THE EFFECT OF FEAR-OF-MISSING-OUT (FOMO) ON HEDONIC SERVICES PURCHASE IN COLLECTIVIST AND RESTRAINED SOCIETY: A MODERATED –MEDIATED MODEL

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ABSTRACT

Purpose: *This explanatory research aims to test the indirect effect of the FOMO-laden appeal of Facebook posts on the purchase likelihood of hedonic services moderated by gender in a collectivist and non-indulgent society.*

Research Design: *covariance-based – structural equation modeling (PLS-SEM) was used to analyze the data of 324 respondents collected during November 2020 through the purposive sampling method.*

Findings: *The results show that anticipated elation and anticipated expense regret perfectly mediate the impact of FOMO on the purchase likelihood of hedonic services. Moreover, gender moderates these mediation effects. Hence, females are more sensitive to FOMO as compared to males.*

Theoretical implications: *Impact of FOMO laden appeal on purchase likelihood of hedonic services is different across cultures and gender.*

INTRODUCTION

Fear Of Missing Out (FOMO) refers to the worries or anxiety (Dykman, 2012) that a person has about not been as lucky as the friends and close ones regarding what they are doing or what they possess being afraid of missing the experience and being curious of what they are doing (Przybylski et al., 2013a). Generally, FOMO is presented as a personality trait in the literature (Abel et al., 2016; Alt, 2015; Przybylski et al., 2013). However, this psychological state can overtake a person in a specific context (Goodrich et al., 2015; Hodkinson, 2019).

Attraction created by FOMO can be personal/impersonal and marketing/non-marketing (Hodkinson, 2019). Marketing appeal based on FOMO can be created personally by sales staff or impersonally through websites or advertisements. The personal and impersonal FOMO appeal that appears to be non-marketing (through friend's comments, shares, messages, or posts on social media) is more powerful (Hodkinson, 2019).

Family and friends' recommendations tend to influence purchase intentions (Aggarwal & Anon, 2019; Kerrane et al., 2012). Moreover, missing out on fear created by impersonal content (advertisements and posts) can be persuasive for future purchases (Tanner et al., 1991). Studying the effect of FOMO-laden appeals by close friends or family members on hedonic-service purchase decisions is warranted as a prelude to studying the effect of FOMO-laden appeals developed for commercial promotions.

Therefore, this study aims to assess (a) how FOMO-laden appeal affects purchase likelihood and (b) if purchase-related emotional feelings mediate the impact of FOMO-laden appeal on purchase likelihood. A similar has been conducted by Good & Hyman (2020) with US residents, members of an individualistic society. Hence, it will be interesting to assess the relationships with respondents from Pakistan, a collectivist society. The study tested purchase-related feelings (anticipated elation, anticipated purchase regret, and anticipated self-elation) mediating FOMO impact on purchase likelihood. Moreover, Good & Hyman (2020) suggested testing anticipated envy as an additional mediating factor in the model.

This study assesses the FOMO-Leden appeal of the social media content in the context of hedonic services in a collectivist society. The paper is structured as follows. Firstly, FOMO related hypotheses are developed with underpinning theoretical background. Afterward, quantitative survey results are summarized. Lastly, the paper discusses theoretical and managerial consequences, along with potential research directions.

LITERATURE REVIEW

Literature related to FOMO is divided into two categories: non-marketing and marketing. Despite both types of research being minimal, FOMO's psychological triggers and effects are explored by the more detailed non-marketing works (Abel et al., 2016; Przybylski et al., 2013). FOMO has been viewed as a personal attribute by most non-marketing studies. It is centered on social networking and internet usage's detrimental psychological externalities (Abel et al., 2016; Baker et al., 2016; Elhai et al., 2016; Oberst et al., 2017; Przybylski et al., 2013b) and the persistent adverse effect FOMO has on the mental and physical health of students (Alt, 2015; Hetz et al., 2015; Milyavskaya et al., 2018). FOMO has been attributed to personal characteristics, interpersonal relationships, and the negative use of mobile apps, social media, and the internet (Alt, 2015; Roberts & David, 2020; Zhou, 2019). Previously, FOMO has been researched as a factor or a mediator. Most of the previous findings have shown FOMO to be a problematic antecedent.

FOMO has been assumed to be a personality trait in most of the previous non-marketing literature. However, FOMO has rarely been indicated as a feeling related to a particular context or disposition (Hayran et al., 2020). Consumers tend to purchase impulsively when they feel FOMO, which can even lead to regrets about purchases at a later stage (Saleh, 2012). FOMO can also result from discovering similar activities while engaging in tedious tasks or an exciting occurrence. It can lead to a decrease in immediate satisfaction and the intention to appreciate those activities (Hayran et al., 2020). On the other hand, images of other people taking part in exciting activities increase FOMO, reduce the satisfaction of the current event, and raise the anticipation of enjoying the missed event. FOMO's relation with a frenzied purchasing surge of culturally aligned brands is connected to each purchase's success (Kang et al., 2019).

Previously, researchers have categorized FOMO as a personal trait, linking it to detrimental effects of mental and physical well-being, along with toxic usage of social media. Earlier marketing research indicates that FOMO is a result of being context-specific, affects purchasing products' impulsivity, regrets after purchases, lack of satisfaction with current activities, the possibility of reliving an experience, and assumptions about potential events. However, the previous studies did not focus much on the FOMO appeal created by personal communication by friends and acquaintances related to consumers' purchasing behavior

(Hodkinson, 2019). These studies do not indicate if FOMO has a positive impact on purchase behaviour. Moreover, there is no literature on FOMO being a mediator.

Fomoasa Source of Appeal

The Interpersonal Closeness (IC) theory suggests that consumer buying behavior can be affected by people close to that consumer (Dubois et al., 2016). Because of acquaintances developed on the social network, the shared content on social media is more believable and influential for consumers than other information sources (Aral, 2011; Aron et al., 1991; Brown &Reingen, 1987). Therefore, the shared content on close groups influences their buying behavior more since it is more trustworthy (Aral, 2011). Hence, marketers should include FOMO arising from the ill feelings connected with not being a part of experiences with family and close contacts (Kreillamo, 1984).

In particular, social media fanatics prefer to evaluate their relationships by setting the most appealing examples as their standards (Tversky & Kahneman, 1973). Such cases are also rare as the public figures of a person's acquaintances and family would more easily come to mind than "bit actors." Consequently, they tend to neglect the relative consistency of their social interactions – a factor that increases FOMO issues – as decisions are overwhelmingly affected by these accessible exemplars (Davidai & Gilovich, 2018; Oppenheimer, 2004; Tversky & Kahneman, 1973).

FOMO and Purchase Likelihood

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A connection between the probability of purchasing an experience and FOMO is suggested in the studies on regret (Loomes & Sugden, 1982). As compared to regrets about taking part in an activity, regrets about not being able to participate in an event are more severe, even if the results are not satisfactory (Davidai & Gilovich, 2018; Morrison & Roese, 2011). Making up for "missing out on a once in a lifetime experience" might not be achievable.

However, FOMO may elicit acts to avoid remorse about inactions (Bagozzi et al., 2016). Avoiding regrets can be compared to the desire to initiate protection (Tanner et al., 1991). The protection motivation concept encompasses an appropriate action a person can carry out in response to a hazard (Floyd et al., 2000). Therefore, FOMO related buying behaviors are influences by advertisements that arouse fear to reduce the chance of missing out on an experience.

H1: FOMO laden appeal will increase the likelihood of purchasing a hedonic service.

Anticipated Elation

Predicted euphoria is a determining factor that links FOMO and buying behavior. Evaluating the satisfaction brought on by a potential purchase is linked to expected elation (Brandstätter & Kriz, 2001). The increased willingness to pick another exciting activity or event

is an example of expected elation. Scenarios, where a person questions the possibilities, allow them to imagine results that leave them with positive emotion arousal(Taute & Sierra, 2015).

By coming up with scenarios where purchasing luxurious goods bring euphoric feelings later, consumers may expect satisfaction, which overcomes anxiety caused by FOMO (Hirschman & Holbrook, 1982). Expecting favorable results can increase the possibility of a consumer making a transaction. Consequently, anticipating positive feelings once anxiety caused by FOMO has alleviated increases the chances of enjoying a purchase decision (Mandel & Nowlis, 2008).

Even though FOMO may result in negative effects, such as depression or fatigue (Milyavskaya et al., 2018), it may result in optimistic outcomes if consumers buy luxury services previously ignored. The connection between FOMO and buying behavior might strengthen if expected positive feelings when buying a luxury service increase.

H2a: Consumers with FOMO laden appeal experience more anticipated elation
H2b: Experiencing anticipated elation will be more likely to purchase a hedonic experience
H2c: Consumers with FOMO laden appeal experience more anticipated elation when purchasing a hedonic experience.

Self-Enhancement

The Self-enhancement theory, with several learning and personality theories being its basis (Rogers, 1961), is a propensity to preserve a confident self-regard (Alicke&Sedikides, 2009; Walker & Keller, 2019). At the core of the theory, it is believed that boosting their self-worth is something people are eagerly willing to do (Epstein, 1973). People regularly evaluate their traits and characteristics based on how they expect others to view them and provide feedback and what they want to hear. Therefore, a positive correlation can be identified between responses to social criticism and how favorable it is.

When a situation arises where a person has to face a failure, threat, or blow to self-respect, they are driven by self-enhancement and have positive thoughts. Self-enhancement encourages psychological well-being instead of temporary IM (Perloff, 1983). By reducing self-deprecating thoughts and increasing positive thoughts about themselves, a person can self-enhance. People who deal with low self-respect and unfavorable self-thoughts overcome this issue by changing and improving their views about themselves (Perloff, 1983). Several social advocates have reported that they would be willing to act more if others were concerned. It implies that self-enhancement impacts a person's motivation to perform an activity.

Rather than reliving unfavorable experiences, self-enhancement prompts a consumer to recount their favorable and enjoyable experiences (Vargo et al., 2019). It may allow them to maintain or preserve their public profile, especially regarding the earlier decision (White & Dahl, 2007). The following hypothesis encompasses the probability of self-enhancement having an impact on FOMO related purchasing behavior and decisions.

H3a: Consumers with FOMO laden appeal experience more self-enhancement
H3b: The feeling of self-enhancement will be more likely to purchase a hedonic experience
H3c: Consumers with FOMO laden appeal experience more self-enhancement when purchasing a hedonic experience.

Anticipated Envy from Other People

People assessing themselves by putting their and their acquaintances and friends' possessions side by side can be linked to the idiom "keeping-up-with-the-Joneses." These people go on to change their purchasing behavior to avoid missing out on an event or activity. Deeming others to be at an advantage, however, may decrease a person's intention to act. Buying may be influenced by causing other individuals to feel envious through purchasing a hedonic product (Hyman et al., 2002).

Envy can be described as the feeling induced by someone else's possession, superior quality, or achievement and hopes to attain it or wishes for that person to lose it (Parrott & Smith, 1993). It encompasses the desire to bridge the gap between a person and others deemed superior (Miceli & Castelfranchi, 2007; Smith & Kim, 2007). Harmful and vicious, envy is a negative feeling from the overwhelming wish to see others have nothing and others' loss of happiness without retrieving any benefit from the situation (Schoeck, 1969). A consumer's envy, a side-effect of mass advertisement, promotes materialism, which corrupts society and decreases life satisfaction (Belk, 1985). However, it is argued that an economy's prosperity can be enhanced by envy (Corneo & Jeanne, 1997).

Consumer decisions are made while keeping in mind to utilize maximum benefit or elevate their social status (Yen et al., 2013). One of the status factors is envying others. An example of this would be to be part of a high-class function to provoke peers' jealousy. Linking back to the "keeping-up-with-the-Joneses" idiom, FOMO can be increased by Impression Management (IM) (Park & Kang, 2013; Philp & Nepomuceno, 2020; Pounders et al., 2016). Therefore, there is a positive relation between FOMO and others' predicted envy.

H4a: Consumers with FOMO laden appeal experience more anticipated envy
H4b: Anticipated envy elation will be more likely to purchase a hedonic experience
H4c: Consumers with FOMO laden appeal experience more anticipated envy when purchasing a hedonic experience.

Anticipated Expense Regret

The Regret Theory (Bell, 1982; Loomes & Sugden, 1982) proposes that consumers predict the implications of their choices (Loomes & Sugden, 1982; Zeelenberg & Beattie, 1997). An intense type of self-sorrow is regret caused by deciding while keeping all options in mind (Landman, 1993). A consumer's behavior has shaped how their decision reduces the possibility of regret at a later time instead of calculating the risk (Bell, 1982).

The justification of a decision may prompt a consumer to consider alternate options while keeping adverse impacts in mind (Connolly & Zeelenberg, 2002). Despite the possibility of optimistic triggered thoughts, appraisals can be affected by unwanted thoughts that have a greater chance of expected regret (Shih & Schau, 2011).

Consumers will regret and reconsider their decisions to not purchase a product if they find out their family or close acquaintances have chosen differently. Since a huge chunk of consumers has a limited budget, purchasing luxury products can only be made possible through monetary trade-offs, which might be regretted in the future. Even though people might identify "anticipated expense regret," the intensity they experience that regret may vary. Moreover, by setting an appropriate purchasing budget, FOMO might reduce expected regret caused by expenses.

H5a: Consumers with FOMO laden appeal experience more anticipated expense
H5b: Anticipated expense elation will be more likely to purchase a hedonic experience
H5c: Consumers with FOMO laden appeal experience more anticipated expense regret when purchasing a hedonic experience.

Gender

Gender is a readily available classification variable. The events and factors that motivate males and females are not the same (Kiani et al., 2016) because males and females play different roles in the family and society (Mesch et al., 2011). Their attitude towards others' expectations and social norms are different (Risman, 2004), and their emotional association with their purchases is different (Raajpoot et al., 2008). These differences between males and females allow marketers to promote products more effectively by matching each gender group's motivational dimensions (Bae, 2019). This study will assess the hypothesis of invariance between males and females in the sample.

Theoretical Foundation

The Complexity theory explains how a phenomenon is influenced by various factors, internal to a phenomenon and external to it, in a dynamic and nonlinear fashion (Lewin, 1992). This study utilizes the theory of complexity to explain the relationship between FOMO appeal and purchase intentions. Consumer behavior in the context of FOMO generating from social media posts involves a complex decision-making process (Good & Hyman, 2020). Social media sites are socio-technical bodies that influence consumer emotions, so this theory provides a meaningful explanation of the phenomenon's complex relationship in this study. Hence, the complexity theory has the capability of explaining a mix of dynamic factors that influence consumer behavior (Good & Hyman, 2020)

Based on the hypotheses developed and the theoretical framework, this study's conceptual framework is illustrated.

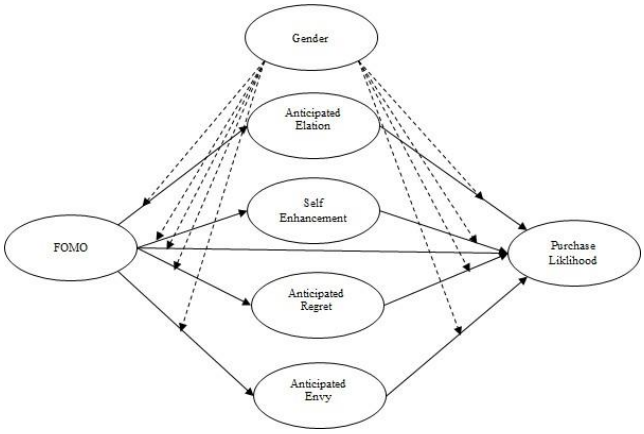

FIGURE 1
CONCEPTUAL FRAMEWORK

METHODOLOGY

This study has adopted positivist assumptions about the nature of reality (ontology) and the method of investigating reality (epistemology) (Creswell, 2003). This study will use a deductive approach to assess the relationship between independent and dependent variables. A deductive research approach is concerned with formulating theory-driven hypotheses tested through quantitative data analysis (Dudovskiy, 2018). Hence, hypotheses, developed with apriori established theories, were empirically tested through data collected from respondents without any interaction with the researchers (Sekaran & Bougie, 2016).

This research's respondents represent frequent social media users belonging to a collectivist culture, *i.e.*, Pakistan. This explanatory research tests and describes the sample attributes selected from Pakistan through questionnaire links posted on the commonly used social media platform Facebook in November 2020 (Sekaran & Bougie, 2016). Link of the web-based questionnaire was posted on various Facebook closed groups along with a 30-second video advertisement released by VELO Sound Station, inviting guests to the event.

Since the primary cross-sectional data was collected through a self-reported questionnaire, common method bias could have crept into the data collected (Podsakoff et al., 2003). The questionnaire was designed with several sections to psychological separation (Jordan & Troth, 2020). The purposive sampling method is used for this study (Saunders et al., 2019). The questionnaire included two screening questions to select the respondents from Pakistan using social media frequently (Cooper & Schindler, 2014). Moreover, a question in the survey required indicating the city of residence, which helped further ensuring sample collection from Pakistan.

The asses the hypotheses developed, AMOS 24 was used to make data analysis. Since it uses Covariance Based Structural Equation Modeling (CB-SEM), specific sample size criteria should be met (Hair et al., 2010). The sample size was decided based on four criteria: sample size between 100 and 200 (Loehlin, 2004), fifty plus eight times of independent variables (Loehlin, 2004), fifteen times of all the variables in the model (Stevens & Stevens, 2001), and at least five responses per variable in the model (Bentler & Chou, 1987). The sample size was more than the required criteria for this study. Overall, 333 valid responses were received through a web-based survey. Responses containing missing answers and outliers were dropped. Finally, after review, only 324 responses were retained for analysis.

The items for all the constructs used in the conceptual framework are presented in Table 1. Purchase likelihood was measured on a scale from 0 to 10, where 0 indicated no chance of going to the event, whereas 10 represent complete surety of going to the event. All other constructs are measured on a five-item Likert scale ranging from 1='strongly disagree' to 5='strongly agree.'

Table 1
SCALES

Scale	Item	Description	Source
Fear of Missing Out (FOMO)		If I do not go to this VELO Sound Station...	Good and Hyman (2020a, 2020b)s
	FOMO 1	I am afraid later I will feel sorry I did not go with my friends	
	FOMO 2	I will worry about what I am missing	

	FOMO 3	I will worry my friends are doing more rewarding things than me	
	FOMO 4	I will feel concerned my friends are having more fun without me	
	FOMO 4	I will feel left out	
	FOMO 5	I will feel sorry I did not experience an event with friends	
	FOMO 6	I will feel anxious about not being with my friends	
	FOMO 7	I will feel bothered that I missed an opportunity to be with friends	
Anticipated Elation		If I attend the VELO Sound Station...	Batra and Ray (1986)
	AE 1	I expect I would feel elated	
	AE 2	I anticipate I would feel excited	
	AE 3	I would feel exhilarated	
	AE 4	I expect I would feel happy	
		about going	
Self-Enhancement (SE)		If I attend the VELO Sound Station...	(Good & Hyman, 2020a)
	SE 1	I think that others would like me if I go	
	SE 2	I think that going would create a good impression of me	
	SE 3	My going would result in others' positive attitudes toward me	
Anticipated Expense Regret		If I go to the concert…	(Good & Hyman, 2020a)
	AR 1	I would be sorry I spent the money	
	AR 2	I would be sorry because I should save money	
	AR 3	I would be sorry I did not spend the	
		money on necessities	
Anticipated Envy		If I attend the VELO Sound Station...	(Lange & Crusius, 2015)
	AN 1	People close to me would be jealous if I got to go.	
	AN 2	People close to me will envy me because I got to go.	
	AN 3	People who do not go will be jealous.	
Purchase Likelihood		On a scale of 0–10 (where 0 indicates no chance and 10 indicates certainty), what is the chance you would attend the event?	(Juster, 1969)

RESULTS

Common Method Bias

The data for this study was through a single administration, self-report questionnaire. Hence, there were chances of Common Method Bias (CMB) creeping into the findings (Podsakoff et al., 2003). The bias with the help of psychological separation in the designing of the questionnaire. Moreover, all observed variables in the study were loaded on one latent variable to perform Herman's test. The first four factors contributed to the total variance of 64.3 percent. The highest-ranked factor explained only 39.55 percent of the variation, which is significantly lower than the criterion value of 51 percent (Podsakoff et al., 2003). Hence, the CMV is not suspected through Harman's test. However, the test has been criticized for identifying only the common variances and not the common method bias (Jordan & Troth, 2020). For the assessment of common method bias in this study's observed variables, the Common Latent Factor (CLF) approach was used. For this purpose, a latent variable was connected to all the items involved in the study in AMOS. The standardized regression weights of all the items in the constrained and unconstrained models are invariant. Therefore, CMB is not pervasive in the data (Conway & Lance, 2010; Podsakoff et al., 2003).

Confirmatory Factor Analysis (CFA)

This study employed the Maximum Likelihood method in AMOS 24 to perform Structural Equation Modelling (SEM) because of multivariate excess kurtosis (Rigdon & Hoyle, 1997). Normality of the data was ensured by assessment of skewness and kurtosis of all items. The skewness and kurtosis of all the variables lie in the range of ± 2 and ± 5 to be accepted as normally distributed (Bentler & Chou, 1987).

First, the measurement model was analyzed. Only the items with a factor loading above 0.7 were retained in the model to ensure item reliability. Moreover, the latent variable was assessed through composite reliability. All constructs in the model have composite reliability (CR) above 0.7 (Tabachnick & Fidell, 2012). The latent variables in the study have convergent validity since the Average Variance Extracted (AVE) of all the constructs is above the benchmark value, 0.5 (Fornell & Larcker, 1981). Moreover, constructs' square root of AVE's is less than the respective pairwise correlations that establish discriminant validity (Hair et al., 2010).

Hetro Trait Monotrait Ratio (HTMT) is considered a more reliable measure of discriminant validity. HTMT ratio is less than 0.9 for all the constructs confirming discriminant validity (Hair et al., 2010). Hence, the measurement model assessment establishes that all the items and constructs utilized in this study are reliable and valid. Moreover, the Maximum Shared Variance (MSV) is less than the AVE of all the constructs reaffirming discriminant validity (Hair et al., 2010).

Table 2
NORMALITY, RELIABILITY AND CONVERGENT VALIDITY

Items	Mean	SD	Skewness	Kurtosis	Load	CR	AVE	MSV	MaxR(H)

FOMO4	2.45	1.41	0.53	-1.06	0.83	0.85	0.654	0.351	0.856
FOMO5	2.48	1.47	0.47	-1.2	0.84				
FOMO7	2.4	1.4	0.52	-1.06	0.76				
AE1	3.01	1.23	-0.13	-0.9	0.84	0.918	0.737	0.333	0.919
AE2	3.28	1.28	-0.36	-0.9	0.87				
AE3	3.02	1.24	-0.09	-0.87	0.88				
AE4	3.26	1.31	-0.3	-0.99	0.85				
SE1	2.45	1.37	0.43	-1.08	0.81	0.9	0.751	0.536	0.907
SE2	2.26	1.3	0.63	-0.81	0.89				
SE3	2.24	1.29	0.68	-0.7	0.9				
AN1	1.99	1.26	1.06	-0.05	0.92	0.902	0.754	0.536	0.913
AN2	2.1	1.28	0.89	-0.37	0.87				
AN3	2.09	1.26	0.91	-0.3	0.82				
AR1	2.95	1.4	0.1	-1.15	0.82	0.881	0.712	0.056	0.887
AR2	3	1.42	-0.04	-1.22	0.89				
AR3	3.2	1.41	-0.18	-1.21	0.82				

Table 3
HTMT RATIOS

	FOMO	**AE**	**SE**	**AN**	**AR**
FOMO	0.809	0.577	0.593	0.504	0.084
AE	0.593	0.859	0.514	0.379	-0.113
SE	0.599	0.517	0.867	0.732	0.157
AN	0.52	0.39	0.73	0.869	0.236
AR	0.079	0.109	0.153	0.245	0.844

Confirmatory Factor Analysis (CFA) was performed on all the constructs. Only four items for FOMO were dropped. All other items loaded neatly on the respective constructs. CMIN/DF in this study is 1.991, which lies below the benchmark value of <3 suggesting a strong model fit. The other goodness of fit and badness of fit criteria also indicate a good overall model fit: Comparative Fit Index (CFI)=0.975; Goodness-Of-Fit Index (GFI)=0.933; Adjusted Goodness Of Fit Index (AGFI)=0.903; Tucker-Lewis Index (TLI)=0.967; Increasing Fitness Index (IFI) =0.974 and Root Mean Square Error Of Approximation (RMSEA)=0.055 as shown in the table below (Siddiqui et al., 2015). Figure 2 illustrates the measurement model of this study.

Table 4
MEASUREMENT MODEL FIT STATISTICS

Fit Measures	**Cut off Limits**	**Model values**	**Fit Measures**	**Cut off Limits**	**Model values**
AGFI	>0.900	0.903	RMSEA	<0.08	0.055
GFI	>0.900	0.933	Pclose	>0.05	0.842

CFI	>0.900	0.974	ECVI	Lower the better	0.842
NFI	>0.900	0.95	Hoelter	>200	222
TLI	>0.900	0.967	CMIN	Lower the better	187.14

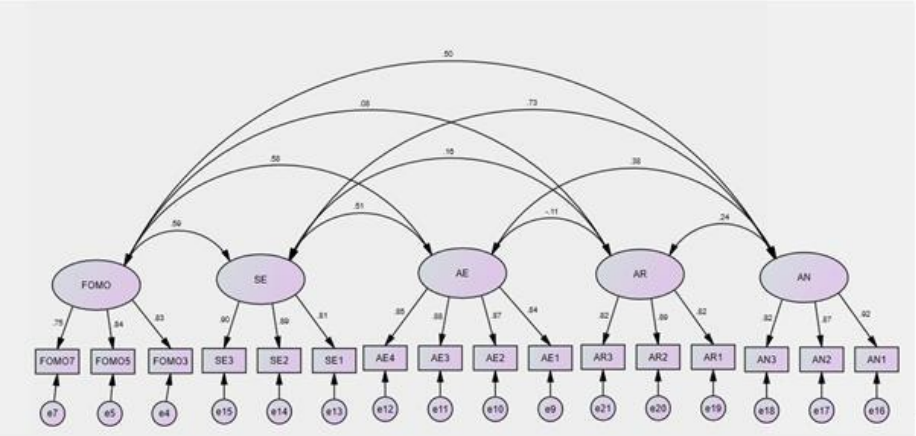

FIGURE 2
MODEL CFA

Structural Model Fit Statistics

After CFA, structural model fit was analyzed. The goodness of fit indices summarized in Table 5 meet the required cutoff criteria (Siddiqui et al., 2015). The badness of fit indices v2/df is less than 3, and RMSEA is less than 0.08 the cut off value (Bentler & Chou, 1987). Hence, the structural model exhibits an excellent fit on most criteria while acceptable to the other indices. The structural model of this study is illustrated in Figure 3.

Table 5
STRUCTURAL MODEL FIT STATISTICS

Goodness of Fit Measures	Cut off Limits	Model values	Fit Measures	Cut off Limits	Model values
AGFI	>0.900	0.903	RMSEA	<0.08	0.073
GFI	>0.900	0.866	ECVI	Lower the better	1.19
CFI	>0.900	0.949	Hoelter	>200	222
NFI	>0.900	0.922	CMIN	Lower the better	299.303
TLI	>0.900	0.938	DF	-	111
IFI	>0.900	0.949	CMIN/DF	<3.00	2.696
PNFI	>0.500	0.752	p-value	<0.05	0
PCFI	>0.500	0.775			

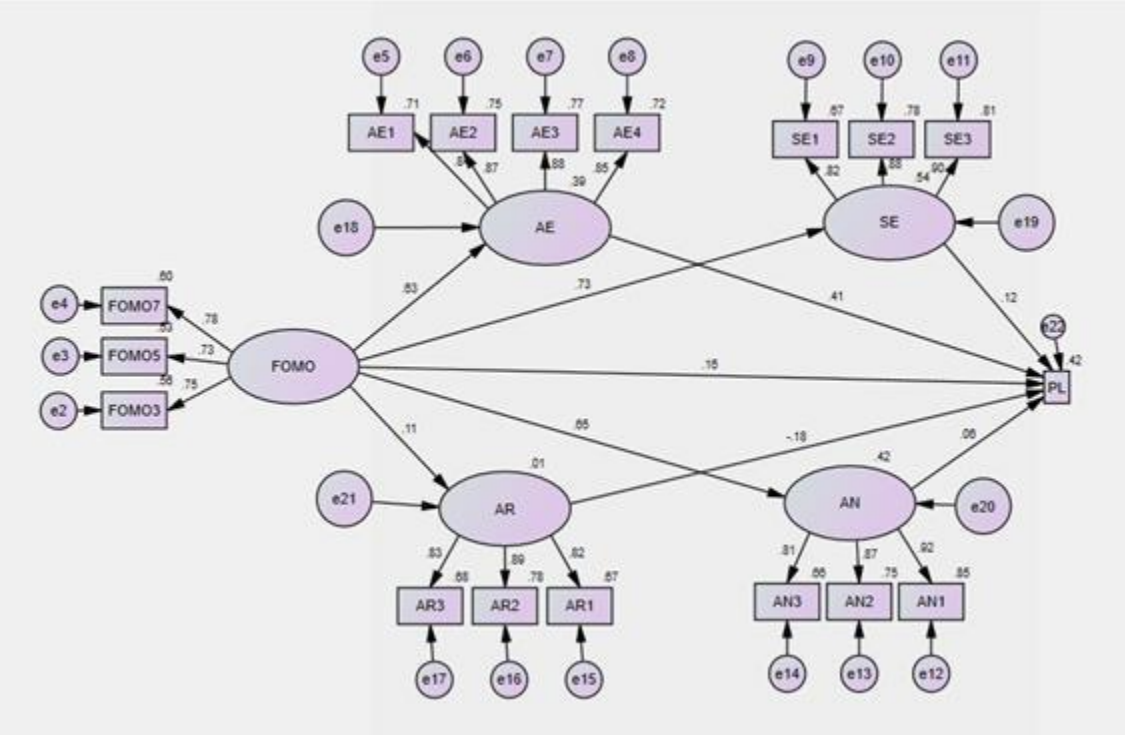

FIGURE 1
STRUCTURAL MODEL

Direct Effects

The hypotheses developed in light of literature were assessed through path coefficients and p-values acquired from the AMOS 24 output. H1, proposing that FOMO positively impacts purchase likelihood, was statistically insignificant (β=0.163, p > 0.05). This relationship's insignificance is of high value since this indicates all indirect effects found significant as full mediation (Rockwood & Hayes, 2020).

Table 6
DIRECT EFFECTS

Hypothesis	Path			Standardized Estimate	SE	t -statistic	p-value
H1	PL	<---	FOMO	0.163	0.341	1.388	0.165
H2a	AE	<---	FOMO	0.628	0.066	9.648	***
H2b	PL	<---	AE	0.408	0.187	6.28	***
H3a	SE	<---	FOMO	0.735	0.072	10.628	***
H3b	PL	<---	SE	0.124	0.22	1.57	0.116
H4a	AN	<---	FOMO	0.647	0.068	9.797	***
H4b	PL	<---	AN	0.058	0.185	0.874	0.382
H5a	AR	<---	FOMO	0.113	0.068	1.763	0.078
H5b	PL	<---	AR	-0.184	0.128	-3.919	***

Mediation Effects

In this model, the impact of FOMO on PL is hypothesized to be mediated by four variables: AE, SE, AR, and AN. These indirect effects were tested with non-parametric resampling through bootstrapping method (with 5000 iterations) at a 95% bias-corrected confidence interval since large sample data (>200 sample size) tends to lack multivariate normality (Rockwood & Hayes, 2020). For this purpose, a user-defined estimand was used on AMOS 24.

H2 proposes that FOMO has a positive impact on PL mediated by anticipated elation. Full mediation of anticipated elation is supported by the findings (β=0.256, $p < 0.01$). H3 proposes that FOMO has a positive impact on PL mediated be a self-enhancement feeling. This hypothesis was not supported by the data (β=0.091, $p > 0.10$). H4 proposes that FOMO has a positive relationship with PL mediated by anticipated envy. This proposition is also not supported by the data (β=0.037, $p > 0.10$). H5 was supported by the data suggesting that FOMO positively influences Pl mediated by anticipated purchase regret (β=-0.021, $p < 0.10$).

Table 7
INDIRECT EFFECTS

	Indirect Path	Standardized Estimate	Lower	Upper	P-Value
H2c	FOMO --> AE --> PL	0.256	0.525	1.017	0.001
H3c	FOMO --> SE --> PL	0.091	-0.079	0.644	0.184
H4c	FOMO --> AN --> PL	0.037	-0.122	0.352	0.358
H5c	FOMO --> AR --> PL	-0.021	-0.161	-0.003	0.085

Multigroup Analysis

This study aims to assess gender-based differential in consumer behavior. Multi-group analysis was conducted to assess invariance between the two groups: males and females. Table 8 summarizes the model fit indices related to males, females, and pooled samples which indicate sufficient model fit in terms of both goodness of fit and badness fit. Only structural weight invariance was assessed, indicating that the null hypothesis of invariance between the male and female samples was rejected ($p < 0.01$).

Table 8
FIT INDICES FOR INVARIANCE TESTS

	CMIN	**DF**	**CMIN/DF**	**P**	**NFI**	**IFI**	**TLI**	**CFI**	**RMSEA**
Male	182.18	111	1.641	0	0.855	0.938	0.922	0.936	0.08
Female	277.786	111	2.503	0	0.9	0.937	0.922	0.937	0.082
Pooled Sample	299.303	111	2.696	0	0.922	0.949	0.938	0.949	0.073
Structural weights Invariance	15.598	4		0.004	0.004	0.004	0.002		

The comparison of the coefficient of determination (R^2) revealed interesting details. The antecedents in the model explain a similar level of variations in the PL. However, variations in the anticipated regret could not be explained by the female sample's data, while the male sample explained 13.9% variations. Although the male sample is smaller than the female sample, the variation in AN, SE, and AE is higher in the male sample than in the female sample.

Table 9			
SQUARED CORRELATION – R2			
	Female	**Male**	**Pooled**
AR	0	0.139	0.013
AN	0.332	0.613	0.419
SE	0.43	0.797	0.54
AE	0.371	0.437	0.395
PL	0.408	0.474	0.421

Invariance between female and male sample was tested on the paths identified as significant in the pooled sample. The effect size of FOMO on AE, AE on PL, and AR on PL are invariant between male and female groups ($p > 0.05$). The null hypothesis of invariance is retained on these three paths. However, the effect size of FOMO on SE and AN is smaller in the female sample than the male sample, and the null hypothesis of invariance was rejected. Besides, the impact of FOMO on AR was found significant only in the male sample. Hence, the null hypothesis of invariance was rejected.

Table 10
MODERATED DIRECT EFFECTS

			Female	**p-value**	**Male**	**p-value**	**Pooled Sample**	**p-value**	**Invariance?**	**CMIN**	**p-value**
			β		**β**		**β**				
AE	<---	FOMO	0.609	***	0.707	***	0.636	***	Yes	0.423	0.515
SE	<---	FOMO	0.66	***	1.031	***	0.769	***	No	4.781	0.029
AN	<---	FOMO	0.582	***	0.867	***	0.671	***	No	7.599	0.006
AR	<---	FOMO	0.007	0.931	0.419	0.002	0.121	0.078	No	3.041	0.081
PL	<---	AR	-0.567	***	-0.308	0.243	-0.502	***	Yes	0.698	0.404
PL	<---	AE	0.969	***	1.704	***	1.171	***	Yes	2.645	0.104

The indirect effects were also assessed for invariance in the two groups **Error! Reference source not found.**. The indirect effect of FOMO on PL mediated by anticipated elation and anticipated envy is invariant in the female and male samples. However, the null hypothesis of invariance is rejected for the indirect effect of FOMO on PL mediated by self-elation and anticipated regret.

Table 11							
MODERATED MEDIATION PATHS							
	Female		**Male**		**Pooled Sample**		
Indirect Path	**β**	**P-Value**	**β**	**P-Value**	**β**	**P-Value**	**Invariance ?**
FOMO --> AE --> PL	0.219	0.001	0.367	0.001	0.256	0.001	Yes
FOMO --> SE --> PL	0.049	0.417	0.347	0.058	0.091	0.184	No
FOMO --> AN --> PL	0.063	0.17	- 0.086	0.39	0.037	0.358	Yes
FOMO --> AR --> PL	-0.001	0.904	- 0.039	0.186	-0.021	0.085	No

In addition to multi-group analysis, moderation of gender was also assessed to ensure the paths on which gender has a differential effect. The gender negatively moderated the effect of FOMO on all the emotional reactions related to purchasing. However, gender moderated the direct effect of only two emotional reactions (anticipated elation and anticipated purchase regret) on purchase likelihood. Hence, full moderated mediation of anticipated elation and anticipated purchase regret is supported by the sample data.

DISCUSSION

This study was conducted in a collectivistic, risk-avoiding, and restrained society, Pakistan (Hofstede, 2016). Therefore, this study's findings deviate from a previous study by (Good & Hyman, 2020) using a similar model. The impact of FOMO laden is insignificant on the purchase likelihood in this study ($\beta=0.163$, $p > 0.05$), whereas this effect was quite strong in the previous study ($\beta=0.23$, $p < 0.001$). This difference in results indicates that FOMO laden was partially mediated in the previous study while fully mediated in the current study.

The FOMO laden appeal has a statistically significant on all purchase related feeling in this study: anticipated elation ($\beta=0.63$, $p < 0.001$), self enhancement ($\beta=0.74$, $p < 0.001$), anticipated envey of others ($\beta=0.65$, $p < 0.001$) and anticipated regret ($\beta=0.11$, $p < 0.10$). These findings are quite similar to Good &Hyman (2020) which also shows all these paths statistically significant: anticipated elation ($\beta=0.39$, $p < 0.001$), self enhancement ($\beta=0.64$, $p < 0.001$), and anticipated regret ($\beta=0.55$, $p < 0.001$). The impact of FOMO on anticipated envy of thers was tested for the first time in this study. However, this relationship was found marginally significant although previous studies show strong impact of anticipated envy on FOMO, $\beta=0.61$, $p < 0.001$ (Good & Hyman, 2020).

Similar to Good &Hyman (2020), the indirect effect of FOMO laden appeal on purchase likelihood was found significant through anticipated elation and anticipated expense regret. These two purchase-related emotions fully mediate the effect of FOMO on purchase likelihood since the direct effect is found statistically insignificant. However, the mediation of self-enhancement and anticipated envy were found statistically insignificant.

This study has made some new findings related to differential effects in the gender

groups. The female group exhibited a high level of impact of FOMO on the purchase-related emotions compared to males. Moreover, impact of anticipated regret on purchase likelihood is statistically insignificant (β=-0.308, $p > 0.05$), whereas this effect is significant among females (β=-0.567, $p < 0.001$). Hence, the results have established a moderated mediation model.

There are two strong reasons for the difference in results between this study and Good & Hyman (2020). First, the two studies' context is different: this study was conducted in Pakistan, but Good & Hyman (2020) were conducted in the US. Pakistan is a collectivistic, risk-avoiding, and restrained society, whereas the US is an individualistic, low power-distance, Masculine, risk-taking, and indulgent society(Hofstede, 2016). People living in a restrained society control their desires and do not focus on leisure activities (Triandis & Hofstede, 1993).

The data for the current study were collected during the second wave of COVID-19 (November 2020). In contrast, Good &Hyman (2020) was received for publication before the spread of the pandemic in the US. The difference in results can be associated with the impact of the pandemic on consumer behavior.

Theoretical Implications

This study's findings show that customers with who experience FOMO laden appeal generated by post on Facebook shared by their friends experience anticipated elation, self-enhancement, anticipated envy by others, and anticipated expense regret. However, only anticipated elation and anticipated expense regret will influence their purchase decision of service with hedonic pleasure (*i.e.*, musical event). It is worth noting that anticipated elation will encourage the customer to attend these musical events, while the anticipated expense regret will obstruct them from such a decision. The mediation analysis confirms these effects. When consumers with FOMO laden appeal for the musical events feel anticipated, their likelihood of purchasing the tickets or passes increases. However, when they experience anticipated expense regret, their chances of attending such an event reduce. The two other hypothesized feelings, anticipated envy of others and self-enhancement feelings were irrelevant in this situation. In all the cases, the effect of FOMO on the anticipated feelings was found to be stronger in the female sample.

This study has made a significant contribution to the literature. First, the variables were tested in light of a new theory related to FOMO, the theory of complexity. Secondly, a new mediator, anticipated envy of others, was tested in the study. It was found to have an insignificant mediation effect. Hence, rejecting the idea that people will be more likely to purchase a service when they feel others envy them. Third, the findings extend the theory related to FOMO by empirically testing and supporting gender moderation in an established model. Moreover, the theory related to hedonic services is enriched by this study as the previously tested model was assessed in a new context, restrained society, and major differences were found. Lastly, since this study's data was collected during the COVID-19 pandemic, implicit effects of the fear of COVID and inclination towards staying at home are also evident in the results.

Limitations and Future Research Directions

This study has several strengths: data was collected from closed groups on social media.

Group members shared real social media video advertisements to collect the group members' responses, unlike other studies where hypothetical vintage was shared. However, certain limitations lead to future research directions.

Future research can include cultural comparison on a single model to increase the results' generalizability across cultures. Moreover, the COVID-19 pandemic might have affected this study's results, along with the cultural differential. Future research should assess the differential impact of fear of COVID-19 on the model.

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