further analysis. For example, disparaging consumers (the extent to which consumers react when they feel fooled for example filing complains, negative word of mouth) might be necessary for accounting for consumer skepticism. This research established that a large number of consumers do not want to replace there traditional methods of shopping online which is enough evidence creates relevant links for future research on this relationship. The aim of this study was to add to the established literature a theoretical relationship model. This study's

results have practical consequences. The current study showed that the outcome variable that was measured predicted scepticism. Though the outcome variable in this study is associated with significant factors like trust, satisfaction, service quality, etc. but understanding consumer skepticism can be the one that can contribute to the strategic advantage for e-commerce organizations.

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