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Determinants of Impulsive and Obsessive Buying Behavior: A Moderation and Mediation Analysis

Hafiz Ihsan ur Rehman* Zulfiqar Ahmed**

Abstract

This research seeks to investigate the factors that make young adults materialistic and the outcomes of their materialistic approach. The study focuses on mediating the role of materialism between the contextual factors (celebrity endorsement and peer influence) and compulsive buying (impulsive and obsessive buying) is the focus of the study. It also looks at the moderating role of the use of social media. The data was collected from undergraduate university students residing in the Punjab province of Pakistan. The structural modelling technique was used to analyze the data. The study results show that materialistic young adults are more involved in impulsive and obsessive buying than others. The results also confirm the findings of previous researches conducted in other cultures. It also confirms that materialism mediates the relationship between sociological factors (celebrity endorsement and peer influence) and compulsive buying behaviour (impulsive and obsessive buying behaviour). Moreover, it proves the moderating role of social media use in determining and affecting these relationships. This research provides guidelines for the researchers, policy-makers, and managers.

Keywords: Celebrity endorsement ; peer influence; materials; social media use ; impulsive buying; obsessive buying.

JEL Classification: Z00

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1. Introduction

Scholars studying marketing psychology have paid a lot of attention to compulsive purchase behaviour (Inglehart & Baker, 2000; Chan et al., 2006). Over fifty million Americans are affected by compulsive shopping (Dittmar & Drury, 2000). There is widespread concern that younger generations, particularly in wealthy and developing countries, are growing materialistic (Parker et al., 2004). In 2003, 32 million 12-year to 19-year old youngsters in the United States spent a total of \$175 billion (Mangleburg et al., 2004); and the young generation, today, has four times greater number of gadgets than the era of 20 to 30 years ago. Young people in the United Kingdom, aged 16 to 18, scored strongly on the compulsive shopping scale, stating that it was difficult to refrain from purchasing new items they did not need (Phau & Woo, 2008). Materialism is linked to self-doubt, insecurity, low school achievement, and juvenile criminality; thus, researchers and educators should pay attention to this phenomenon (Deci & Ryan, 1995; Chang & Arkin, 2002). Previous research has expanded our knowledge of the main determinants of impulsive buying (Jalees, 2009). However, most of the studies on impulsive purchases have been conducted in Western countries, and there are minimal research experiments in third-world countries such as Pakistan. According to the studies, economic growth positively impacts pulsive purchases (Kacen & Lee, 2002). Pakistan's economic situation is improving as its GDP continues to rise to 4.8%, reaching 5.79 percent in the fiscal year 2018, the highest level in 13 years, and the current GDP growth is recorded as 4.8% in 2021 (Hafeez & Fasih, 2018). As a result, it is crucial to look into impulsive purchasing in Pakistan. Furthermore, Ali et al. (2012) found that Pakistani people's materialistic thinking grows. Materialistic persons measure their success by the worth of their belongings (Richins & Dawson, 1992). As a result, individuals are more likely to make impulsive purchases (Tatzel, 2002).

Impulsive shopping is considered a common occurrence, and impulsive purchases account for a major share of consumer behaviour (Habib & Qayyum, 2018). Depending on the nature of the products, roughly 40 to 80 percent of consumer purchases are attributable to impulse purchases (Amos et al., 2014). Impulse purchases account for 80 percent of luxury product sales, 62 percent of supermarket sales, and 30-50 percent of retail and fast food store sales (Ruvio & Belk, 2013). Impulsive purchasing is defined as a strong, uncontrollable and impulsive need for instant possession of goods and services with minimal consideration of the repercussions of the purchase (Aragoncillo & Orus, 2018). Since human beings frequently act on impulse, unexpected shifts in consumer purchasing behaviour occur (a sudden urge). Urges have been discovered to be significant motivating elements with the ability to influence humans to act in specific ways. In terms of reactions, they are characterised by impulsive responses to immediate situations.

The impulses have several important characteristics; they are abrupt, strong, last for a brief time and dissipate after the stressor or threat is processed (Telci, 2013). Furthermore, primary impulses in humans are mainly physiological urges. In contrast, the secondary urges are heavily influenced by our social environment and inspirations, such as purchasing commodities that are desired or considered a symbol of social status in a culture (Kang & Park-Poaps, 2010). To some extent, it can be seen in the circumstances involving socially problematic behaviour. Likewise, any form of mental or physical disorder, such as Obsessive-Compulsive Disorder (OCD), may also be referred to in this regard (Pan et al., 2015).

Nonetheless, urges have diverse impacts, and they differ from person to person. Some people have low cravings but are unable to resist them. On the other hand, others may have the ability to regulate or manage their behavioural patterns and refuse to comply with even the powerful cravings. People with weak controlling abilities are more likely to engage in uncontrollable behaviour, which is CBB. There are positive and socially recognized drives and harmful urges that are socially criticized, regardless of a person's ability. However, the unconscious behavioural patterns that have been organized by human evolution are still at work, and they can be harmful to the social fabric at times (demographics of an area). With 9 percent of youths, in the United States, owning a smartphone and 45 percent claiming to be always connected online, social media has become ingrained in the daily lives of young people (Anderson & Jiang, 2018). The exponential expansion of social media, which individuals choose to access via mobile devices, has marked the current period. People use multiple platforms, and social media has managed to find a central role in our daily lives (Dwivedi et al., 2019). 93 percent of businesses have used social media in their marketing plans. It generates a lot of advertising revenue that is expected to grow by 28.4% through 2022 (Dwivedi et al., 2019). One of the most important aspects of social media is personalised advertising (PAD). PAD has a huge impact on users' purchasing decisions.

According to Zafar et al. (2019), the environment on social media encourages users to buy impulsively. Social comparison theory (Festinger, 1954) states that when objective means are unavailable, people are motivated to evaluate themselves by comparing themselves to other consumers. The researchers broaden the idea to include a comparison of material objects in determining an individual's social status. Media and social influence are likely to interplay and have parallel effects on the younger generation (Chen et al., 2006; Valente, 1996). The major goal of the investigation is to identify the impact of social influences (peer influences, and celebrity endorsement) on impulsive and obsessive buying behaviour of consumers with mediation (materialism and moderation; social media use). The current research adds to the existing body of knowledge, in numerous ways, to fill this research gap. As a first step, we provide an existing theoretical paradigm to explain why Pakistani youth is so materialistic. Secondly, by putting the conceptual model through its paces, and validating it with a variety of causes and effects of materialism, among young people, we widen the breadth of the literature. The third point of discussion is materialism and impulsivity as plausible mediators between social factors and young adults' compulsive shopping behaviour.

2. Literature review

2.1 *Materialism*

Many alternative definitions of materialism have emerged as a result of years-long research. According to Belk (1985), Materialism is defined as a person's value system for worldly possessions. Materialism is defined as a person's internal desire to receive and spend. The persons' importance to worldly possessions is called materialism (Hollander et al., 1986). Materialism refers to a person's attitude toward possessions and achievements to obtain the most desired position in society (Richens & Dawson, 1992). Materialism has been attacked on social, religious, and philosophical grounds (Belk et al., 1982). Materialism, as a dimension of personality characteristics, creates a distinction between the individuals who depend on possession as the main component of the entity and those for whom ownership is of secondary importance (Belk, 1984). As a foundation for this notion, the definition of materialism is the people's attitudes toward possession and the value they place on acquiring material goods. Materialistic persons use their material possessions to improve their social relationships with others (Rindfleisch et al., 1997). The three dimensions of materialism are envy, possessiveness, and a non-negotiate attitude (Belk, 1984). Materialistic people are less satisfied and happy with their lives than non-materialistic ones (Ryan & Dziurawiec, 2001). Materialists value psychological and social aspects less than others (Kasser, 2003).

According to Belk (1988), Material things are widely used by young people to express their extended self; it makes materialism a common practice. The term "materialism" is defined as "the degree to which individuals aspire to engage in the development and preservation of the self through the acquisition and use of objects, services, and experience" (Shrum et al., 2013). The materialism value scale technique is used in this study to measure materialism. The scale has three dimensions: success, happiness, and centrality. Success is determined by what you have. Materialistic young adults are continually compelled to make lavish purchases because their key life goals are to accumulate wealth and material stuff. Happiness is the belief that owning many expensive things makes you happy. Centrality relates to possession, which is important in the materialists' lives. They use high-end things to convey social standing, prestige, and wealth. Both external and internal variables influence young people's materialistic behaviour (Kasser & Kanner, 2004).

2.2 *Peer Influence and Materialism*

According to a survey about youth, there is a strong link between peer contact, peer pressure vulnerability, and materialism (Chan & Fang, 2007; Chan & Prendergast, 2007). Peers have more effect than parents do in developing materialistic behaviour (Chaplin & John, 2010). Peer group influence leads to high levels of materialism, possibly because peer acceptance is regarded as the best approach for gaining confidence and intimate connection

with one's peers in a specific community (Isaksen & Roper, 2012). According to the comprehensive social assessment hypothesis, people build their social position by comparing themselves to others through their material possessions (Motl et al., 2001). Materialism among young adults is exacerbated by peer pressure (Benmoyal-Bouzaglo & Moschis, 2010). In most cases, peers are thought to be more influential than parents in encouraging the adoption of materialistic ideals. Surprisingly, there is no evidence that peer-materialism causes young age materialism to rise. On the other hand, Peers are more likely to pass down values than their parents are. When the teenagers and youngsters discuss consumption with their friends (e.g., what cool brands are there in the markets, what is in and out, how much they spend on a pair of sneakers, etc.) and observe their peers' acquisitive tendencies, they are more likely to imitate such behaviour and want the same things the formers want or have. We explore how peers' materialism increases the adolescents' self-esteem, which in turn drives materialism, in contradiction to this viewpoint. Materialism is both a coping mechanism for dealing with challenges and a symptom of underlying insecurity (Kasser, 2003).

H1: Peer Influence has a Significant Impact on Materialism

2.3 Celebrity Endorsement

According to celebrity studies, celebrities reflect and represent key aspects of capitalism, such as individualism, consumerism, and materialism. Celebrity-related scripts and photographs circulate widely in the media frequently focus on their successful, happy, and glamorous lives (Giles & Maltby, 2004). This means that it is not only the customers' materialism that influenced their reactions to celebrity-supported companies (e.g., Under Armour endorsed by Michael Phelps, Puma recommended by Rihanna, Chanel endorsed by Blake Lively, etc.), the celebrity-founded and owned product lines/brands also do that (For example, Jessica Simpson's product lines, Paris Hilton's brands, JLo by Jennifer Lopez, and so on.). Customers' levels of fashion participation are also influenced by materialistic incentives (O'cass & Frost, 2002). Fashion engagement, or a consumer's interest in clothing and fashion, is an important component of his lifestyle that influences his purchase decisions and behaviour (Naderi, 2013; Nam et al., 2007). Celebrity worship is a common occurrence among teens and young consumers worldwide (Yue & Cheung, 2000). According to a recent estimate, celebrities are utilised as spokespersons in about 20% of all advertising worldwide (Shimp & Andrews, 2013).

According to Shimp and Andrews (2013), in the United States, celebrities regularly feature in television and print advertising. Celebrity endorsement is particularly widespread in Japan, with over 70% of all advertisements using local or foreign celebrities (Praet, 2008). Celebrities are generally seen as trustworthy providers of information by consumers (Atkin & Block, 1983). Using celebrities as product spokespersons in advertising attracts new clients and encourages materialism (McCracken, 1989; Petty et al., 1983). Young people are

particularly drawn to celebrity endorsements (Yue & Cheung, 2000). According to Lafferty and Goldsmith (1999), young people prefer products that are promoted by movie stars and sports stars (Chan & Prendergast, 2007, 2008; Chan & Zhang, 2007). In addition to their classmates, young people may compare themselves to celebrities. Celebrity messaging has become a part of a person's social reality building (Alperstein, 1991). As a result, celebrity worship may have a tremendous impact on their followers' values, attitudes, and behaviour (Arratia & Schultze, 1991). As a result, the materialists see celebrity status as a sign of success, and they try to portray luxury consumption as a reflection of a successful life (Sharda & Bhat, 2018).

H2: Celebrity Endorsement has Significant Impact on Materialism

2.4 *Impulsive and obsessive buying behaviour*

CB is compulsive purchasing which has been linked to a variety of psychiatric problems and other impulsive actions. CB has been linked to anxiety, mood, substance misuse, obsessive hoarding, and eating disorders studies (Christenson et al., 1994; O'cass & Frost, 2002). CB has also been linked to various personality problems (Schlosser et al., 1994). According to studies, CB has been linked to avoidant, obsessive-compulsive, and borderline personality disorders (Leibinger et al., 2009). Due to time and quantity limitations, these triggers caused panic or terror among the inhabitants, resulting in an impulsive and obsessive purchase. Obsessive-compulsive shopping is a major component of the disease spectrum that contributes to low life satisfaction and excessive use of credit, according to Harnish et al. (2019). As compulsive purchasers aren't interested in the things they buy, the act of purchasing, rather than the products obtained, appears to ease obsessive buyers' moods and states (O'guinn & Faber, 1989). Compulsive buying is typically classified as either an addiction or a psychological illness (Hartston, 2012), an affective disorder (Lejoyeux et al., 1995), and a mood disorder (Kesebir et al., 2012), or an obsessive-compulsive disorder (Hollander, 1993).

Compulsive buying, on the other hand, maybe influenced by dispositional variables. Examples, anxiety (Williams & Grisham, 2012), depression (Cullen et al., 2010; Mueller et al., 2011), materialism (Dittmar, 2005; Mueller et al., 2011; Rose, 2007), decision-making difficulties (Kyrios et al., 2004), impulsivity (Billieux et al., 2008; Black et al., 2012), narcissism (Rose, 2007), and Perfectionism has been connected to compulsive shopping and has been shown to predict it (for a review on comorbidity rates see Aboujaoude, 2014). CBB (compulsive purchasing behaviour) is a compulsive activity in which a person shops as a coping mechanism for feelings of emptiness or as an escape from uncomfortable situations or negative feelings (O'guinn & Faber, 1989; Raab et al., 2011). According to a study, when these clients indulge in the habit, they prefer things that are related to their attractiveness. CBB is a form of an obsessive eating disorder.

According to a previous study, different compulsive spending habits may have common causes, development patterns, and results, as well as being comorbid (e.g., Christenson et al., 1994; Faber et al., 1995; McElroy et al., 1994). Ridgway et al. (2008). Obsessive buying, for example, is defined as the need to purchase specific brands of clothing or other items. Furthermore, a previous study has revealed that obsessive purchasers are motivated to engage in obsessive buying by frequent and continual thoughts, intrusive feelings, and images, all of which lead individuals to engage in obsessive buying with the primary purpose of decreasing anxiety and suffering (Roberts & DeVecchio, 2000). Another consumer behaviour outcome examined in this study is obsessive buying. According to Japutra et al. (2019), uncontrollable cravings to engage in dangerous acts characterise impulse-control disorder, whereas concern or anxiety characterise the obsessive-compulsive disorder. Obsessive buying is a natural urge that is accompanied by apprehension about shopping and a desire to make repeated purchases to relieve stress or tension. Obsessive-compulsive disorder (OCD) is defined by intrusive thoughts (obsessions) and routines (compulsions) performed to relieve worry or suffering (American Psychiatric Association, 2013).

H3: Materialism has a significant impact on Impulsive Buying behaviour

H4: Materialism has a significant impact on obsessive buying behaviour

2.5 *Materialism as Mediator*

This research aimed to see if materialism acted as a buffer between specific sociological situations and shopping addiction. Theoretical support for materialism's mediating effect on compulsive behaviour has come from a variety of studies (Nga et al., 2011; Rose, 2007). (Gallagher et al., 2017) looked at materialism as a mediator between the relationship of gender, family, peer influence and compulsive buying. Obsessive shopping was investigated as a probable predictor of materialism. Sociological factors such as peer pressure, celebrity endorsements in the media, and television advertising have all been related to materialism and compulsive shopping in adulthood (Lindstrom & Jeffries, 2004; Manchanda et al., 2010). Based on the available literature, we claim that materialism mediates the association between celebrity endorsement, peer influence, and obsessive behaviour.

H5: Materialism mediates the relationship between peer influence and impulsive buying behaviour

H6: Materialism mediates the relationship between Celebrity Endorsement and impulsive buying behaviour

H7: Materialism mediates the relationship between peer influence and Obsessive buying behaviour

H8: Materialism mediates the relationship between Celebrity Endorsement and Obsessive buying behaviour

2.6 *Social Media Use*

Because of the widespread usage of smartphones and the quick expansion of social media, billions of people can now share and post anything on social media sites (i.e., Facebook, Instagram, Twitter, etc.) (Prentice et al., 2020; Islam et al., 2021). Many studies have indicated that consumers' use of social media influences their decision-making processes and motivates them to modify their preferences (Barger et al., 2016). Social media gives internet users the ability to access information in real-time, besides fostering relationships with other people even in times when they cannot interact face-to-face due to pandemics. In this extraordinary situation, it's no surprise that social media usage has exploded. Social media consumption has risen due to COVID-19's widespread distribution, according to a recent global poll done in important nations such as China, the United States, Spain, and Italy, with 40% of online users engaging in excessive social media use (Watson et al., 2020). Every day, millions of posts on routine life events appear on social media.

2.7 *Social Media as Moderator*

Among all forms of advertising, social media has had a significant impact on young people. Not only the younger generation but even adults regard social media as the most adaptable and appropriate medium for advertising these days, rather than television or other forms of media. According to Adobe Digital Insights' (ADI) State of Digital Advertising 2018 report, this is in stark contrast to older age groups, who overwhelmingly cite television as their most relevant channel. By increasing the number of young influencers available for purchase via online marketing, social media is growing in popularity. Social media's impact has expanded beyond advertising. According to a survey done last year, the youth trusts recommendations made on social media more than those that reach them through television advertisements.

Additionally, a recent survey indicates that social media dialogues account for almost 12% of consumer transactions in India. While the elderly are still reliant on television and banner commercials, adolescents are exposing themselves to numerous social media websites where they are constantly bombarded with advertisements. These commercials are critical in persuading children to make purchases because materialism is the primary component that generates a buying desire. Social media is a significant contributor to the materialistic mindset among youth. All prominent social media platforms have a technique of promoting a particular post and quickly increasing its popularity. These metrics play a significant part in determining one's own and others' worth. We anticipate a large number of likes whenever we post something on Facebook, Instagram, or Twitter, regardless of the fact whether the post is about sending a social message or taking a selfie. This demonstrates that we evaluate our self-worth on the behaviour of others and their preferences or dislikes. We are beginning to equate the value of online connections with that of in-person interactions, using the number

of Retweets or likes we receive as a gauge of our worth. As a result, the more we receive, the higher our self-esteem is, for we can consider ourselves to be popular.

H9: Social media use Moderates the relationship between peer influence and materialism

H10: Social media use Moderates the relationship between celebrity endorsement and materialism

2.8 SOR framework

The SOR model has been widely adopted and used in consumer behaviour research (Liu & Cao, 2016; Islam et al., 2018). According to the SOR model, various components of the environment function as stimuli (S), when combined, modify people’s inner states and cause them to act as organisms (O) that in turn cause them to exhibit behavioural reactions (R). The model has received empirical support from a large body of literature Vieira et al. (2018). This concept was proposed with a retail scenario in mind. The environmental stimulus in this paradigm is atmospheric cues, and the two major states of emotion are Organism and shopping at the store as responses. Environmental stimuli have a considerable impact on the consumer’s internal states; and, according to the SOR model application, consumers’ environmental stimuli also derive from all invaders. In the framework developed by (Zheng et al., 2019), Ambient, design and social cues are among the stimuli. The SOR model was used in this study to clarify the links between external inputs, organism state, and specific outcomes. The current study used the SOR model as the environmental stimulus, with social influence (celebrity and peer influence) and social media use as the social stimuli (S). As materialism in the Organism (O). The comments (R) alluded to obsessive shopping (impulsive and obsessive buying behaviour).

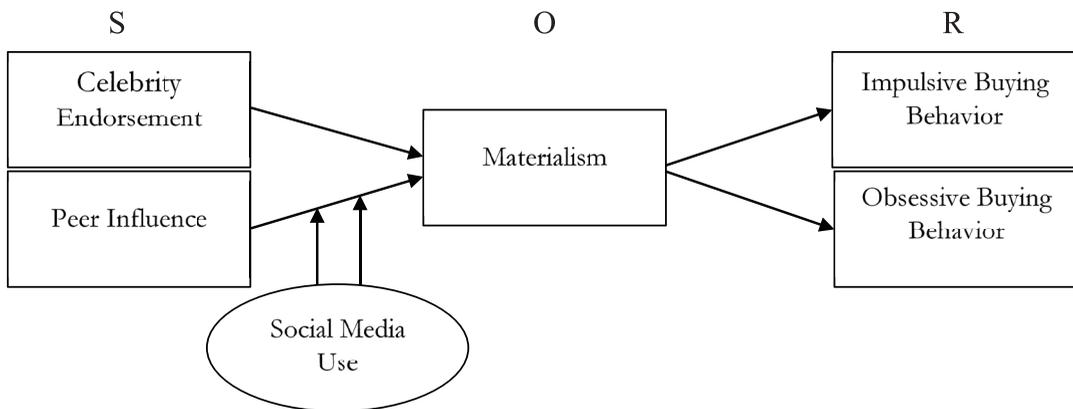


Figure 1: SOR Model

3. Methodology

In the context of Pakistani consumers, there is little evidence in the consumer behaviour and marketing literature about the relationship between the antecedents of materialism and compulsive buying behaviour among young adults. Based on recent literature, for this investigation, we proposed the following conceptual model: Among young adults; (1) materialism is a major predictor of compulsive buying behaviour, (2) materialism serves as a strong mediator between the indicated contextual factors and compulsive buying behaviour, (3) Celebrity endorsement and peer influence are important predictors of materialism, and (4) social media serve as a moderator between the relationship of celebrity endorsement and peer influence with materialism.

3.1 *Measurement development*

This study's questionnaire is based on previous research. Six items were used to assess materialism Richins and Dawson (1992). Four items from Sheldon et al. (2004), the Celebrity Endorsement Survey, were used to assess celebrity endorsement. Three items were used to assess the influence of peers from Mangleburg and Bristol (1998). four items were used to assess consumers' impulsive buying behaviour by Ridgway et al. (2008). Obsessive buying will be assessed by using the 4 items from Ridgway et al. (2008). Social media use was measured by using 10 items from (DeVellis et al., 2003). Therefore, the entire questionnaire was made up of elements derived from previous research. The factors we chose and included in our conceptual model are some of the ones that have been linked to materialism and compulsive shopping in young people. A quantitative approach was used to collect data. All items were assessed using a five-point Likert scale ranging from "strongly disagree" to "strongly agree. Because English is the primary language of instruction in Pakistan's colleges, content validity was not an issue because all of the things were created in English (Islam et al., 2018; Rasool et al., 2012).

3.2 *Data collection*

Undergraduate university students were provided with the data. 450 people responded (227 male and 223 female). The survey method was employed to improve the data's validity. Surveys are useful in quantitative research because they allow researchers to examine the relationships between various variables; and scientists in the social sciences frequently employ surveys (Zhang et al., 2014). In the spring of 2021, data were collected from undergraduate students at universities (major campuses) in Pakistan's Punjab region. For this study, university students are the most appropriate participants since they have more free time and resources (Chan et al., 2006; Chou, 2001; Pinto et al., 2000). In the presence of their teachers, students were given a properly designed questionnaire to complete during their online lesson. The researchers gave the students a brief overview of the study's factors before

asking them to fill out the questionnaire. Due to missing data, 17 out of 450 replies were eliminated. As a result, the final sample included findings from 433 pupils. Males made up 50.44 percent of the responders, while females made up 49.55 percent. They were between the ages of 18 and 30. The respondents' demographic profiles are shown in Table 2.

3.3 Data analysis

We employed structural equation modelling (SEM) in conjunction with the partial least squares (PLS) approach to analyse the data to evaluate the measurement and structure models and confirm the adequacy of the measurement model by validating the proposed constructs' reliability and validity. PLS is a powerful regression measurement approach. Concurrently, A and confirmatory factor analysis (CFA).

Table 1:
Demographic profile

Variable	Group	Frequencies	Percentages
Age	19 to 24 Years	383	85.1
	25 to 30 Years	67	14.9
Gender	Male	227	50.4
	Female	223	49.6
Part-Time Job	Yes	86	19.1
	No	364	80.9
Per Month	less than Rs.1000	177	39.3
Spending on Fast Food	Rs.1001 to 2000	104	23.1
	Rs. 2001 to 3000	75	16.7
	Above Rs.4000	94	20.9

4. Results

4.1 Measurement model

The measuring model was evaluated in this study using CFA (Hair et al., 2012). We began by evaluating the measurement model's substance, convergence, and discernment. The most difficult technique is construct validity (Malhotra, 2010). Still, It is required for this study so that the concept's meaning might shift, and respondents' interpretations of the construct can fluctuate during data collecting (Drost, 2011). As a result, the data gathering step receives extra attention from researchers. A pilot test of 50 questionnaire responses was conducted before the main data collection to investigate the reliability, validity, and average variance extracted (AVE) for the validation of the content. We deleted some items and improved the convergent and discriminant validities, as well as the alpha values, during this

process. The degree to which a construct is connected with the other constructs in a conceptual model is called convergent validity. The AVE, Cronbach's alpha, and composite reliability (CR) scores, as well as the factor loadings, were used to assess convergent validity.

The most commonly used statistical approach for assessing construct reliability is Cronbach's alpha (Gefen & Straub, 2000). A latent variable's "internal consistency" refers to the consistency between its items. Construct reliability denotes the absence of random mistakes in construct elements and the consistency of results. The construct dependability ratings that are acceptable are higher than 0.70 (Keil et al., 2000), and Cronbach's alpha values for all constructs in the current study are greater than 0.70, as shown in Table 2. The term discriminant validity refers to the fact that each construct in the conceptual model is distinct from the others. The discriminant validity was assessed (Fornell & Larcker, 1981). At the notion level, we looked at discriminant validity. The square root of the AVE of variables was compared to the connection between correlations among variables. The results showed that the discriminant validity of the current study is good. AVE, CR, and Cronbach's alpha levels of 0.50, 0.80, and 0.70, respectively, have been advocated by the researcher (Faqih, 2016; Flynn et al., 1990). Table 2 shows that all of the measurement models' needed values are above the minimum level. As a result, the findings suggest strong discriminant and convergent validity.

4.2 *Structural model assessment*

Table 2:

Construct wise Reliability Analysis

Variable	Cronbach's Alpha	No. of Items	CR	AVE
Materialism	0.825	6	0.870	0.627
Celebrity Endorsement	0.848	4	0.853	0.595
Peer Influence	0.887	4	0.898	0.688
Impulsive Buying Behaviour	0.891	4	0.885	0.658
Obsessive Buying Behaviour	0.894	4	0.897	0.687
Social Media Use	0.905	10	0.915	0.546

As a result of the model's statistical tests for reliability and validity, it was determined that the model was suitable to test hypotheses. A correlation analysis was used to establish a straight link between the variables. The term "correlation" refers to the relationship between two or more variables. Materialism was positively associated with celebrity endorsement, peer influence, and social media usage (respectively, $r = .403$, $r = .364$, $r = .373$, $P < 0.001$). Materialism was found to be linked to young adults' impulsive and obsessive purchasing behaviour ($r = 0.268$, $r = 0.350$, $P < 0.001$). Correlation analysis values can be seen in Table 4 (see Fig. 1). The second stage was to use Amos to run the structural equation model to see if the hypotheses were supported. The impact of independent variables on dependent variables was investigated using the SEM approach. The antecedents' variables (celebrity endorsements, peer influence, and social media use) have a considerable influence on dependent variables, based on the data analysed in the conceptual model (materialism, impulsive and obsessive buying behaviour). The results indicate that path coefficients of celebrity endorsement ($\beta = 0.309^{***}$, $p < 0.01$), peer influence ($\beta = 0.252^{***}$, $p < 0.01$), and Social Media Use ($\beta = 0.224^{***}$, $p < 0.01$) all have significant predictors of materialism. Therefore, H1 and H2 are supported. Materialism significantly predicted ($\beta = 0.081^{***}$, $p < 0.01$) impulsive buying behaviour and ($\beta = 0.206^{***}$, $p < 0.01$) H3 and H4 are also supported by obsessive buying behaviour among young adults and materialism explains 24.7 percent of the variance in compulsive buying. Materialism was found to be a key driver of impulsive and obsessive purchase behaviour using parameter coefficients. Analysis of Regression (path coefficients & R²) values is presented in Fig. 2.

4.3 Mediation analysis

In the current research, materialism served as a mediator between (celebrity endorsement and peer influence), and (impulsive and obsessive buying behaviour). Several psychologists and social scientists have argued about the viability of mediation (Baron & Kenny, 1986; Hayes & Scharkow, 2013; MacKinnon et al., 2002; Preacher & Hayes, 2004; Shrout & Bolger, 2002). We employ the mediation approach explained by (Preacher & Hayes, 2004), employing a 95 percent confidence interval and the bootstrapping method. The indirect effect is substantial with a 95 percent confidence interval excluding zero. Materialism mediates between the variables (celebrity endorsement and peer influence) and variables (impulsive obsessive buying behaviour). The boot strap confidence interval shows 95percentt, excluding zero, the indirect effect of materialism on correlations between determinants (celebrity endorsement and peer influence) and (impulsive and obsessive purchase behaviour) is substantial. This finding suggests that materialism moderates the effect of the variables (celebrity endorsement and peer pressure) on impulsive and obsessive purchasing behaviour.

To test the moderation effects of social media use in the relationship between celebrity endorsement and materialism, the interaction terms were employed to test hypotheses H9 and H10. The results indicated social media use as a significant and positive moderation of the relationship between celebrity endorsement and materialism. The interaction term ($b=0.126$, $p < 0.05$) was a significant moderator between the relationship. In the same way, social media use proved as a moderator in the relationship between peer influence and materialism. The interaction term ($b=.082$, $p < 0.05$) is a significant moderator.

Table 3:
Moderation effects of social media

	Relationship	Estimate	Significance
ZMaterialism <---	ZCelebrity_Endorsement	0.332	***
ZMaterialism <---	ZSocial_media_Use	0.224	***
ZMaterialism <---	INT_CEN_SMU	0.126	***

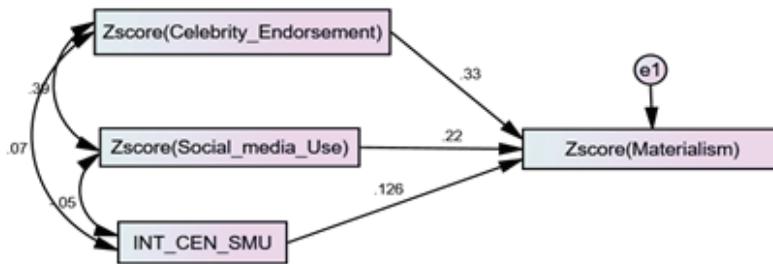


Figure 2: Endorsement

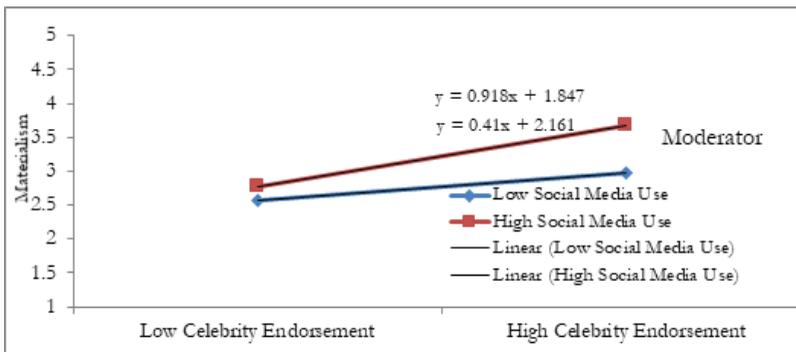


Figure 3: Low and High Celebrity Endorsement

Table 4:
Results

			Estimate	Significance
ZMaterialism	<---	ZPeer_Influence	0.273	***
ZMaterialism	<---	ZSocial_media_Use	0.263	***
ZMaterialism	<---	INT_PIN_SMU	0.082	***

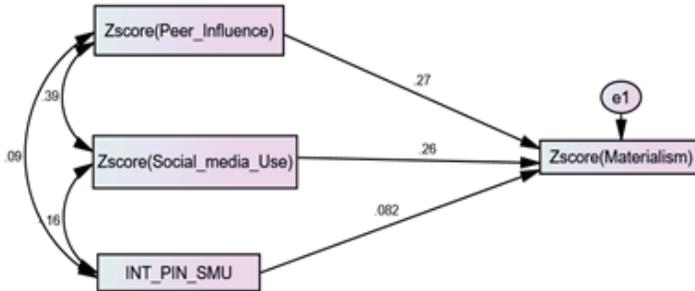


Figure 4: Materialism

5. Discussions

The relationship between celebrity endorsement and peer influence on compulsive or impulsive purchase behaviour was specifically studied in this study. This study also investigates the mediating role of materialism and impulsiveness in relationships. Moreover, the moderating role of social media use among the younger generation is also investigated. By Russell and Mehrabian (1977), the description of the SOR model reads, “various aspects of the environment act as stimuli (S) that together affect people’s internal states and act as organisms (O), drive their behavioural responses (R).” According to this study, celebrity

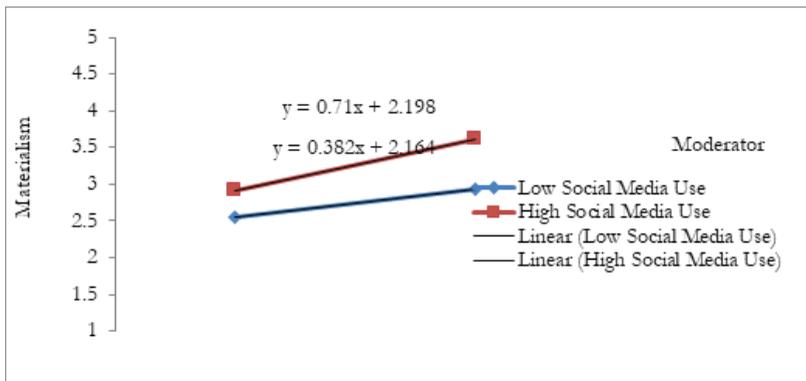


Figure 5: Materialism Graph

endorsement, peer influence, family influence and social media use are used as Stimulus (S), factors from the environment, whereas materialism and impulsiveness are presented as Organism (O), and obsessive and impulsive buying behaviours are behavioural outcomes. We divide the framework into three models. In the first model, the direct effect of celebrity endorsement, peer influence and social media use on materialism was analysed, and it also has the direct effect of materialism on impulsive and obsessive buying behaviour. In the 2nd model, mediating effect of materialism between the relationships of celebrity endorsement and impulsive and obsessive buying behaviour was found; and the mediating effect of materialism between the relationships of peer influence and impulsive and obsessive buying behaviour was estimated. The young generation has a strong influence from media celebrities and peers. They follow media celebrities in their purchasing. In the same way role of the peer also has a significant impact. According to the research, celebrity endorsement is the most important predictor of materialism in Pakistan, as it is in other nations (Kim et al., 2007; La Ferle & Chan, 2008; Pugliese & Okun, 2014). This is important since Pakistan is an Islamic state with a Muslim majority.

It varies from the Western multi-religious situations in which most prior research was undertaken. Islam is not opposed to personal growth and quality of life; rather, it fosters and directs the development of a happy life. It encourages people to improve their lives by striving to make each day better than the previous one, but it discourages people from focusing their lives solely on accumulating material goods. Materialism and obsessive shopping are forbidden in Islam. Pakistani culture, according to the current study, is not homogeneous and is influenced by various cultures. Our findings show that, like their foreign counterparts, Pakistani young people are impressed by social actors like celebrities and peers. So, that is the conclusion to be derived from the current study's findings that are similar to those of other cultures' investigations (Chan & McNeal, 2003; Chan & Prendergast, 2008; Chen & Chia, 2006; Islam et al., 2018; Keppell et al., 2006; La Ferle & Chan, 2008; Lee & Ahn, 2016; Mueller et al., 2011; Nga et al., 2011). The findings revealed that peer pressure has altered young adults' materialistic beliefs and obsessive buying habits. The youth of Pakistan has a strong desire for material possessions.

Materialistic young adults who frequently connect with their peers are more likely to be materialistic than those who do not connect. That is the case in Pakistan and other nations. (Chen & Chia, 2006). It implies that peer communication develops a predisposition to become impulsive. It has been previously researched by Lueg et al. (2006) also that Consumers' shopping preferences and decision-making are heavily influenced by peer communication (Shim, 1996). Young adults are more likely to utilise social media. The formers' widespread use can be attributed to several factors. First, we discovered that around 10% of college students have laptops and smartphones during the data collection process. Students at Pakistan's universities have been given free laptops and Wi-Fi internet access by the government.

When young adults have smartphones with access to a range of social media applications, they are more likely to see videos in which celebrities promote things on social networking sites. Finally, since young adults have vast social networks, they are prone to observe their friends and favourite media superstars' material things. Furthermore, young adults actively adhere to group norms when it comes to talking about material belongings and making purchases of various goods and services to maintain relationships with their peer group.

As a result, the moderating influence of social media on young adults reinforces the relationship between (peers and media superstars) and consumerism, which is detrimental to their development. All of the hypotheses are supported, implying that social media has an impact on the development of a materialistic mindset in young people, as well as on the personality trait of impulsivity. These outcomes are consistent.(Fan & Gordon, 2014; Joshi & Rahman, 2019) Similarly, materialism mediated the connections between celebrity endorsement and compulsive buying behaviour in the first instance, and between peer influence and compulsive buying behaviour, in the second instance, respectively. The current study employs the SOR model to investigate how interpersonal communication influences the development of materialism, which in turn influences consumer purchasing behaviour (Chan & Prendergast, 2007, 2008; Engeln–Maddox, 2005). Consumer behaviour research has made considerable use of the SOR model, which has received widespread endorsement and application (Islam et al., 2018; Liu & Cao, 2016). This finding demonstrates that young adults in peer groups are under pressure to shop according to their friends' recommendations. Young people are influenced by their peers in their study and employment contexts that have an impact on their materialistic attitudes.

According to the social exchange hypothesis, young adults are inclined to compare their material possessions to those of their friends. As a result, the findings in Pakistan are encouraging and in line with prior research. (Chan & Prendergast, 2007; La Ferle & Chan, 2008). Today's young adults are preoccupied with the ideas of material belongings and the acquisition of expensive items, as this appears to be an important aspect of modern life. As a result, the family system is transforming from collectivism to individualism. The high proportion of young adults is the primary factor. Second, the media has had an impact on people's lifestyles. Pakistan is a developing country that is undergoing cultural and social transformations, owing to the widespread use of social media among the country's youth. Young adults in Pakistan utilise media for a variety of purposes including gathering information about products, brands, and discounts. Moreover, today's youth is more exposed to media (e.g., Facebook, Twitter, and LinkedIn) than previous generations (Lee et al., 2016). This has had a major impact on materialistic attitudes and obsessive shopping. As a result, the empirical research presented, herein, sheds light on these aspects apart from demonstrating that young adults in Pakistan (a modern Islamic society) have materialistic outlooks that are strikingly comparable to those in other cultures. According to the findings of our study, young Pakistani individuals are influenced by peer pressure and celebrity endorsement to

become materialistic and obsessive shopaholics. Compulsive purchasing was linked to the research variables' sociocultural factors through materialism.

5.1 *Theoretical contributions*

Our work contributed to the present corpus of knowledge. The first step was to test and validate a conceptual model that predicted materialistic beliefs in young people. The results revealed that all hypotheses in the conceptual model were accepted. Our research backs up theories on the causes of materialism that have been proposed in the literature, which covers a wide range of societal circumstances. As a result, this study is the first to systematically investigate the interrelationships among social and marketing components, compulsive buying behaviour, and materialism among young adults in Pakistan, as well as, to a lesser extent, in other countries with a majority of those under Islamic influence. Second, this study demonstrates that sociological variables are the most important constructs for the development of compulsive purchasing in a modern Islamic culture, which lends support to previously discovered factors (Chan & Prendergast, 2008; Chan & Zhang, 2007), and, through the inclusion of materialism, as a mediator in the theoretical model.

The third point is that our proposed model provides a new theoretical viewpoint on materialistic goals and obsessive buying behaviour. This is because just a few research studies have found materialism to play a mediating role between contextual factors and compulsive purchase. As a result, the current research added to the body of knowledge regarding the factors that influence compulsive purchase behaviour. Implications For policymakers, the current study's findings add to our understanding of how to reduce materialistic desires among teenagers. The government's policymakers should also learn from these findings, which show that young adults in Pakistan, like in other nations, are either currently infected with materialism or on the verge of becoming so.

The policymakers may want to look for a remedy to stop this tendency from continuing. If this is the case, the remedies that work in drastically diverse societies should be investigated; properly for this article implies that this is a global problem. The governments should adopt a program to teach young adults how to develop a decent buyer's mindset to avoid consumerism and excessive purchasing. Secondly, because television advertising is strongly associated with compulsive behaviour and material accumulation, authorities should put in place laws to mitigate the effect. Third, new visual and ethical courses would be developed at the university level to reduce the amount of consumerism that young adults are exposed to. Fifth and last, materialism is anti-culture in Pakistan, where the collective family system is the dominant social structure because it is constantly centred on individual values. Parents should spend time with their young children and instil fundamental values in them. They should dissuade kids from comparing their consuming habits to those of their peers.

5.2 *Limitations and future research*

There are certain limitations to the research we conducted. First, we acquired information from the university students who were all respondents. Since the model's outcomes could differ in different situations, the study's conclusions have low external validity; with a different audience in mind, the study's findings could be different. Future researchers should retest and re-evaluate the conceptual model in different circumstances. Second, the data was collected from the university students in Pakistan's province of Punjab, where young people are more influenced by (peer group, celebrity endorsement) contextual variables than those in other parts of the country. Future research should focus on a large sample size and data collection from all universities throughout the province in order to acquire a more comprehensive picture of young adults' attitudes regarding the study constructs and the constructs in general. Third, we used cross-sectional data in our study. Since buying compulsively varies with time and is not a one-dimensional construct, a longitudinal study could help to explain this concept. Fourth, the type of product should be considered as a predictor and variable of materialism and compulsive buying in future research. A future research project could look into the impact of family communication on consumerism.

Conflicts of Interest

The authors declare no conflict of interest.

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Cross Border HRM Challenges of Chinese Companies: An Exploratory Study

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Abstract

With the growing footmark of Chinese MNCs around the globe, the management of the host country employees has been a new challenge on the horizon. The study aims to understand the human resource management and cross-cultural practices and challenges faced by Chinese companies across the border. This cross-sectional and exploratory study used semi-structured interviews and focus groups for the data collection. The respondents were Chinese managers from Chinese companies and Chinese cultural centres working in Pakistan. This study used thematic analysis with triangulation of sources and methods. This study found culture as a key theme affecting all the emerging human resource management themes. Chinese companies working in Pakistan use informal social networks in addition to traditional applicant recruitment methods. Cultural training is common along with technical training in particularly state-owned Chinese enterprises. Although in many Chinese companies, the parent country nationals fill top positions, local employees could be seen working in the top tier management of some Chinese companies. The Chinese companies' management practices have not been paid much attention to in this region. This study enables us to develop deep insights into Chinese companies' human resource management practices and challenges. This research also contributes to the literature on international human resource management and cross-cultural management.

Keywords: International HRM (国际人力资源管理), Chinese MNCs (中国跨国公司), Cross-Cultural Management (跨文化管理), Belt and Road initiative (一带一路), HRM practices (人力资源管理实践).

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1. Introduction

China has seen magnificent economic growth over the last three decades with a startling average of 10% annual GDP growth. It all goes back to 1978 when China set out for the economic reforms leaving the soviet-style economy for the social market economy (Shen, 2006). The data reflects that the performance of Chinese companies has been improving every year. There were only 18 Chinese companies listed in Fortune 500 in 2005, which splendidly increased to 95 in 2014. This year, surpassing the US for the consecutive second time, 143 Chinese companies got listed in Fortune 500 (Xinhua, 2021).

China has rapidly transformed itself from a merely labor-intensive offshore location to a technological giant with the imprint of Chinese companies that could be strongly felt around the globe. In a related vein, China has been working to revive the old silk route with the One Belt One Road (OBOR). CPEC (China Pakistan Economic Corridor) with nearly 62 Billion US\$ is considered a flagship project with the aim of regional connectivity and economic development of Pakistan (Javed, 2016).

Pakistan's manufacturing and service industries have been traditionally dominated by Western Multinational companies (MNCs). In recent times, the China-Pakistan Economic Corridor (CPEC) is one of the factors behind the surge of investment as the economy is showing signs of recovery with the increasing GDP growth. However, amidst all these Chinese cultural and financial direct investments, there is less attention paid to the management practices adopted by these companies to run their operations in Pakistan. Moreover, according to Quer et al. (2007) hypotheses based on Western quantitative research with advanced statistics may limit the profound understanding of the Chinese management style. Therefore, researchers need to focus on qualitative studies with an inductive approach to understand the idiosyncrasies of the Chinese management context.

Despite being under the business and research limelight in recent years, the Chinese MNCs' work practices in developing countries have been underexplored (Cooke & Lin, 2012; Haasis & Liefner, 2019). Though, there have been a limited number of studies focusing on the Chinese MNCs from various perspectives (Babu et al., 2020; Bunchapattanasakda & Wong, 2010; Fan et al., 2013; Jackson, 2014; Zhang, 2003). Some studies attempt to examine the Chinese MNEs' HRM practices in the developed part of the world (Jack et al., 2019; Yang & Lin, 2019; Zhu, 2019). However, attention has not been much paid to the HRM and general management practices and challenges faced by Chinese MNCs in this region, except for (Kim, 2020), which broadly shed light on China and India relations including HRM challenges faced by Chinese MNCs in India.

Hence, against the aforementioned backdrop, this study attempts to understand the HRM practices and challenges faced by Chinese MNCs in Pakistan. This study will also add insight to the existing theory and practice by developing better comprehension of the Chinese management style and it also contributes to the cross-cultural management and international human resource management literature. The next section of this paper reviews the past studies that review and discuss the HRM practices and cultural influence of Chinese MNCs abroad. The third section highlights the research methodology. The fourth part exhibits the research findings. The following sections discuss the findings in the light of extant literature. The last part presents the concluding points of this study.

2. Literature Review

2.1 *HRM Practices and Challenges*

Creating and updating HR systems is a big challenge for the human resource professionals of Chinese Multinational companies (Zheng, 2013). They need to come up with systems that go well with the politics, society, law, and culture of both countries- the parent and host country. Their policies and systems should be flexible enough to hire, train and retain competent employees. Moreover, Tarique and Schuler (2010) emphasize that international managers need to be locally responsive as well as globally integrated while running international HRM affairs' practices of Chinese MNCs vary from organization to organization. In some companies, the parent country employees are only sent when there is a need, mainly for finance or trouble-shooting. The HR manager found that managers from the parent country face challenges to manage host country employees. Hence, the parent company hired local managers to look after employees, and then Host country managers are managed by the top management of the parent country (Shen & Edwards, 2004).

Examining the universally embraced international human resource management practices of ten regions, Von Glinow et al. (2002) found out that although many organizations' primary focus is technical training. However, soft skills training skills are on the rise all over the globe. In a similar vein, Chinese companies send their host country employees to China for training and development. The aim is to cultivate better awareness of the Chinese culture and corporate culture among the host country's employees. Fan et al. (2013) studied many Chinese MNCs working in Australia. One of these MNCs was very successful in the early years of the operation because of decentralizing managerial roles and empowering local managerial employees.

For the successful implementation of the international business strategy, the role of an MNC's HR manager is very crucial as he must have a good understanding of the notion of local responsiveness and global integration (Cooke et al., 2017). Moreover, Shen (2006) also argued that the HR runs all the shows as he is responsible for arranging labor from the

host country to the home country or from the parent country to the host country. The international HR manager should coordinate well with management in the home country as well as the host country to run smooth operations. Chinese management style is quite different from the western MNCs and sees a disparity between the Chinese companies' strategic objectives and their practices. Jackson (2014) noted that although many Chinese MNCs are providing jobs to the local employees but not doing enough to enhance their skills. Hence, he advises Chinese companies to make a contribution to the community skill development, enhance community engagement and look for unnoticed areas where their effort could provide locals employment and community development.

In another study, Zheng et al. (2006) empirically examined 72 Chinese enterprises' HRM practices. They found that employee training and performance evaluation had an insignificant relationship with business performance. They found that not even half of the companies they surveyed had a composite training program. They explained that Chinese firms' fear of losing employees after training which they suggested could be improved by working on employee commitment strategies. However, the communication of performance expectations from Chinese MNCs is very important in developing countries as the work environment is not very competitive. The job responsibilities and tasks should be articulated very clearly.

Many Chinese companies adapted the compensation mechanisms conferring to the host country's needs. In the study aimed at many African countries, it was found that Chinese MNCs abandoned their traditional compensation system and customized it to the preference of local employees. Providing long-term incentives was not that fruitful to motivate them. Instead, they would be motivated by short-term incentives. Similarly, it was noticed that local employees would work beyond the office timings to earn overtime pay.

In another case, it was found that local employees were not very loyal to Chinese MNCs and it was very hard to reduce the voluntary turnover. One of the reasons was the lack of understanding between the Chinese managers and local employees. However, some managers reduced the turnover by developing interaction under some peer systems and it also enhanced employee engagement (Fan et al., 2013). Some Chinese MNCs working in developing countries send their employees to China. In one case, it was reported that the employees who came back from the training were very punctual in office timing which was very pleasant for top management because they were not sent for the time management courses. More importantly, these employees cultivated awareness among the rest of the local employees which changed the work attitude of many employees gradually (Zheng, 2013).

2.2 *Organization structure*

Studying the strategies of leading Chinese multinational companies, Cooke (2012) found out the Chinese firm commenced its program with a small number of Chinese employees but when the firm grows larger, it would begin to employ more local employees. It was noted that nearly 70% of the employees were host country nationals including the higher managerial post. Many of these host country managers climbed up the hierarchy due to their hard work and competence and are considered more favourably to effectively communicate with local employees. Interestingly, it was found out that key job position in some organization functions like purchasing and finance is likely to be filled by Chinese. However, key technical, marketing and operations positions are staffed by the host country national.

As far as organizational structure is concerned the Chinese state-owned enterprise ensures authority to the Chinese managers. The bosses in China are generally respected as part of the tradition and it also reflects Chinese leaders' authority. This hierarchical structure and system sometimes create problems abroad for Chinese SOEs where people appreciate equality and seek less distance between superior-subordinate relationships. On the other hand, private Chinese MNCs also seek to develop a relationship beyond work with the host employees. For this purpose, they organize events where families of employees are also invited. This helps Chinese companies to build an emotional association with employees which increases employees' morale and contribution to the company (Cooke & Lin, 2012).

2.3 *National and organizational culture*

Hofstede's seminal work of cross-culture management has drawn the attention of scholars (Hofstede, 1984). The cultural dimensions theory attempts to measure the national culture through the dimensions of long-term orientation, uncertainty avoidance, masculinity, individualism, and power distance. In many aspects, there is not much difference in some dimensions score of Pakistan and China. Like on individualism Pakistan and China score 14 and 20 showing the collectivist nature of the society. However, Pakistani society scores high on uncertainty avoidance whereas China scores low. It reflects that Chinese society is more risk-oriented than Pakistani one. Furthermore, China scores very high in long-term orientation in comparison to Pakistan which shows that Chinese society is much more pragmatic than Pakistani society.

Emphasizing the effect of traditional Chinese values on HRM practices, Warner (2010) concludes that Confucian values are observably embedded in human resource management but with a variety of significance. Additionally, the Chinese soft power which is believed to be the soul behind Chinese economic development is largely attributed to the beliefs of the great Chinese philosopher Confucius (Javed, 2014). Moreover, Xing et al. (2016) recognize that Chinese MNCs have been observed to adapt to the local African atmosphere

rather than disseminate their indigenous HRM philosophy. The reason was a lack of acquaintance with culture and business. They regarded adaptation to the local culture as paramount in managing host country employees.

The notion of *guanxi* (关系) has been well associated with Chinese business and Human resource management practices. To understand *guanxi*, we need to see the Chinese social system which bonds one another in a special kind of relationship. In simpler words, if people are in a *guanxi* relationship, they are completely devoted to each other. Chen and Easterby-Smith (2008) studied *guanxi* from the perspective of Chinese MNCs operating abroad and concluded that special relationships with employees (*guanxi*) are very also necessary to manage HR when working abroad.

Table 1:
Summary of Literature Review

Authors	Key Themes of Reviewed Work
1 Zheng	Emerging multinational enterprises, Dragon multinational, International HRM
2 Tarique and Schuler	Talent Management, globalization
3 Shen and Edwards	Recruitment and Selection, Chinese MNEs, International HRM
4 Von Glinow, Drost, and Teagarden	International HRM, globalization, culture
5 Fan, Zhang, and Zhu	International HRM, Chinese MNCs Strategies
6 Cooke, Veen, and Woods	Comparative HRM, Cross-culture approaches
7 Shen	International HRM, International staffing, Chinese MNEs
8 Jackson	Chinese MNEs, International HRM, Cross-cultural Management
9 Zheng, Morrison, and O'Neil	HRM Practices, Chinese SMEs
10 Cooke	Chinese MNEs globalization, HRM challenges, and implications
11 Cooke and Lin	Chinese MNCs, HRM, institutional factors
12 Warner	Confucian HRM, Globalization, PRC
13 Javed	Chinese soft power, Confucian Values, the rise of the Chinese economy
14 Xing, Liu, Tarba, and Cooper	Chinese firms, African employees, culture
15 Chen and Easterby-Smith	Chinese MNCs, IHRM, internationalization study
16 Diego, Enrique, and Laura	Chinese management

3. Research Methodology

Studying Chinese multinationals using quantitative research is hard because they have been not extensively researched to produce ample literature to support quantitative analysis (Fan et al., 2013). Saunders et al. (2009) comment that exploratory research attempts to clarify the understanding of the problem. Similarly, this study is exploratory and aims to understand the HRM challenges faced by Chinese MNCs in the socio-economic context of Pakistan. The logical understanding of methodology could be enhanced by using the right kind of research approach. This research follows an inductive approach because it seeks to interpret and understand the social phenomenon in contrast to the deduction approach that inherits its roots from natural sciences.

Semi-structured interviews and focus groups were used for data collection. According to Blumberg et al. (2014), if the research is exploratory then it is likely to use qualitative research interviews. The semi-structured interview generally covers several themes and questions. This type of interview provides flexibility to exclude some questions after considering the context of the organization. The sample size consisted of 16 Chinese managers and a Chinese director of a cultural institute working in Pakistan. The focus group was conducted with the five respondents and eleven interviews were conducted for data collection. Interview protocols were ensured during the process, such as information being collected with consent, salient features of the study were shared, and open-ended questions were placed before respondents. Furthermore, Marshall (1996) comments that the qualitative study does not have the issue of sampling if the research objectives are appropriately met.

This study uses Hycner for the thematic analysis. Some themes were identified during the process of reviewing the literature and some got finalized during analysis (Hycner, 1985). The thematic analysis of this study is grounded on phenomenology. Phenomenology as a research approach seeks to understand the phenomena from the point of view of those who have experienced them (Neubauer et al., 2019). The researcher could develop a better insight into the meaning of -what and how it was- experienced. Triangulation of methods was done through the semi-structured interviews and focus groups and triangulation of sources i.e. Chinese managers of companies and a Chinese director of the cultural institute.

Table 2:
Respondents Profile (N=17)

Variable	Values	n (17)
Gender	Male	100%
	Female	0%
Highest Qualification	Intermediate	2
	Bachelor	10
	Master	5

4. Findings

After the interviews and focus group, the data were transcribed and analyzed. Following are the key themes that emerged from the data analysis.

4.1 Staffing

Chinese companies would use multiple methods to attract Pakistani applicants for the open position. This includes traditional methods of giving advertisements in the newspaper, posting jobs on prominent national job websites, and using social media. Interestingly, many Chinese companies use informal networks to hire employees. One of the Chinese managers from a large Chinese bank remarked, “Chinese expatriate network facilitates greatly in recruiting Pakistani employees”. Additionally, these companies primarily recruit managerial employees through the internet and social media and rely on informal networks and newspaper advertisements for non-managerial employees.

Chinese companies find it very difficult to hire highly skilled people in Pakistan. The manager of a large Chinese mobile company said, “Most of the applications we receive are comprised of overqualified applicants. We receive a good number of job applicants with 16 years of education. However, for non-managerial positions, Chinese companies don’t require highly educated but highly skilled individuals”. As one of the respondents told that customer service skills and appearance are sine qua non for a good salesperson. If we are going to hire a salesperson, we ensure they have got required skills to perform the job. Moreover, a Chinese manager advised a Pakistani applicant to carefully read the job description before applying for the job. As another manager from Chinese Automobile company comments, “overqualified hiring has created a mismatch between job and person, and it resulted in employee turnover”.

According to another Chinese manager, their company prefers young and fresh employees for certain job roles over experienced employees. The selection process consists of written tests and interviews. It was found out that all of the Chinese companies would not conduct more than two interviews. One of the Chinese managers strongly believed that having more than two interviews is waste of time.

4.2 Performance management

The performance of the employee is being managed differently by different Chinese companies. Even in one company, we may find different kinds of appraisal types and periods. The performance appraisal is generally conducted annually in most Chinese organizations. However, a couple of companies working on multiple projects in Pakistan evaluate their employees on the completion of their project which varies it could be 4 months, 8 months, or

even more than a year. In the words of one of the focus group participants from a renowned Chinese mobile company, “our company has got a monthly target for their sales staff. This not only helps them to closely track their performance but also helps them to work out their performance gap. According to another Chinese manager from a Chinese automobile company, “we have an annual performance appraisal system, the development areas of the employees are identified during the process, and action plans are made in light of appraisal feedback. This process also enables us to identify the pay raise for the employees”.

4.3 *Employee Training and Development*

Chinese companies consider successful training indispensable for good performance. There are different practices in different companies. The focus group participant from the Chinese mobile phone company informs, “The training program duration depends upon the position one has hired for. The salesperson working on the shop floor will get one week of training. The Pakistani sales officer will go one month of training and the Pakistani manager training program goes up to 6 months. The hallmark of our training program is Pen Feng (mandarin) which is translated as more than responsibility in English”. Generally, the training is classified into two parts, technical training, and culture training. The technical training centered on product knowledge and culture training gives an insight into the Chinese and corporate culture.

Many Chinese companies use coaching and mentoring to train Pakistani employees. It helps them to develop and refine their specific skills according to the requirement of the company. In the words of a Chinese manager from a large Chinese bank, “the language was the key barrier between the Chinese trainer and local employees”.

4.4 *Organization structure*

Most Chinese companies had top managers from their parent countries. In some companies, only the regional heads are from China, the rest of the entire workforce is Pakistani. The focus group participant told us that in the future, there will be more Pakistani managers at the top level. We will be very happy to see Pakistani managers running the corporation. According to one of the Chinese managers from an automobile company, at our organization, only highly technical staff is Chinese with a Chinese head, all other employees are from Pakistan”. Moreover, it was found out that the mobile company and automobile company from china have only Pakistanis in the sales and marketing department as they believe the locals understand the language and market. Moreover, one of the respondents told, “We had a training manager from China at the start of our operations here. But now we have a Pakistani Training manager and this employee was hired as a sales associate because of his commitment to work. He got double promotions in two years to earn this designation”.

4.5 *Culture*

Culture has emerged as one of the themes affecting all the human resource domains. All of the respondents consider cultural differences between the two countries are an issue that impedes efficiency in the beginning but with time the knowledge enhances the cultural comprehension and the working relationship gets natural. The language problem is one of the key issues faced by Chinese companies and businesses in Pakistan because many Chinese cannot speak English or Urdu fluently also according to the director of the cultural center Professor Li, “language is the key to culture. I also believe that the knowledge of China and the Chinese language immensely increase the job prospects of Pakistani applicants to Chinese companies. But, I also believe that Chinese managers also need to develop a cultural understanding of Pakistani people”.

Organizational culture also varies from company to company. In one of the companies, the Chinese managers were having a formal and informal relationship with Pakistani employees at the same time. When they are at work, the managers would be formal but outside work they enjoy the informal relationship as occasionally they would also go out for the dinner. Additionally, one of the respondents told that Pakistani people tend to procrastinate which undermines productivity.

The interviews reflected that many private Chinese companies have adapted to the culture of Pakistan. One of the Chinese claimed that without conforming to the local culture, it is hard for us to do business as many of the big markets in the business hub of Karachi would start work 10. However, in China people are used to starting work early, he also claimed that even in China you don't find any single person saying good morning after 9 am.

Moreover, it was found during the focus group that the targets and practices vary between the host country and parent country. The work culture in china is more competitive than in Pakistan. The company has set a flexible target in Pakistan whereas in China the employees have comparatively tougher targets.

5. **Discussion**

The study started with the intent to understand the HRM practices and challenges faced by the Chinese firms in a new county like Pakistan. As it is with the qualitative study, the iterative nature blossomed into a study covering more than what was initially envisaged. Therefore, with the start of the data collection in the form of interviews, it was evident that Chinese companies consider culture as affecting human resource management practices in every way. Hence culture emerged as a key theme in this research. The establishment of the Confucius institute and Chinese language centers are facilitating the acquisition of cultural knowledge. The teachers mainly come from mainland China. They also arrange a cultural

tour of China and take Pakistani students around the various Chinese universities and cities. Many Chinese companies also contact these cultural and language centers for fulfilling staffing purposes. Moreover, Pakistani job applicants even with a basic knowledge of the Chinese language are preferred for the opening.

Interestingly, this research shows that the Chinese managers have conformed to Pakistan culture and they also enjoy informal ties with Pakistani employees after work. Similarly, Xing et al. (2016) found that Chinese managers' development of social ties with the local employees also helped them to understand the culture and recognize local employees' good qualities.

This research shows that Chinese companies have been using various recruitment methods. It ranges from the commonly used method of newspaper advertisement to the informal method like using networking to develop a candidates pool. Using the social network is a commonly used Chinese method in Pakistan that is also being practiced by Chinese companies in Mainland China. For managerial posts, most Chinese companies use internet job portals, this makes sense as internet usage tendency for job search is primarily found among the graduates of higher education institutions in Pakistan. In China also recruitment through the informal network has common practice, particularly among small and medium-sized organizations.

Chinese companies are facing problems when it comes to hiring highly skilled Pakistani employees. In a similar vein, Zhu et al. (2013) found out that it is difficult to find good host country managers in developing countries. However, Jing and McDermott's (2013) claim of Chinese companies use only parent country nationals for the top management position was not verified. This study argues that Chinese companies have also hired Pakistani managers at the top-level management. China developed rapidly in the last three decades, and it is one of the reasons that have led to an increase in emphasis on certain key skills. In Pakistan, the institutions need to focus on the refinement of the students' skills. It was also evident from this study that many Chinese companies demand punctuality, hardworking, good interpersonal skills, and loyalty. Besides, this study shows that Chinese managers don't like to see their employees leaving and highly regard loyalty. This is also consistent with the findings of (Jackson, 2014). He found out that during the staffing process for the expatriates, loyalty is one of the key traits that are sought after by the Chinese MNCs. Furthermore, this research showed that Chinese companies don't conduct more than two interviews. On the other hand, more than two interviews in Pakistan are not very common for all the job openings but for many jobs, the applicant will go through more than two interviews and the number of interviews also varies from company to company. However, this interviewing system for Chinese companies is saving them money and time.

This research reflects that Chinese companies highly regard employee performance management. The appraisal period is generally one year for most the companies but it varies for different job positions and companies. Particularly, the sales target is closely monitored and reviewed on monthly basis. On the contrary, Zheng et al. (2006) asserted that the performance evaluation has not got a significant relationship with the firm performance. Moreover, Xing et al. (2016) argue that the communication of performance expectations is indispensable for Chinese companies working in developing countries as the work culture is not very competitive.

Chinese companies' training program varies from company to company. The notion of Pen Feng (more than a responsibility) is firmly embedded in the cultural training program of Chinese private enterprises in Pakistan. It enhances the understanding of Chinese work culture among Pakistani employees and enhances their performance. The concept of Pen Feng is quite similar to the good research notion of Guanxi. Guanxi has been popular in Chinese management research and after the rise of China as an economic power, it has also drawn significant attention from western scholars (Anderson & Yiu-chung Lee, 2008; Chen & Easterby-Smith, 2008; Guo & Miller, 2010; Su & Sohn, 2015). Many Chinese companies are using mentoring to train an employee which is a common method in Pakistan. Furthermore, the Chinese companies could commence cultural training programs for their managers who are going to be posted in Pakistan. A better understanding of the culture could enhance their managerial effectiveness.

This research shows that even though many companies had Chinese top managers. But, Pakistani employees can work hard and move up the ladder through promotion. Moreover, the highly technical staff is primarily from China but Chinese companies had employed Pakistani staff in the Sales and Marketing department for the reason that they had better knowledge of the local market.

6. Conclusion

The effective management of host country employees is indispensable for the business success of MNCs. This study portrays the current human resource management and cross-cultural practices and challenges faced by Chinese companies from the perspective of Chinese managers. Chinese companies are using various staffing methods. Usage of the informal network is one of the commonly used Chinese recruitment methods in Pakistan. Many companies turn to Chinese cultural centres for finding the right candidates. Additionally, no Chinese companies ever conduct more than two interviews as they consider it tantamount to time-wasting.

Culture is firmly ingrained in every Chinese company's practices. A major part of the training program of Chinese companies comprises cultural training in addition to technical training. The Chinese companies mainly employ Parent country nationals for the top post but they also substitute as they find a suitable replacement which also helps them financially.

The localization of Chinese practices and learning from them with time will enable Chinese companies to refine and upgrade their HRM policies and procedures. From another perspective, this study also concludes that knowing Mandarin, good communication, and time management skills increase the job prospects in Chinese companies.

6.1 *Managerial Implications*

A rising number of Chinese companies have been investing across the border. In the case of Pakistan, Chinese companies have created a large number of jobs for the Pakistani people. Stakeholder theory suggests organizations take care of all stakeholders to create more value. The Chinese companies could contribute to the skill development of their employees and community in this regard. Moreover, the Pakistani and Chinese are not too far apart in many cultural dimensions. However, the cultural training of Chinese managers could endow them with a better understanding of idiosyncrasies associated with Pakistan culture. This could also result in the better compatibility of Chinese and Pakistani values and subsequently, improve and streamline their managerial performance.

6.2 *Limitations and Future Research*

It is important to highlight the research limitations of the study. First, this study primarily focused on the Chinese managers and relied only on their experiences to understand issues. The perspective of employees working in Chinese companies could further enrich our understanding of Chinese management practices in future research. Second, this study is cross-sectional, future studies could adopt a longitudinal design to examine Chinese management practices. Third, our world is highly interconnected now, and the influence of Chinese organizations is increasing with every passing day, Chinese enterprises and their management practices have received scant attention around the world, particularly in South Asia. The Chinese trade volume has also been rapidly rising with the respective countries. Subsequently, the number of Chinese companies and their operation has been on the rise. Future Studies could look into the Chinese management practices and also study their link to Confucius's philosophy and Chinese cultural values. Lastly, the Chinese grand project 'Belt and road initiative' has been endorsed by almost 70 countries of the world. The roll-out of CPEC as a massive bilateral project is also part of Chinese premier Xi Jinping's belt and road initiative. In this perspective, future studies could look into the role of the Chinese government to influence their companies to invest in their preferred countries and, in such cases, also the preferential treatment of host countries like Pakistan to Chinese companies.

Conflicts of Interest

The authors declare no conflict of interest.

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Signaling the Store Attributes on Customer Store Loyalty Mediated Through Hedonic, Social and Utilitarian Customer Values

Sania Usmani*

Abstract

Developing customer loyalty is the primary objective for retailers. Price pressures faced by the developing economies leave a small margin for retailers. Increasing the frequency and repeat purchases can help retailers to increase their profit margins. Customers can only be retained if they are loyal. This research is carried out to understand the dynamics underlying the store attributes and customer loyalty. It has examined the impact of Store attributes on Customer Store Loyalty mediated through Customer Value. In this research, a sample of 300 customers was taken from two departmental stores, particularly, Chase Up and Intiaz. This study has taken 3 Store attributes; Store Atmosphere, Merchandise Quality, and Relationship Marketing and assessed their impact on Store Loyalty mediated through 3 types of Customer Values; Hedonic, Social and Utilitarian. Structural equation modeling was carried out using the Partial Least Squares method in SMART-PLS software. The results showed that Merchandise Quality, Relationship Marketing and Store Atmosphere impact Store Loyalty mediated through Hedonic and Utilitarian Values. Social Value is not significant and does play a role in creating Loyalty. The study concludes by identifying gaps in the literature and recommending practical and theoretical implications for the same.

Keywords: Customer store loyalty; hedonic value; social value; utilitarian value; merchandise quality; store atmosphere; relationship marketing.

JEL Classification: M31, M39

1. Introduction

Customer loyalty is the primary source for any business. Indeed, customer loyalty plays a vital role for an organization to set a higher price and create competition (Aaker, 1991). Customer loyalty is a primary factor in achieving profitability. Customer loyalty has been determined as a key element in developing long-term relationships between organizations and consumers. Customer loyalty is the vital foundation in key retail administration. The most significant advantages of customer loyalty to the retail industrialist are word of

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mouth, being ready to pay higher costs and significant market share resulting from repeat purchases. Customers for whom loyalty doesn't matter can easily switch toward other stores where prices are less. Osman (1993) claims that "the customers who are loyal to a certain store always pay a visit whenever they go out for a shopping". Repeat purchases by loyal customers increase firm performance as well as augment store Loyalty. Loyal customers may not switch to other brands and are less susceptible to competitors' offerings. They sometimes even ignore a poor experience (Sinha et al., 2018; Hassan & Hashmi, 2020). While disloyal customers switch frequently as soon competitors offer a better value proposition (Sharma & Jain, 2019). Attracting new customers is much more expensive as compared to retaining the old ones, therefore, stores should focus on building sustainable relationships with customers (Rather et al., 2018; Hassan & Hashmi, 2020). Store loyalty refers to customers' long-term commitment to the store. They will consistently buy from one store over a period of time (Hassan & Hashmi, 2020).

According to Woodruff (1997), customer value is a basic factor in organization planning and differentiation because it addresses "what the customer needs and trust when they purchase and consume seller's product. Evidence demonstrates that individuals will develop their behavior (like versus dislike) both from the course of their emotions and sentiments. To pull in customers, retailers invest enough assets into making important environments for the customer, to provide a positive shopping experience.

The study of customer experience is even more applicable with regard to retailing as Berry (2002) declared that retailing is tied to creating an aggregate customer value. Store atmosphere, merchandise value, and store familiarity affect store loyalty, word of mouth, readiness to pay, and customer value. A tremendous amount of competition in the market makes a business vulnerable to maintaining market share. Frequent changes in the taste of consumers make them switch to competitors' products. It doesn't only affect the profitability but also makes it difficult for the organization to survive in the market if it fails to maintain customer loyalty. Hence, this study aims to identify the factors that affect customer value which eventually leads to customer loyalty. This research has used three factors of a retail store, which include relationship marketing (relationship building and maintenance), merchandise quality (product, price, quality, and placement), and store atmosphere (ambiance of the store).

This research is aimed to examine how merchandise quality, store atmosphere, and relationship marketing increase the three types of customer value; such as Social value, Hedonic value and Utilitarian value. Further, how customer value increases customer loyalty. By using the results of this research, retailers can create different activities and programs that will strengthen loyalty towards their stores. Moreover, this research will help in understanding how retailers can emphasize store atmosphere to build customer value in terms of making their shopping experiences better and enjoyable which will make them loyal to the store. Lastly, it will also help to understand customer choices and preferences of merchandise

quality to be kept in the store. The insights into the factors separately affecting each value dimension will help gauge the minor details on how to increase value and loyalty for shoppers.

1.1 Research Questions

This study aims to explore the impact of Merchandise quality, Store atmosphere and Relationship Marketing on Customer Store Loyalty through Customer Value in the retail industry of Pakistan. The research questions are;

- Which Store factors (Store atmosphere, merchandise quality, relationship marketing) impact the customer value (Utilitarian, Hedonic, Social) in the retail industry?
- Which Store factors (Store atmosphere, merchandise quality, relationship marketing) impact customer loyalty in the retail industry?
- Does customer value (Utilitarian, Hedonic, Social) mediate the relationship between the Store factors (Store atmosphere, merchandise quality, relationship marketing) and customer loyalty in the retail industry?

2. Literature Review

2.1 Signaling Theory

This study has used the signaling theory (Boulding & Kirmani, 1993) to provide the theoretical foundation between the variables. Signaling theory provides reciprocation between two parties. The information signals are transferred from one party to another. Consumers have no information about a departmental store prior to their visit, then the retailer signals the information to the consumer through product, price, placement of a product on the shelf, promotions, packaging, etc. further, a retailer may signal information through store atmosphere, relationship marketing and merchandise quality and variety. Store attributes thus, play signaling roles between the retailer and the shopper. A customer perceives a store through the attributes it portrays and creates a lasting image which leads to customer value and loyalty. It involves functional as well as psychological qualities. Thus, a retailer uses a mix to build its customer base and retain those loyal customers. By using appropriate retail mix elements, a retailer builds a sustainable competitive advantage. Previous studies have discussed outcomes of store attributes like patronage intention, shopping behavior, consumer attitudes towards the departmental stores, relationship investments, and customer satisfaction (De Wulf et al., 2001; Wang, 2009; Odekerken-Schröder, De Wulf, & Schumacher, 2003).

2.2 Customer Store Loyalty

According to Dick and Basu (1994), loyalty is better than other alternatives. Whereas, Oliver (1999) gives store loyalty a completely new emotional definition in which a customer visits a store, again and again, to satisfy their needs and show loyalty towards the

store. Orth et al. (2010) state that Store loyalty is increasing because old customers are more attached and feel comfortable buying from the same store, they show loyalty as compared to the new customers, in this way it benefits the store owners because they do not need to incur more cost to gain new customers and save approximately 80%.

The bonding between customers and retailers is established through a long course of years with loyalty (Sirdeshmukh et al., 2002). This loyalty doesn't end with stores or purchased goods, it is spread in other service firms like airlines, hotel chains and restaurants where customers come, use and spend in exchange for services. East et al. (2000) present the theory of first-brand loyalty and first-store loyalty adapted from Cunningham (1961). Knox and Denison (2000) observed that loyalty is much alike in the retail sector. They found that most of the retail segments share similar retail techniques. If the customer shows loyalty for a longer period of time then the profits are shared with the customer. Loyalty tends to increase the perception of the quality of the merchandise with the level of service the customer receives. Originally based on the concept of brand loyalty, it refers to the tendency to repeat purchases at the same store. It involves a commitment to buy at the same store over time. A consumer becomes loyal to the store based on evaluative processes towards a particular store. Store loyalty involves both attitudinal and behavioral components. Attitudinal involves commitment while behavioral involves repeat purchases and word of mouth (Reddy et al., 2011).

2.3 *Customer Value*

According to Hirschman and Holbrook (1982), once a retailer understands the shopping behavior of the customer, they will have great opportunities to gain customer value. They define customer value as the outcome of an interaction between a subject and an object. Customer value involves preferences and it is relative to a context. Customer value is an evaluative judgment that is an outcome of a shopping experience by a buyer. Buying, therefore, covers a whole shopping experience and shopping as a motive is not enough, social and hedonic values also need to be acknowledged. Thus, there are three types of values to provide a complete understanding of customer value, namely; utilitarian value, hedonic value and social value. As a retail marketer, one must segment its customers based on different underlying motives therefore understanding how customers derive value from their shopping experiences becomes important. Creating and delivering value has become important to survive in a marketplace today. Shoppers don't only look for prices and convenience nowadays. Retailers must understand multiple motives to create customer value for their loyal customers (Rintamäki et al., 2006).

Customer's value is a tradeoff between quality and benefits they perceive relative to the sacrifice they pay by paying the price of that product. It is what they get from what they paid. Indeed, perceived value influences loyalty intentions directly and indirectly (Grosso et al., 2018).

Table 1:
Categorization of Customer Value

Dimension	Utilitarian	Social	Hedonic
<i>Approach</i>	Cognitive	Symbolic	Experiential
<i>Purpose</i>	Means to a Material End	Means to a Social End	An End itself
<i>Outcome</i>	Economical	Social	Emotional
<i>Consumer</i>	Homo Economicus	Homo Faber	Homo Ludens

Source: Adapted from Rintamäki, et al. (2006).

2.4 Hedonic Value

Hedonic value is gained from the motives of fun, fantasies and feelings. They involve delight and fulfillment gained by the shopping experience. The consumer is known as Homo Ludens (Experiential Customer) who is motivated by his senses and wants. These customers want to sense, feel and relate. A hedonic value is subjective and involves entertainment and exploration during shopping. It is realized through aesthetics and customers find shopping an adventure and an enjoyable session. Activities such as bargain hunting, browsing, window shopping and variety-seeking relate to attaining hedonic values by buyers. Shopping itself becomes an end (Rintamäki et al., 2006).

Hedonic value can be experienced during numerous stages of the shopping cycle. Babin and Attaway (2000) stated that hedonic value predicts the passion for shopping itself. If the general impression of the shopping is one of joy and satisfaction, ultimately customers will experience hedonic value. Oliver (1999) stated that if customers' utilitarian and hedonic values are higher, their sentiments of positivity will be more, and they will normally feel more satisfied with the store. Hedonic shopping values include delight and joy.

Babin and Attaway (2000) stated that a shopping experience is fruitful when it gives pleasure. Subsequently, the shopping experience might be measured by utilitarian and hedonic values. Numerous scientists indicate that the utilitarian and hedonic value of the shopping experience is identified by the level of customer satisfaction with the store.

2.5 Social Value

Social value involves Symbolism gained through interactions between the customer and the retailer. The customer is known as Homo Faber. Shopping is seen as a social activity where relationships, social codes and symbolic meanings matter. Shopping experiences reflect the Self; self-esteem and social status as an outcome. Customers associate their social identity with shopping. The shopping spree which enhances the customer's self-esteem and status contribute to social value. Status comes through membership which is part and parcel of materialism and conspicuous consumption. These status-conscious consumers are known

as self-monitors. The perceived social value is intrinsic and includes favorable impressions created through buying the product.

Symbolic features involve products, personnel, and store which enhance the meaning of Self. Customers stroll through the store and are gazed upon which enhances their self-esteem and social status. These shopping experiences are often termed magical or unique (Rintamäki, et al., 2006). Babin and Attaway (2000) see social value as an individual aspect of aggregate customer value. Most of the customers may have examined items at stores that push their money-related abilities, maybe with little aim of buying, yet doing this improves their status and confidence, which adds to social value.

Chandon et al. (2000) indicated that symbolism can be achieved by shopping, as consumers show their personality through the consumption experience. To convey to customers that they value, retailers seek different methods to increase their loyalty. Doing as such is not costless, therefore it becomes important to understand the drivers of total customer value becomes critical. Fruitful retailers comprehend that customer value incorporates concrete and unique parts of the shopping experiences, from the decision to purchase that leads towards consumption. This requires an extended meaning of customer value which underlines experiential and social aspects of consumption.

2.6 *Utilitarian Value*

Utilitarian value involves convenience and monetary savings. It is also known as functional utility derived from the shopping experiences. Consumers are rational problem solvers who use cognitive processing to process the information and decide. It is a product-centric shopping experience where a consumer has a pre-defined end and is usually termed a Homo Economics. Their utilitarian value involves extrinsic task-related needs. Hence, it is easier to gauge consumer needs as they merely involve price reductions or discounted products. These monetary savings increase the utilitarian value for consumers. Further, access, search, possession and transaction convenience when sought increases utilitarian value. Understanding how to deliver convenience involves the process from “drive in to check out”. The actions taken by the retailer may include maximizing the ease and speed of shopping (Rintamäki, et al., 2006). In the utilitarian perspective, value is instrumental and consumers solve the problem logically. The utilitarian point of view stresses the consumer decision-making process. Consumption is a means to accomplish a predefined goal. A customer hence becomes a utility calculator.

It can be said that customer value is directly proportional to the goals and purposes of a customer, such as low price and convenience, as well as factors that are meaningful on their own, (e.g. to some, shopping is a social outing and/or an adventure). As such, the experience of shopping creates a variety of concrete and intellectual benefits which in turn add to the

total customer value that is greater than the simple acquisition of products or services (Chandon et al., 2000). Chandon et al. (2000) suggested that social value has a low contribution as compared to utilitarian and hedonic value amongst the tripartite conceptualization of consumer value. Monetary savings and convenience create utilitarian value; exploration and entertainment provide hedonic value; social value is attained from self-esteem and enhancement. Customer value plays a vital role in creating customer loyalty. Giving high value (social, hedonic, and utilitarian) to customers ends with high customer loyalty and thus maximizes store profitability. In practice, the relationship between customer value, loyalty, and profits can be noticed in the market (Chandon et al., 2000).

2.7 *Merchandise Quality*

The importance of merchandise quality on satisfaction and store loyalty is mostly ignored. However, merchandise quality strongly affects customer loyalty than customer satisfaction. A study conducted on shoppers identified that strong products and merchandise quality play a significant role in influencing consumer buying decisions (Reddy et al., 2011; Naylor & Frank, 2000). Baker et al. (2002), argued that the overall perception of merchandise quality affects the decision of the customer if they will revisit the store and repurchase, regardless of the satisfaction level towards the store. Therefore, a retailer has to build a positive precept in the minds of a customer by delivering a delightful shopping experience. This positive perception can be achieved through store reputation, store image, pricing strategies, merchandise-quality perceptions and, relationship marketing (public relations, promotions, advertisement). Merchandising involves product quality, assortment, styles and fashion in merchandise.

Merchandise mix provides the customer with a variety of products and services which enhances customer value. This will retain their customers and make them loyal. Product or merchandise quality is defined as a customer's fulfillment with the merchandise being offered by a departmental store. High merchandise quality increases the excitement of shoppers, it makes them pleased and content with their shopping experience and further makes them loyal to the store. Higher product price is directly proportional to product quality and variety satisfaction (Wang, 2009). The merchandise quality is the second most important factor which plays a vital role in forming and enhancing store loyalty. Merchandise quality affects both consumer satisfaction and consumer loyalty (Reddy et al., 2011; Naylor & Frank, 2000).

H1. Merchandise Quality has a positive impact on Store loyalty mediated by Hedonic Customer Value

H2. Merchandise Quality has a positive impact on Store loyalty mediated by Social Customer Value

H3. Merchandise Quality has a positive impact on Store loyalty mediated by Utilitarian Customer Value

2.8 *Relationship Marketing*

According to Morgan and Hunt (1994), relationship marketing ought to be an organization-wide philosophy. This is based upon the objectives of relationship marketing which are relationship building and maintenance. It is expected that relationship marketing and customer loyalty to the store are positively related. It is the implementation of relationship marketing that is more likely to influence customer perceptions.

As per Gundlach (1995), it is the experience of the customer with the goods and services that establishes customer loyalty. The quality of the relationship before the sales is emphasized. The need for relationships, between companies and people, is important, instead of the relationship between salespeople and customers, because it is the fact that when salespeople leave their place of work, the customer with whom they had grown close may also leave the store with them. The creation and maintenance of long-term exchanges are highlighted in relationship marketing. Such relationships are better than short-term, task-based relationships (Myhal et al., 2008). Delving further, relationship marketing relies upon creating a strong foundation of shared interests and commitments between customers and companies. By using customer interaction firms strive to create commitment with their consumers, this includes trust, the desire by a customer to uphold a valued relationship. It is suggested by Wong and Chow (2007) that relationship marketing increases customer loyalty, repetitive involvement and positive word of mouth.

Leung (2016), explains that empathetic employers, those who can easily form a conversation with the customers, giving them the feeling that they might never be able to get a product elsewhere, increase loyalty. It has been studied that on average a loyal customer is worth 10 times more than a customer who purchases for the first time, which causes an increase in the revenue of the store. Relationship marketing is all about working together, it focuses on keeping and enhancing associations with current customers as opposed to securing new customers. It requires extensive use of advertisements, promotions, correspondence, and customer-related strategies to make loyal customers. To retain a customer, stores must exceed customers' needs and wants so they will make repeat purchases. Leung (2016), argues that organizations that want to compete with competitors, must offer something other than low prices. Representatives with good interpersonal skills effectively interact with customers in a polite manner which provides customers with something they will be unable to get elsewhere which increases their loyalty.

H4. Relationship Marketing has a positive impact on Store loyalty mediated by Hedonic Customer Value

H5. Relationship Marketing has a positive impact on Store loyalty mediated by Social Customer Value

H6. Relationship Marketing has a positive impact on Store loyalty mediated by Utilitarian Customer Value

2.9 *Store Atmosphere*

Retailers give their consumers an exceptional shopping experience and they try to retain their customers through a change in the creation of the atmosphere (Hashmi & Nadeem, 2021). found that store atmospherics and shopping behavior have a significant relationship by conducting 60 experiments. The store atmosphere may include general interior variables (such as flooring, color schemes, lights, music, scents, temperature, cleanliness); layout and design (such as space design, grouping, placement of equipment, waiting area, furniture, dead area); Point of purchase (such as signs, cards, wall decorations, pictures) and lastly human variables (such as uniforms, crowding and privacy). These atmospheric characteristics have a significant association with consumer attention and purchase decision. Consumers place high affective evaluations on to store atmosphere. Most researchers argued that buying environments can be designed in a way that can create emotional effects among consumers who place a high value on buying experiences. These atmospherics can not only create purchase probability but also loyalty and repeat purchases (Olahut, et al., 2012). Retailers, therefore, put a lot of hard work into enhancing the store environment, exterior, merchandise quality, price range, and promotional activities for the store.

Store atmosphere or shopping environment refers to an in-store environment created by way of visual displays, interior design and the ease of mobility within the store. The physical surroundings impact shopping behavior A nice store atmosphere entails a comforting layout with pleasant colors, aroma, music, decorations and lights. Ease of mobility and accessibility within the store gives a store an added advantage as it provides customers with convenience during shopping (Wang, 2009). Sirgy (2000) recommended that a pleasant and stimulating environment of a store can make an ideal setting and produce positive feelings about the store. Store environment components can impact the individual emotions experienced by a customer and impact their shopping experiences, consumption, quality, satisfaction, and shopping value.

As per Babin and Attaway (2000), satisfying customers need an unforgettable and pleasant shopping experience. Therefore, retailers have resorted to outstanding decor, eye-catching displays, pleasant sight and sound and other aspects of interest that bring out positive effects and influence the shopping experience which leads to customer store loyalty. Retailers are now focusing on recreating their internal store environment to maintain customer loyalty.

H7. Store Atmosphere has a positive impact on Store loyalty mediated by Hedonic Customer Value

H8. Store Atmosphere has a positive impact on Store loyalty mediated by Social Customer Value

H9. Store Atmosphere has a positive impact on Store loyalty mediated by Utilitarian Customer Value

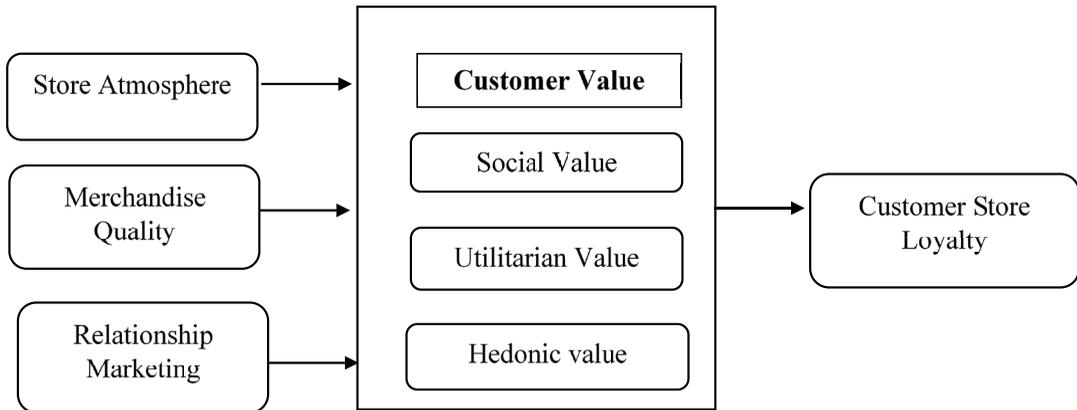


Figure 1: Research Model

3. Research Method

The Signaling and Inference theory has been applied in this study to test the relationship between Customer Store Loyalty, Customer Value and Store Attributes. Customer Values included; Hedonic, Utilitarian and Social Values. Quantitative causal research was used in this study. Customer Value is the mediator while Customer Store Loyalty is the independent variable and Store Attributes are the independent variables. The target population in this study is the consumers of two retail chain stores in Karachi, Pakistan. The industry chosen is retail and the two stores are; Imtiaz and Chase Up. Imtiaz Super Store is a Pakistani supermarket that operates a chain of stores across Pakistan. Imtiaz has 19 stores in Pakistan with Rs. 40 – 1000 billion sales as of 2022. Imtiaz is the biggest competitor and a leading giant in the retail industry with huge margins (Imtiaz Supermarket, 2022). Chase Up is currently the largest non-grocery and second-largest grocery store with 7 outlets and one online outlet across Pakistan. Chase currently holds an 18% market share with Imtiaz leading the way with 20% (Arshad, 2017). Therefore, these two largest chains were selected for this study as 40% market share is held by these two retail giants.

3.1 Sampling Design

300 sample of consumers was taken from both the chain stores. 150 consumers were selected from each store; Imtiaz and Chase Up. The data was collected from consumers for a better understanding of the model being tested. Non-probability-based convenience sampling technique was applied to know the consumer's preferences and convenience towards these stores. The survey method was used to collect primary data from the shoppers. The researcher visited the departmental stores personally and collected the data from consumers who were shopping in those stores. The structural Equation Model was used to test the mediated model using Smart-PLS software. The entire questionnaire used a five-point Likert scale on all the

independent and dependent variables. To measure perceived customer store loyalty, a scale developed by Zimmer and Golden (1988) was used. To measure perceived Customer Value (Utilitarian, Social, and Hedonic), a scale of customer value developed by Chandon et al. (2000) was used. To measure perceived store atmosphere, perceived merchandise, quality and relationship marketing, the scale was adapted from Wang (2009).

4. Results

In this research, 300 respondents were taken for the data collection. Data on 7 variables were collected through a questionnaire. The first independent variable was “Store Atmosphere” which consists of 3 items; the second independent variable is “Merchandise Quality” which consists of 4 items; the third independent variable is “Relationship Marketing” which consists of 4 items. The Mediator in this study is Customer Value which is the aggregate of 3 components namely; “Hedonic value”; “Utilitarian value” and “Social value”. All these components each consist of 6 items. Lastly, “Store Loyalty” was the dependent variable used in this study which consists of 6 items. Table 2 represents the Gender, Age, Income and Education levels of shoppers who participated in this study.

Table 2:
Demographics

Variable		Frequency	Percent
Gender	Male	168	56.0
	Female	131	43.7
Age	Less than 21	52	17.3
	21 to 30	213	71.0
	31 to 40	26	8.7
	41 to 50	5	1.7
	Above 50	4	1.3
Income	Less than 20,000	98	32.7
	20,000 to 40,000	91	30.3
	40,000 to 50,000	63	21.0
	50,000 and above	46	15.3
Education	Matriculation/O Level	12	4.0
	Intermediate/A level	28	9.3
	Undergraduate	149	49.7
	Graduate	107	35.7
N=300			

Table 3 represents the Descriptive Statistics of 7 variables namely; Store loyalty, Store Atmosphere, Merchandise Quality, Relationship Marketing, Hedonic Value, Utilitarian Value and Social Value. The mean for SL is 3.6739 (SD= 0.66236; C.A =0.758); the mean for SA is 3.6989 (SD=0.75112; C.A=0.688); the mean for MQ is 3.8942 (SD=0.68842; C.A=0.745) ; the mean for RM is 3.5108 (SD=0.79983; C.A=0.833); the mean for HV is 3.4594 (SD=0.67147; C.A=0.754); the mean for UV is 3.6256 (SD=0.63173; C.A=0.647);

the mean for SV is 3.4783 (SD=0.62032; C.A=0.700). All the correlations were significant at 0.01 except RM and SA which is insignificant.

Table 3:
Descriptive Statistics: Mean, SD and Intercorrelations

VARIABLES	Mean	SD	C.A	1	2	3	4	5	6	7
SL	3.6739	0.66236	0.758	-	-	-	-	-	-	-
SA	3.6989	0.75112	0.688	.323**	-	-	-	-	-	-
MQ	3.8942	0.68842	0.745	.530**	.443**	-	-	-	-	-
RM	3.5108	0.79983	0.833	.349**	-.032	.269**	-	-	-	-
HV	3.4594	0.67147	0.754	.419**	.174**	.284**	.437**	-	-	-
UV	3.6256	0.63173	0.647	.364**	.364**	.433**	.276**	.453**	-	-
SV	3.4783	0.62032	0.700	.334**	.282**	.396**	.479**	.841**	.773**	-

N = 300; p<0.05*; p<0.01**; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; HV= Hedonic Value; UV= Utilitarian Value; SV= Social Value; C.A=Cronbach Alpha

An independent sample t-test was conducted between the two stores to identify the difference between data and results. It was found using Levene’s test that the variances are equal across the two groups (i.e., p-value large) and that Equal variances are assumed. Thus, there is no difference between the store loyalty of both groups. The focus of this study is to generalize the entire model using the sample of both groups, and not the comparison of separate groups, therefore, the sample is combined and the results are stated collectively for both groups. The only reason to identify the two organizations was due to the reach and sales of these stores across Pakistan. Table 4 shows the results of the independent sample test.

Table 4:
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2 tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
SL	Equal variances assumed	.095	.758	-1.090	298	.277	-.08333	.07646	-.23380	.06713
	Equal variances not assumed			-1.090	296.868	.277	-.08333	.07646	-.23380	.06714

4.1 Measurement Model

A 2-step approach was used in this study. First, the measurement model was carried out to measure the validity and reliability. Then, the structural model was used to test hypotheses. Convergent Validity and Reliability were tested via 3 indicators; Cross Loadings, Composite Reliability (CR) and Average Variance Extracted (AVE). The threshold of Cross loadings is ≥ 0.5 , AVE is ≥ 0.5 and the Reliability is ≥ 0.7 . According to Table 5, all values are greater than 0.5 for AVE, 0.7 for CR and 0.6 for Cross Loadings as shown in Table 6 (Hair et al., 2019; Ramayah et al., 2018).

Table 5:
Convergent Validities and Reliabilities

	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
CV	0.742	0.741	0.853	0.659
MQ	0.728	0.730	0.847	0.649
RM	0.836	0.853	0.891	0.672
SA	0.645	0.671	0.847	0.735
SL	0.782	0.795	0.859	0.605

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; CV= Customer Value

Table 6:
Cross Loadings

	MQ	RM	SA	SL	CV
MQ01	0.771				
MQ02	0.848				
MQ03	0.796				
RM01		0.737			
RM02		0.852			
RM03		0.887			
RM04		0.796			
SA01			0.894		
SA02			0.819		
SL02				0.727	
SL04				0.804	
SL05				0.740	
SL06				0.834	
SV					0.817
UV					0.790
HV					0.828

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; HV= Hedonic Value; UV= Utilitarian Value; SV= Social Value

Fornell and Larcker Criterion (1981) and Heterotrait Monotrait Ratio (HTMT) (Franke and Sarstedt, 2019) were used to assess the discriminant validity. Table 7 shows that discriminant validity exists as per Fornell and Larcker Criteria.

Table 7:
Fornell-Larcker Criterion

	CV	MQ	RM	SA	SL
CV	0.812				
MQ	0.403	0.805			
RM	0.477	0.271	0.820		
SA	0.328	0.456	0.010	0.857	
SL	0.364	0.569	0.239	0.467	0.778

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; CV=Customer Value

The HTMT values should be ≤ 0.85 . The values of HTMT in Table 8 are ≤ 0.85 so it can be concluded that participants understood the difference between all 7 constructs. To sum up, it can be said that there was validity and reliability in the measurement model.

Table 8:
Heterotrait-Monotrait Ratio (HTMT)

	CV	MQ	RM	SA	SL
CV					
MQ	0.543				
RM	0.607	0.344			
SA	0.453	0.663	0.083		
SL	0.485	0.744	0.296	0.646	

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; CV=Customer Value

4.2 Structural Model

A sample of 500 iterations was carried out using bootstrapping procedure to calculate beta coefficients, t-values and p-values (Ramayah et al., 2018). As p-values are not a good indicator for testing the significance of hypotheses therefore a combination of p-values, t values and effect sizes was used in this study (Hahn & Ang, 2017).

Hypothesis 1 was rejected as the Merchandise Quality did not have a significant impact on Store Loyalty mediated by Hedonic Value ($\beta = 0.035$, $p = 0.114$). Also, there was no direct effect of Merchandise Quality on Hedonic Value ($\beta = 0.126$, $p = 0.058$). Hypothesis 2 was also rejected as the Merchandise Quality did not have a significant impact on Store

Loyalty mediated by Social Value ($\beta = 0.005$, $p = 0.589$). Also, there was no direct effect of Merchandise Quality on Social Value ($\beta = 0.060$, $p = 0.343$). Hypothesis 3 was accepted as the Merchandise Quality had a significant impact on Store Loyalty mediated by Utilitarian Value ($\beta = 0.052$, $p = 0.019$). Also, there was a significant direct effect of Merchandise Quality on Utilitarian Value ($\beta = 0.263$, $p = 0.000$). Hence, it seems that Merchandise Quality highly impacts a shopper's functional and monetary aspects in creating Store Loyalty. Therefore, a retailer needs to focus on the variety and quality of goods along with the convenience and pricing of goods. The total effect was significant where Merchandise Quality affects Store Loyalty mediated by all three value dimensions; Social, Utilitarian and Hedonic.

Hypothesis 4 was accepted as the Relationship Marketing had a significant impact on Store Loyalty mediated by Hedonic Value ($\beta = 0.105$, $p = 0.001$). Also, there was a significant direct effect of Relationship Marketing on Hedonic Value ($\beta = 0.376$, $p = 0.000$). Hypothesis 5 was rejected as Relationship Marketing does not have a significant impact on Store Loyalty mediated by Social Value ($\beta = 0.041$, $p = 0.271$). However, there was a significant direct effect of Relationship Marketing on Social Value ($\beta = 0.476$, $p = 0.000$). Hypothesis 6 was accepted as the Relationship Marketing had a significant impact on Store Loyalty mediated by Utilitarian Value ($\beta = 0.043$, $p = 0.027$). Also, there was a significant direct effect of Relationship Marketing on Utilitarian Value ($\beta = 0.214$, $p = 0.000$). Hence, it seems that Relationship Marketing impacts shoppers' emotional and functional aspects and that will increase their loyalty to the store. The total effect was significant where Relationship Marketing effects Store Loyalty mediated by all three value dimensions; Social, Utilitarian and Hedonic.

Hypothesis 7 was rejected as the Store Atmosphere did not have a significant impact on Store Loyalty mediated by Hedonic Value ($\beta = 0.036$, $p = 0.060$) at 95% Confidence Interval. Although it may be accepted at a 0.1 threshold or 90% Confidence Interval instead of 95%. There was a significant direct effect of Store Atmosphere on Hedonic Value ($\beta = 0.130$, $p = 0.039$). Hypothesis 8 was also rejected as the Store Atmosphere did not have a significant impact on Store Loyalty mediated by Social Value ($\beta = 0.012$, $p = 0.359$). However, there was a significant direct effect of Store Atmosphere on Social Value ($\beta = 0.140$, $p = 0.025$). Hypothesis 9 was accepted as the Store Atmosphere had a significant impact on Store Loyalty mediated by Utilitarian Value ($\beta = 0.051$, $p = 0.016$). Also, there was a significant direct effect of Store Atmosphere on Utilitarian Value ($\beta = 0.254$, $p = 0.000$). Hence, it can be said that Store Atmosphere impacts shoppers' emotional and functional aspects and that will increase their loyalty to the store. The total effect was significant where Store Atmosphere affects Store Loyalty mediated by all three value dimensions; Social, Utilitarian and Hedonic.

Further, there was a significant direct effect of Hedonic Value on Store Loyalty ($\beta = 0.280$, $p = 0.000$) and there was a significant direct effect of Utilitarian Value on Store Loyalty ($\beta = 0.199$, $p = 0.002$). However, there was no significant direct effect of Social Value on Store Loyalty ($\beta = 0.086$, $p = 0.263$). The results show that Social Value has no impact on Shoppers'

Store Loyalty and Utilitarian and Hedonic Value impacts their loyalty. The retailers must therefore focus on the interior layout of the store along with a focus on the five senses of the shopper such as pleasant colors, aroma, music, decorations and lights. Also, ease of mobility and accessibility within the store may help to increase loyalty. Table 9 shows the indirect and total effects as well as the significance of the hypotheses being tested in this study while Table 10 shows the direct effects between the independent, dependent and mediator variables.

Table 9:

Total and Indirect Effects

	Total and Indirect Effects of IV on DV via M	B	T Values	P Values	Status	Hypothesis
	MQ -> SL (Total Effect)	0.093	2.714	0.007	Significant	Accept
H1	MQ -> HV -> SL (Indirect Effect)	0.035	1.584	0.114	Insignificant	Reject
H2	MQ -> SV -> SL (Indirect Effect)	0.005	0.541	0.589	Insignificant	Reject
H3	MQ -> UV -> SL (Indirect Effect)	0.052	2.351	0.019	Significant	Accept
	RM -> SL (Total Effect)	0.188	5.444	0.000	Significant	Accept
H4	RM -> HV -> SL (Indirect Effect)	0.105	3.256	0.001	Significant	Accept
H5	RM -> SV -> SL (Indirect Effect)	0.041	1.102	0.271	Insignificant	Reject
H6	RM -> UV -> SL (Indirect Effect)	0.043	2.224	0.027	Significant	Accept
	SA -> SL (Total Effect)	0.099	3.103	0.002	Significant	Accept
H7	SA -> HV -> SL (Indirect Effect)	0.036	1.883	0.060	Insignificant	Reject
H8	SA -> SV -> SL (Indirect Effect)	0.012	0.919	0.359	Insignificant	Reject
H9	SA -> UV -> SL (Indirect Effect)	0.051	2.413	0.016	Significant	Accept

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; HV= Hedonic Value; UV= Utilitarian Value; SV= Social Value; All values are significant at 95% Confidence Interval

Table 10:

Direct Effects

Direct Effects	B	T Values	P Values	Status
MQ -> HV	0.126	1.902	0.058	Insignificant
MQ -> SV	0.060	0.950	0.343	Insignificant
MQ -> UV	0.263	4.721	0.000	Significant
RM -> HV	0.376	7.128	0.000	Significant
RM -> SV	0.476	11.067	0.000	Significant
RM -> UV	0.214	4.089	0.000	Significant
SA -> HV	0.130	2.065	0.039	Significant
SA -> SV	0.140	2.246	0.025	Significant
SA -> UV	0.254	4.552	0.000	Significant
HV -> SL	0.280	4.309	0.000	Significant
SV -> SL	0.086	1.121	0.263	Insignificant
UV -> SL	0.199	3.191	0.002	Significant

N = 300; SL=Store Loyalty; SA= Store Atmosphere; MQ= Merchandise Quality; RM= Relationship Marketing; HV= Hedonic Value; UV= Utilitarian Value; SV= Social Value; All values are significant at 95% Confidence Interval

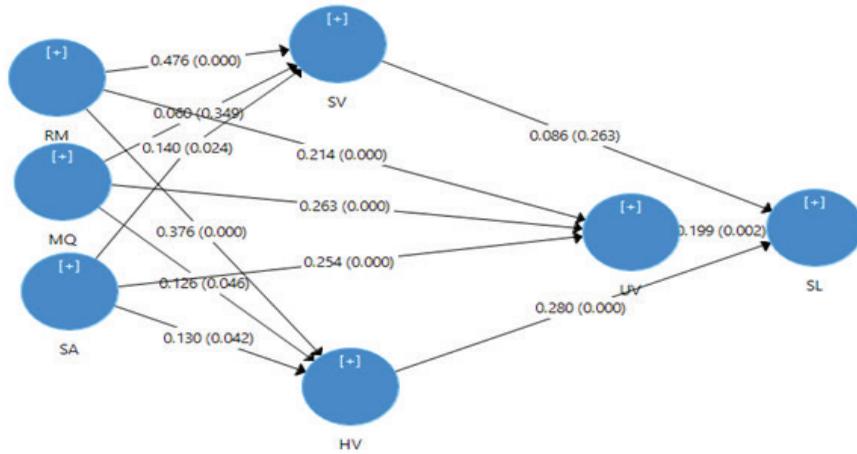


Figure 2: Graphical Presentation of Structural Equation Modeling

5. Discussion

This study tested the relationship between Independent Variables, Dependent Variables and Mediators. According to previous research, the result shows the effective relationship between Customer Value, Customer Store Loyalty and the three independent variables like Relationship Marketing, Store Atmosphere and Merchandise Quality. The result collected from this research gives us the pathway for future research on the impact of different variables on Customer Stores Loyalty. As Customer Store Loyalty is one of the most important factors nowadays, the need for this research was to know the factors which are affecting customer store loyalty and how the customer will remain loyal to a store. To sum up, it can be said that the study supports many other previous research findings and with that, some new findings were also found Morgan and hunt (1994). It was found that customer value mediates a relation between store attributes and customer loyalty. Particularly, Utilitarian and Hedonic Values mediate the relationship between Relationship Marketing, Store Atmosphere, Merchandise Quality and Customer Store Loyalty.

5.1 Theoretical Implications

From a theoretical perspective, this study will provide a clear view of the relationship between Store attributes, customer value and customer loyalty in the Pakistani context. Relationship marketing is a process of maintaining and enhancing relationships with customers and that leads to increasing customer value for that store, ultimately, increasing loyalty. Similarly, consumers place high importance on Store attributes such as ambiance, lighting, and music which impacts their hedonic values and ultimately loyalty.

5.2 *Practical Implications*

From a broader perspective, the findings of this study apply to all the retail businesses around the world. This study can be used by store managers to see how customers are buying products concerning store atmosphere, relationship marketing and merchandise quality. The study can be used by students to understand the conceptual relationships, by marketers to understand consumer values and shape strategies accordingly to capture their loyalty, and by researchers to use the results of this study to develop further theories. However, the study was done on small scale and hence requires further research to understand these relations better.

5.3 *Limitations and Future Research*

The major limitation of this study was that the respondents belong to only one geographical location i.e. Karachi and only two departmental stores were studied which cuts down the diversity in responses. Further, the sample size was 300 which cannot be generalized all over the population in the world. This study will serve as the groundwork for future research. Based on the findings of this study the researchers can re-examine the impact of store atmosphere, merchandise quality, and relationship marketing with the same or some other relatable dependent variable such as customer satisfaction, or customer retention. By adding more specifications or diversity in geographical locations to cover the broader representation of the masses. Future research can also be done using other independent contextual variables. Furthermore, future research can be done on a large scale or in newly opened stores and malls. Researchers may also use different ways of data collection such as mixed methods including interviews and focused groups.

6. **Conclusion**

The findings of this study suggest that the loyalty of customers have been identified as the most important basis for key departmental stores and in developing long-run relations between organizations and consumer. The results showed that there is a direct relationship between store atmosphere and store loyalty of the customer. The strongest variable in our study is Relationship Marketing which has a significant relationship with customer value and customer store loyalty. This research resulted in three factors, including relationship marketing (relationship building and maintenance), merchandise quality (product, price, quality, and place), and store atmosphere (ambiance of the store).

This discussion tells about the relationship between each variable that affects customer loyalty to generate more revenues for the store. For some customers store's image is important, while the quality of service and products are more important for others. The conceptualization and operationalization of relationship marketing implementation were addressed given the elusive nature of the construct (Fournier, 1998). The results of the present

study regarding the customer's value and the store attributes could help the operators of the stores to develop customer loyalty. Therefore, it is important to understand customers' desires to attract and retain their loyalty.

Conflicts of Interest

The author declare no conflict of interest.

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Inter-Regional Socioeconomic Disparity Levels Within Rural Sindh

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Abstract

The purpose of this study is to investigate the existence of socioeconomic disparity levels in rural Sindh. Determining the reasons behind such disparity is not the scope of this research. Previous studies reflected that compared to lower Sindh, upper Sindh has performed better as per socioeconomic indicators such as health and literacy rate, the Multidimensional Poverty Index (MPI) calculated shows no such pattern on a closer look; even though the MPI values for upper Sindh district are lower in comparison to lower Sindh, the intensity of poverty in upper Sindh is extreme. PSLM household survey questionnaire was used to calculate the MPI of various districts selected through a stratified sampling technique. The results show the MPI values for districts in lower Sindh reflect a greater incidence of poverty compared to upper Sindh. However, the intensity of deprivation in upper Sindh is higher. For instance, the MPI value recorded for Qambar, an upper Sindh district was 0.091 and the intensity of poverty recorded was 0.67.

Keywords: MPI; socioeconomic disparity; deprivation; poverty; Sindh.

JEL Classification: B55

1. Introduction

The notion of development may be understood in the context of economic progress. The main idea of economic progress or prosperity is linked to the well-being of the poor people of the region (Danaan, 2018; Pansera & Martinez, 2017; Anand & Sen, 1997). Contemporary social science relies on measuring levels of deprivation to assess the overall well-being of the people in a given region. The level of deprivation may not be equal even among the districts of the same province where there is homogeneity in terms of political setup and economic opportunities available. Investigating such occurrences in Sindh province of Pakistan is the scope of this study.

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Two concepts crucial to the study of economic progress are the socioeconomic dimension of development and the incidence of poverty. The definitions of both are rather fluid.

It is difficult to have one definition of poverty that is also a standard measure of it and used by all economists or researchers. Some define poverty in the sense of deprivation while others look at it as an effect of the failure of the government in providing enough public goods such as welfare.

Researchers like Singhal and Gill (1991) and Saunders (2004) define poverty as a state of deprivation, a social phenomenon where a section of the society does not meet the minimum requirement of living (Singhal & Gill, 1991). Qureshi (2004) makes an observation reported by Khan et al. (2014) that poverty is a discrepancy in what one has and should have. He also opines that the experience of poverty is individualistic and unique. This makes it a vague and broad concept. So far it appears that poverty has many dimensions. Resource lessness as an indicator of poverty is common in various studies (Memon et al., 2015; Khan et al., 2014). Lack of access to essential public goods and services such as food, safe drinking water, and shelter, or lack of access to 'social resources such as access to information, education, health care, social status, political power, or the opportunity to develop meaningful connections with other people in society' sponsor poverty (Memon et al., 2015).

Mainly, the study of the socioeconomic aspect of poverty is crucial to this study. In order to study poverty and development in the light of socioeconomics, it is imperative to introduce the latter first.

Socioeconomics is characterized as a multidisciplinary concept. The term is sometimes used in specific research using certain methodologies some of which made significant contributions in the fields of "economic sociology" and "political economy". It may be noted that the term socioeconomics does not offer a replacement for doing economics this way in fact it is one of the ways economics can be studied (Hellmich, 2015). Studying economics in the light of socioeconomics offers a contrast to the "homo economics paradigm" which focuses on the neoclassical assumptions* of the rationality of man and self-interest (Hellmich, 2015). Representing alternate views is not the scope of this discussion. This section is only dedicated to stating the departure from the neoclassical way of thinking in economics and introducing the term socioeconomics.

Since, socioeconomics is an attempt to diversify how social science can look at development while in a way undermining the limited, orthodox, neoclassical view, this contract

*The first thing we learn in economics is that man is rational, is motivated by incentives and makes rational decisions on the basis of cost and benefit analysis. This is the neoclassical way of thinking (Weintraub, 2002). As for homo economics, it is a term used to describe an economic man who makes rational decision.

is seen as the opposite of rationality and that is termed as non-rationality which carries a negative connotation. The problem with the rational choice theory is that “once one starts to talk about rationality, it preempts the way we organize our views of human thought and behavior” (Etzioni, 2013). In other words, the focus on rationality in rational choice theory takes human behavior (which may not be repetitive or consistent) out of the context. As it happens, human behavior may not always be consistent with the rational choice theory (Etzioni, 2013). Surely, development and poverty will have socioeconomic aspects if understood in aversion to the rational choice theory. Even more clarity in the realm of the socioeconomic aspect of poverty can be attained by conducting a region-specific study instead of looking at the big picture.

A holistic approach to studying incidents of poverty is problematic (Hussain et al., 2019). In the case of huge population studies, some of the impacts is masked because the overall picture does not look devastatingly gloomy. For instance, a report by Sustainable Development Policy Institute (SDPI) shows huge levels of disparity in poverty levels in urban and rural Sindh but the overall incidence of poverty in Sindh seems to match that of Punjab (Naveed & Ali, 2012). Furthermore, in the light of heterogeneity in terms of demographics among all provinces of Pakistan and eighteenth amendment to the constitution that transferred a lot of powers from the federal to the provincial governments (Hussain et al., 2019) provide a strong ground for the regional study.

1.1 Research Problem

Within rural Sindh, which is the area under study for this research, there exist different levels of development albeit no change in provincial government for decades. The United Nations Development Program (UNDP) published a Human Development Index (HDI) report showing that over the period of ten years the HDI of only one district in lower Sindh namely, Dadu has improved from 0.385 in 2005 to 0.632 in 2015 (UNDP, 2017). However, the statistics are not impressive. According to the United Nation Development Program (UNDP) report on MPI, Dadu scores 0.247 on deprivation index which is similar to Rwanda with matching Intensity of Deprivation of 48 percent (UNDP, 2017).

The HDI report published by UNDP (2017) acted as a beacon to guide the study into investigating why some of the districts in Sindh were not doing as well as others.

1.2 Research Question

The main question for this study is:

What is the level of interregional socioeconomic disparity in rural Sindh?

In order to investigate this question, an attempt to work out the Multidimensional Poverty Index (MPI) for at least two rural Sindh districts will be presented in the findings chapter using the PSLM tools.

1.3 Research Objectives

The aim of this study is to investigate whether there exists an interregional disparity in Sindh and if so, to what extent. For this, an index is required to measure the extent. Therefore, a Multidimensional Poverty Index (MPI) is calculated.

2. Literature Review

To view the research problem in the light of the literature available, it is essential to study the history of development efforts made by the government for the nation teeming with poverty and deprivation at multiple levels. This section will give a brief overview of the economy of Sindh while discussing the development scenario in Sindh, the problems of development in Sindh, social and political hindrances together with socio-economic aspects of poverty in Sindh.

2.1 Development and Poverty in Pakistan

In a number of attempts to alleviate socioeconomic backwardness in Pakistan, international organizations set up goals like Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) (United Nations, 2015). After the failure to achieve MDGs, the seventeen SDGs prioritized reducing extreme poverty by putting it as the first goal to be achieved and every other goal directly or indirectly connected to working towards achieving the first goal (World Bank, 2002).

The United Nations while laying out SDGs has pointed out that ‘eradicating poverty in all its forms remains one of the greatest challenges facing humanity’ (United Nations, 2015). Though some countries have pulled themselves out of extreme poverty, some are still struggling for the most basic human needs because progress is uneven (United Nations, 2015). The United Nations claims women to be more likely to experience poverty than men because they have less paid work, education, and own less property’ (United Nations, 2015). On the contrary, Padda and Hameed (2018) claim that women-headed households in rural Pakistan are less likely to experience poverty because of welfare programs like Benazir Income Support (BISP). This claim can be rejected on the basis of reports on corruption in the said program (Mian, 2020). A local newspaper had reported earlier in 2020 that some 2,543 government officers of grade-17 and above had got themselves registered among the beneficiaries of the social safety net (Mian, 2020). Corruption aside, this program does little to help women anyway. A meager amount every four months combined with currency depreciation does not do much to improve the standard of living of a household. Reports on the Ehsaas program, another welfare project initiated in 2019 by the government claimed that it was the biggest welfare program (GOP, 2020; Mian, 2020). However, media reports indicated huge corruption, malpractice and mismanagement (Hasnain, 2020; “Dr. Sania takes notice”, 2020;

“Corruption, Malpractice added to Ehsaas Program”, 2020). Another media report questioned how the program was being financed (Subohi, 2019). Since the current government censors a lot of news (Ellis-Petersen & Baloch, 2019), the details on how much money was actually disbursed to the deserving cannot be estimated.

While Pakistan is trying to turn into a welfare state, ‘it doesn’t have much financial capacity to undertake any substantial investment to that end, especially when this lack of revenue is combined with rising debt repayment and defense spending. It is not possible to be a debt-ridden security state and a welfare state at the same time’ (Wani, 2002). On a political front, considering the 18th amendment that has brought some autonomy for the provinces, has Sindh worked on the development agenda taking advantage of this power balance move?

Khan et al. (2016) in their article on center-periphery relations and governance gap identified that albeit central government is responsible for the provision of public goods and services, security and ‘political legitimacy in territories under its jurisdiction’ devolution makes governance efficient (Khan et al., 2016). This brings us to question how the local government has fared in Sindh over the years. A detailed critical analysis of the Sindh Local Government Act 2013 presented by Rid and Murtaza (2019) clearly indicates that the move was more political than a means to improve administrative efficacy (Rid & Murtaza 2019). Much of the failure to realize the ambition of offering welfare to the citizens can be attributed to the poor administration and management of such affairs. For the sake of this study let us take Sindh as a point of reference. Drought and famine in Thar have been an issue. Though a renowned economist, Amartya Sen, who was a witness to the systematic destruction of his home state owing to the mismanagement of the famine affair of Bengal in 1943, said that famine cannot take place in a democracy. Shehzad (2017) is baffled at the fact that the government’s efforts to provide food and heavy expenditure (“No child deaths from hunger”, 2014)*, prevalence of famine is implausible rather confusing. Shehzad (2017) blames poor governance for such dismal state of affairs in Thar. He writes that Governance in Tharparkar could be analyzed with respect to social development in the form of rainfall harvesting and water supply schemes, health sector practices and overall agriculture management in the region; he iterates how badly corruption in the government organizations responsible for managing these issues, have affected the drought and famine ridden region of Sindh (Shehzad, 2017).

*The Express Tribune, a Pakistani daily newspaper had reported that the Sindh government claimed to have distributed free wheat worth Rs.2 billion to the residents during the past six years. Retrieved from <https://tribune.com.pk/>

As mentioned above, the 18th amendment has awarded relative autonomy to the provinces. This step should have made governance better. However, the situation in provinces, specifically Sindh, remains unaltered. Other than the problems in Thar owing to bad governance, various sectors of the government have failed to move swiftly towards development in other districts of Sindh as well. A detailed overview of the problems of development in Sindh is presented in the later section of this chapter.

2.2 *The Problems of Development in Sindh*

The key problem areas that need attention for development in Sindh include education, healthcare, infrastructure and agriculture. All these sectors of the economy of Sindh are in a deplorable state. This section will discuss these sectors and the policy adaptation and implementation problem for the same in detail.

2.2.1 *Education in Sindh*

Albeit education having an inverse relationship with poverty (Ahmed et al., 2019), a well-functioning system of inclusive, relevant and quality education remains one of the major challenges facing Pakistan even today' (Hussain et al., 2019). The irregular and uncertain economic development is a result of the low priority rendered to education, training and skill development. The practice of announcing schemes and policies and later revoking them, without any proper evaluation, has become a norm in Sindh's history. Nationalization of all private institutes in the 1970s played its role in putting further dent to the quality of education in Sindh. Financial allocations remained inadequate and unemployment high due to weak education system.

Pakistan and its provinces are constitutionally bound under Article 25(A) to provide free and compulsory education to all children aged 5 to 16. International funding organizations like the United Nations have laid education related framework on the pretext of achieving universal education goal first through Universal Declaration of Human rights in 1948 and then through Millennium Development goals (MDGs) till 2015 and later Sustainable Development Goals (SDGs) to be achieved by 2030. However, the province has failed to achieve targets for universal education by 2015 as over 6.6 million children, that is 53 percent, in Sindh are out of school. The onus of failure lies on the province since the 18th Amendment to the constitution gave the provinces autonomy and hence the responsibility was delegated to the province.

On an infrastructural basis alone, the province has not delivered. There is a total of 46,039 schools in Sindh* and while it may seem that education is accessible in the province, it is not so (Hussain et al., 2019). Around 50 percent of these schools (27,792) are either one-room schools or one-teacher schools. The SEMIS 2016 data shows that over 60 percent of these schools do not have electricity and half of these schools across Sindh lack other basic facilities such as Boundary wall, Toilet and/or Drinking water. It can be inferred from these facts and figures that having too many schools but absence of essential basic facilities shows poor planning and indolent management. These factors encourage the widening of existing gender gap; parents are especially reluctant and feel insecure to send their daughters to schools without boundary walls or toilets (Hussain et al., 2019).

On the policy front, two policies that were aimed at improving governance and reducing the gender gap are worth mentioning. In order to manage the schools better, the School Education and Literacy department of the Sindh government announced the School Consolidation Policy in 2012 (Sohoo et al., 2020). The aim of this particular policy was to convert distinct government schools operating on the same campus into a single functional school. This was a step toward improved governance as it was thought this would increase the smooth transition from primary to secondary school and compensate for the teacher absenteeism problem (Sohoo et al., 2020). Before this policy, the resources of schools like playgrounds and washrooms were used by both schools but no one took the responsibility for maintaining them (Hussain et al., 2019). This policy is aimed at resolving this management glitch and improving resource allocation and utilization. This policy failed at the implementation stage. In theory, this was a good decision. In reality, there was a lack of cooperation between the teachers and school administration. This was because the government did not take the stakeholders into confidence when introducing this policy.

Another brilliantly devised policy that the Sindh government introduced was to cater to the smooth transition of female students from one grade to another – especially from primary to secondary. This was a step towards bridging the gender gap. The Girls' Stipend Programmed, 2006 was introduced whereby every female student from grades 6 through 10 received PKR 2500 at the end of every academic year (Unar & Zarif, 2018). A subsequent Differential Stipend Policy was introduced in 45 talukas where female students received PKR 3500 instead because of very low transition rates (Sohoo et al., 2020; Hussain et al., 2019; Unar & Zarif, 2018). The persistent decrease in the transition rates among female students puts a question mark on the effectiveness of the entire initiative (SEMIS, 2016).

*The Express Tribune, a Pakistani daily newspaper had reported that the Sindh government claimed to have distributed free wheat worth Rs.2 billion to the residents during the past six years. Retrieved from <https://tribune.com.pk/>

The failure of this policy initiative could be because of the low proportion of female students actually receiving the stipend*. In short, keeping in mind the most common practice of the government, that is, making policies only to rescind them later, public administration ends at a stage of policy formulation as implementation is rarely reached in the right manner (Hussain et al., 2019).

2.2.2 *Healthcare in Sindh*

Physical, social and mental wellbeing makes an integral part of human development. An overview of healthcare system in Sindh reveals that both public and private sectors provide curative healthcare where performance of government is not impressive in provision of basic healthcare facilities to the citizens; It is not an accessible commodity especially for rural population.

On infrastructure and staffing level, the statistics show Sindh has a highly underdeveloped health system. According to Planning and Development department, Government of Sindh, there are only 17 Civil hospitals for 29 districts of Sindh. This means that some districts might not even has a single Civil hospital. A total of 102 Civil, Specialized and Taluka hospitals for a population of fifty million does not seem enough (GOS, 2017). The table below shows the number of Basic Health Units (BHUs) and Rural Healthcare Centers (RHCs) in Sindh as per Planning and Development Department, Government of Sindh.

Table 1:

Basic Health Units and Rural Health Centers with Bed capacity

HEALTH UNIT/CENTER	NO. OF UNITS	NO. OF BEDS
BHU	800	1615
RHC	133	1703
Total	933	3318

Source: Government of Sindh, Sindh Bureau of Statistics 2017

The services provided in these units and centers are of rudimentary nature and while the total number of units may seem impressive with respect to accessibility, the quality of care is poor; this is evident from the fact that the usage of public-sector health facilities in Sindh is only 22 percent (Hussain et al., 2019). With 3,159 people per doctor (including surgeons, gynecologists, pediatricians and physicians), 12,441 persons per nurse and 1,455

*As per the data shared by Hussain et al. (2019) from Reform Support Unit, Education and Literary Department, Government of Sindh, less than 50 percent female students have been receiving stipend for grade 6 and on average 79 percent female students have been receiving stipends in grades 7, 8, 9 and 10.

people per bed (GOS, 2017), the province seems to be failing at providing healthcare facilities as there exists a wide gap between the demand and supply of the healthcare services (Hussain et al., 2019).

Not only the overall picture of the state of healthcare service is disappointing, but they' also exists a stark disparity even between districts for a number of reasons such as government attention, budget allocation and development schemes*. It may be useful to take Tharparkar district as an example. Most districts in the south of Sindh province except Karachi and Hyderabad are reported to rank low in human development as per UNDP's annual HDI report (UNDP, 2017). However, Tharparkar is the lowest ranking district in Sindh in terms of HDI and MPI. Siyal et al. (2018) claim that the government has been 'successful in providing the basic healthcare facilities to the people of Tharparker, the reports on high number of deaths over the years due to climate change, starvation due to lack of livelihood and social factors such as standard of living and education (skill development that caters to earning decent livelihood) make it less convincing (Khan & Robinson, 2018; Ali et al.,2018).

The case of Tharparkar must not be taken as an outlier. The facts speak for itself; Umerkot, Tando Allah Yar and most district in lower Sindh have also ranked very low on HDI (UNDP, 2017). As mentioned above, save the urbanized cities of Sindh that is, Karachi, Hyderabad and Sukkur, the rest of the districts do not have an impressive ranking on HDI. These urban centers may even have relatively better infrastructure of the healthcare facilities. But the reality about management of public sector hospitals is very shocking. Hussain et al. (2019) have revealed that Civil Hospital Karachi, has two-thirds of its funding emanating from 'philanthropic and charity organizations' while only one third of it comes from the provincial budget. One can only imagine the disappointing state of affairs at these healthcare facilities in rural Sindh.

On the policy front, several experiments, with respect to improving governance, like introducing autonomous board of governors, have failed (Nishtar et al., 2013). The management remains weak and governance, poor. Moreover, political involvement in human resource has contributed to human resource policy failures and has put a dent on the budget for non-salary components (Hussain et al., 2019). In short, healthcare system in Sindh faces infrastructural and policy related challenges that the government of Sindh needs to address to move up the ladder of development.

*For instance, health expenditure increased to Rs. 665 billion in 2016 from Rs. 48.4 billion in 2006. But most of the budget was incurred on recurring expenditure (Hussain et al., 2019; GOS, 2017).

2.2.3 *Subsistence in rural Sindh*

Pakistan was predominantly an agrarian economy. However, for more than three decades now, its contribution to the GDP of Pakistan has slowed to 20 percent (Chandio et al., 2016). Sindh has followed the same pattern and the share of agriculture in its economy is merely 17 percent (Hussain et al., 2019). On a policy front, Sindh 1950, many steps were taken to somehow elevate the status of the landless peasants (the haris). The 1950 Sindh Tenancy Act was the first step at benefiting the haris who had worked on the land for three years. It gave them the right to be a permanent hari –lifelong job security on the land they had worked on for three years for the same landlord, and compensation from the landowner were they to be removed from the job. However, the feudal lords cleverly avoided keeping a hari for three years in a row to prevent them from becoming permanent haris (Jamali, 2018; Sindh Laws, 1950).

In 1953 there were a total of 2.5 million landless peasants in Sindh. That made 79 percent of the population of Sindh (Hussain et al., 2019). The reforms in the 1960s and 1970s showed a shift in the land ownership. The top 8 percent of the owners had a share of 32 percent in 1970s compared to 54 percent in the 1950s. However, this does not paint the actual picture. The number of Jagirdars (the landlords with more than 250 acres of land) went down only because their lands were distributed among individual family members. And in some cases, on paper it was given to the benamidars, that is, the servants of the landlord, but the benefits went to the landlord (Hussain et al., 2019). The redistributive land reforms of Bhutto in the 1970s aimed at further protecting the sharecropping tenants (Gazdar, 2009). However, this policy initiative failed due to a lack of proper follow-up by the government officials and many landlords took to saving their lands either through Benami transfers or by giving up barren pieces of land (Hussain et al., 2019).

Another problem relating to agriculture sector is the dependency of the haris on the landlord. Majority of farmers in Sindh continue to rely on the informal sources of credit from their zamindars (landlords). But this dependency is not merely pecuniary; the landlord does not only own the land but the haris as well (Breman, 2013; Azad et al., 2003). One major reason for the dejected state of this kind of dependency of haris is the hope that these landlords who happen to be politically influential if not politicians themselves, promise them a small government job for their sons or relatives (Hussain et al., 2019).

Other than policy issues and the toxic relationship between the landless peasants and the landowners, the reasons for low productivity appear to be related to resource lessness. There exists disparity in productivity of large and small farmers. This is because the small farmers have little access to resources such as the limited subsidized fertilizers and the seeds. Landlords with bigger landholdings use their power in diverting the limited resources to themselves. The same elites breach the modules and divert water towards their lands too.

The tail-enders do not receive adequate supply (Azad et al., 2003). In short, the slowdown in contribution of agriculture to the economy of Sindh is not limited to complex dependencies and policy issues, but the intraregional politics where the elites win. The standard of living of the majority remains low because of the conditions explained above. A system that supports the powerful will not allow any economic and policy reforms to be effective. The disparity in production among small and large farmers is evidence enough. Public policy changes and institutional renewal is required to avert the agriculture crisis in Sindh.

The key problem areas that need attention for development in Sindh include, education, healthcare and standard of living. All these areas of the economy of Sindh are in deplorable state. But the condition of the aforementioned indicators is not uniform across the province and therefore, the development reports reflect disparity among various districts of Sindh (UNDP, 2017). This section sheds some light on such inconsistencies.

2.3 *Interregional socioeconomic disparity levels within Sindh*

Conventionally economic development and growth were assessed in terms of income. With the shift in focus to other dimensions like public welfare, the real concern now is the sharp rise in socioeconomic inequalities accompanying economic growth. In their article Zulfqar and Gillani (2019) discuss how the socioeconomic disparity levels in Pakistan have enabled cronyism and therefore harbored corruption among politicians and bureaucracy which has led to misallocation of resources. The findings of their study report that widening income disparities among the provinces of Pakistan, particularly the rural areas, are not surprises. However, Sindh reported to have the highest rural-urban income disparity level among all provinces of Pakistan.

Socioeconomic disparity levels among provinces painted a grim picture; disparities in access to education, health facilities and infrastructure were reported. The most surprising figure stated was that only 10 percent of people in Sindh had access to electricity while even in KPK, at least 34 percent of people had access to it (Zulfqar & Gillani, 2019). One interesting variable is taken into consideration while discussing the extent of socioeconomic disparities in the gender disparity. The report stated that Pakistan has been ranked second last in the annual Gender Gap Index 2013- 2016 (Zulfqar & Gillani, 2019). The current scenario implies that females suffer more due to lack of opportunities, access to education, healthcare and financial services. While this overall picture may guide the researchers to the real concerns of present-day Pakistan, regional analysis reveals that socioeconomic disparity levels within the rural set up of any given province of Pakistan are varying.

Consider the case of Sindh. Although Sindh has the second largest economy of the country, but poverty rate of the province is also high (Iqbal & Khan, 2020). Khan et al. (2014) acknowledges that the concept of poverty is not limited to just the monetary attributes but

includes ‘several dimensions directly influencing the level of individuals’ socio-economic status’ (Khan et al., 2014). It analyzes the incidence of multidimensional poverty (MDP) at regional levels in the Sindh province of Pakistan and revealed in its findings that there are varying degrees of poverty levels across the province with socio-economic aspects. Furthermore, the magnitude of poverty is higher in rural areas of Sindh.

A comprehensive report published by the UNDP ranks all the districts of all the provinces of Pakistan on the basis of the Human Development Index. There are three observations worth noting in the case of Sindh. Most districts in Sindh have a low ranking as compared to that Punjab. For instance; the lowest-ranking district of Punjab, Rajanpur has an HDI of 0.506 while the lowest ranking district of Sindh, Tharparker has an HDI of 0.22 which is lower than half of Punjab’s lowest-ranked. Secondly, within Sindh, there seems to be a huge disparity among the districts’ HDI. Lastly, in contrast to the disparity among the districts of Punjab, there seems to be no pattern to the disparity among the districts in Sindh. Some of the upper Sindh districts show poor ranking than those of lower Sindh ones. This suspicious variability needs to be examined. The methodology section below will cater to the research design selected for examining such disparities. Since there exists no recent data such as the MPI for the seemingly existing disparities, this paper will try to mirror the methodology adopted by the Pakistan Social and Living Standard Measurement (PSLM), Pakistan Bureau of Statistics.

3. Research Methodology

This is a cross-sectional, inductive study and thus focuses on a single point in time, i-e. 2021-22. The qualitative data in the form of a survey is quantified into an index namely, Multidimensional Poverty Index (MPI). The survey questionnaire used is the same that Pakistan Social and Living Standard Measurement (PSLM) uses for a countrywide survey. There were two instances where sampling was required for this research. The first stage was when selecting the upper and lower Sindh districts for data collection. Stratified random sampling was done for Talukas of upper Sindh and lower Sindh districts separately. The Talukas were grouped as per the level of Human Development (HD) described in the United Nations Development Program’s report on HDI. These sub levels marked on the Index were: Medium HD, low medium HD, low HD, and very low HD.

Table 2:

Stratified Sampling for upper and lower Sindh w.r.t Human Development

District	MHD	LMHD	LHD	VLHD	Sample size
Lower	0	2	4	1	7
Upper	2	3	0	0	5
Total					12

Here,

MHD = Medium Human Development

LMHD = Low Medium Human Development

LHD = Low Human Development

VLHD = Very Low Human Development

Sample size for Talukas was 12 in rural Sindh districts as this is not a funded research. Keeping practicality and time constraint in mind that only one researcher will have to collect data from the districts, the number of households interviewed from each Taluka/Tehsil was 22-25. Therefore, total sample size appeared to be 264 households from the selected 12 districts of upper and lower Sindh. The second stage required selection of the Talukas from the categorized set of HDI levels. The Talukas are selected at random using simple random sampling technique. It is reiterated that the number for each HDI level/ category was decided through stratified sampling.

The questionnaire for the interview survey is a mild modification of the one used in the PSLM data analysis. It is a bilingual questionnaire. The original English version is translated in Sindhi.

The indicators, deprivation cut-offs and weights assigned to each dimension are presented in the table below:

Table 3:
MPI indicators, deprivation cut-offs and weights

Dimension	Indicator	Deprivation cut-off	Weights
<u>Education</u>	Years of Schooling	Deprived if no man OR no woman in the household above 10 years of age has completed 5 years of schooling	1/6 = 16.67%
	Child school attendance	Deprived if any school-aged child is not attending school (between 6 and 11 years of age)	1/8 = 12.5%
	School Quality	Deprived if any child is not going to school because of quality issues (not enough teachers, schools are far away, too costly, no male/female teacher, substandard schools), or is attending school but remains dissatisfied with service	1/24 = 4.17%
<u>Health</u>	Access to health facilities/ clinics/ Basic Health Units (BHU)	Deprived if health facilities are not used at all, or are only used once in a while, because of access constraints (too far away, too costly, unsuitable, lack of tools/staff, not enough facilities)	1/6 = 16.67%
	Immunization	Deprived if any child under the age of 5 is not fully immunized according to the vaccinations calendar (households with no children under 5 are considered non-deprived)	1/18 = 5.56%
	Ante-natal care	Deprived if any woman in the household who has given birth in the last 3 years did not receive ante-natal check-ups (households with no woman who has given birth are considered non-deprived)	1/18 = 5.56%
	Assisted delivery	Deprived if any woman in the household has given birth in the last 3 years attended by untrained personnel (family member, friend, traditional birth attendant, etc.) or in an inappropriate facility (home, other) (households with no woman who has given birth are considered non-deprived)	1/18 = 5.56%
<u>Standard of Living</u>	Water	Deprived if the household has no access to an improved source of water according to MDG standards, considering distance (less than a 30 minutes return trip): tap water, hand pump, motor pump, protected well, mineral water	1/21 = 4.76%

Table to be continued...

Dimension	Indicator	Deprivation cut-off	Weights
	Sanitation	Deprived if the household has no access to adequate sanitation according to MDG standards: flush system (sewerage, septic tank and drain), privy seat	1/21 = 4.76%
	Walls	Deprived if the household has unimproved walls (mud, uncooked/mud bricks, wood/bamboo, other)	1/42 = 2.38%
	Overcrowding	Deprived if the household is overcrowded (4 or more people per room)	1/42 = 2.38%
	Electricity	Deprived if the household has no access to electricity	1/21 = 4.76%
	Cooking fuel	Deprived if the household uses solid cooking fuels for cooking (wood, dung cakes, crop residue, coal/charcoal, other)	1/21 = 4.76%
	Assets	Deprived if the household does not have more than two small assets (radio, TV, iron, fan, sewing machine, video cassette player, chair, watch, air cooler, bicycle) OR no large asset (refrigerator, air conditioner, tractor, computer, motorcycle)	1/21 = 4.76%
	Land and livestock (only for rural areas)	Deprived if the household is deprived in land AND deprived in livestock, i.e.: a) Deprived in land: the household has less than 2.25 acres of non-irrigated land AND less than 1.125 acres of irrigated land b) Deprived in livestock: the household has less than 2 cattle, fewer than 3 sheep/goats, fewer than 5 chickens AND no animal for transportation.	1/21 = 4.76%

Source: UNDP's Multidimensional Poverty report on Pakistan

The questionnaire is imported from the PSLM data base available at Pakistan Bureau of Statistics (2017)

which is used to calculate the national MPI. The methodology used will be the same as used by the Planning Commission of Pakistan's report on National MPI for the year 2014-15.

Calculation of MPI

$$MPI = A \times H \quad (1)$$

Where,

A is intensity of deprivation and

H is the headcount.

During the course of research, no such actions were taken that may qualify as misconduct. According to the United States Office of Research Integrity (ORI), misconduct in research refers to ‘fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting research results’ (University of California, 2014).

4. Results

This section contains the findings of the data collected from the respective districts selected through stratified and then random sampling. There were 31 villages in total from where the data was collected and recorded. Each district was represented by at least two villages.

Below is the table displaying the Talukas selected at random for upper and lower Sindh districts mentioned earlier:

Table 4:

List of Talukas selected at random for household survey

	Medium HD	Low Medium HD	Low HD	Very Low HD
<i>Upper Sindh</i>	Khairpur Mirs (Khairpur)	Qambar (Shahdadt)		
	Dadu (Dadu)	Khanpur (Shikarpur) Khairpur Mirs (Khairpur)		
<i>Lower Sindh</i>		Ghorabari (Thatta)	Tando Mohammad Khan (TMK)	Kaloi (Tharparker)
		Tando Allah Yar (Tando Allah Yar)	Tando Ghullam Hyder (TMK) Kharo Chan (Sujawal) Mirpur Khas (Mirpur Khas)	

*District names are mentioned in parenthesis.

In table 5. Results of Multidimensional Poverty Index (MPI) for rural Sindh are displayed. MPI is the measure of deprivation spread over three dimensions namely; education, health and standard of living. The Intensity (A) is a measure of the degree of deprivation whereas, the Incidence (H) is the poverty headcount in a given district.

Table 5:
District-wise MPI for rural Sindh

S.no	DISTRICT	Intensity (A)	Incidence (H)	MPI
1	<i>Sujawal</i>	0.58	0.91	0.524
2	<i>Thar</i>	0.51	0.68	0.349
3	<i>Thatta</i>	0.62	0.55	0.336
4	<i>Tando Muhammad Khan</i>	0.56	0.59	0.329
5	<i>Tando Ghullam Hyder</i>	0.54	0.55	0.295
6	<i>Mirpurkhas</i>	0.6	0.41	0.243
7	<i>Tando Allahyar</i>	0.52	0.45	0.235
8	<i>Khairpur</i>	0.46	0.36	0.167
9	<i>Dadu</i>	0.49	0.32	0.156
10	<i>Naushero Feroz</i>	0.44	0.32	0.139
11	<i>Qambar</i>	0.67	0.14	0.091
12	<i>Shikarpur</i>	0.38	0.14	0.051

The district-wise MPI results are arranged in a descending order of MPI values. This arrangement suggests that the districts of lower Sindh have greater incidence of poverty than that of upper Sindh. This may appear as a pattern until it is gauged from the table above that albeit the MPI and H values for districts of lower Sindh may be higher than that of upper Sindh, the highest intensity of deprivation recorded was for Qambar, a district of upper Sindh. This break in the pattern validates the socioeconomic disparity among the lower and upper Sindh districts identified in the HDI report discussed in the literature reviewed. It also raises the question as to why one of the least deprived districts shows the greatest intensity of deprivation. This can be further investigated in the subsequent future study as it is not the scope of this research.

5. Discussion and Conclusion

The discussion in the literature reviewed pointed out three problem areas suggesting disparities in access to education, health facilities and standard of living among various districts of Sindh.

5.1 *Practical and Theoretical Implications*

On policy front, there were multiple loopholes discussed in the literature reviewed. A major loophole of most development policies formulated was not taking stakeholders into confidence. This had caused the policy to fail at implementation stage. Moreover, the socio-economic setup of the rural Sindh had contributed in the lack of development owing to the prevailing feudal system. While these remain, qualitative variables awaiting exploration in the area of development, one thing which has become certain from the quantitative point of view is that the rural areas of Sindh are deprived in education and that upward social mobility is not reflected in terms of standard of living.

The empirical data in the form of MPI calculated confirmed socioeconomic disparity levels existing in rural Sindh. Based on the descriptive answers to some question in the research tools used, it was discovered that most of rural Sindh had shown high deprivation in the areas of education. It was revealed in the data that in most cases, the children themselves are not willing to attend school owing to lack of interest and in some cases due to school violence. Furthermore, the data analysis confirmed the claims presented in literature reviewed regarding lack of access to basic facilities like gas and electricity. Most households in rural Sindh do not have access to gas or electricity. Such deficiencies hinder the social mobility of the rural population. At first, there seemed to be a pattern suggesting that upper Sindh is relatively less deprived of education, health and access to basic facilities, however, an abnormally high intensity of deprivation was recorded for Qambar district of upper Sindh suggested there is no pattern to this deprivation.

5.2 *Policy Recommendations*

This study would make one recommendation to cater to depressing deprivation levels in rural Sindh: administrative attention would resolve the school violence issue and subsequently improve school attendance. The government must make sure that education is imparted in a friendly environment so that it would encourage the children to attend school. Improvement in delivery of education service would positively impact the literacy rate and offer better employment opportunities to the people of rural Sindh. This step would play a key role in improving the standards of living of the people of rural Sindh.

5.3 *Limitations and Future Research*

Since this research was neither an independent study with no financial support nor human resources and therefore the area under study was not explored on a large scale. The cooperation from the households in rural Sindh was mostly conditional and limited. One huge obstacle that was somehow later overcome was fake data provided by the interviewees in district Sujawal as they were under an impression that this research came with financial

benefits. The data was discarded and it was collected again from a different village in Sujawal. In Shikarpur district there was a turf war going on between locals and probably some law agency. Therefore, it was dangerous and difficult to collect data. Keeping such nuances among different districts in mind, it would be relatively easy for a public institution to conduct such research. The scope of this research was to identify disparity levels among various districts of Sindh. However, the reasons behind such socioeconomic disparity within a single province were not the scope of this research but it can be taken up as future research.

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A Nexus between Devaluation and Inflation in Pakistan

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Abstract

This study empirically analyzes the relationship between the devaluation of currency and inflation in Pakistan by using time series data from 2001 to 2018. Although the government in Pakistan adopted policies to stabilize prices and boost exports yet exchange rate depreciation is observed over the years coupled with an increase in inflation. The exchange rate is predominantly a key element of international trade because a country fails to meet the demand of its population through endowed natural resources in a close economy that they have. So, they depend on other markets for the fulfillment of their demand. Eventually, exchange rate and inflation are the main determinants of macroeconomic evaluation in a country. This research work examines the relationship between the devaluation of currency and inflation in Pakistan over the period from 2001 to 2018, with the application of the cointegration test, VECM model, and correlation analysis. In an econometric model Inflation (INF) is taken as a dependent variable and exchange rate (used as a proxy for currency devaluation EXC), gross domestic product (GDP), and money supply (MS) are independent variables in the study. The role of the central bank in this domain has always been crucial. Central Bank takes action to stabilize the currency in the country which sometimes is observed in inflationary pressure. The study employed a stationary test and the variables are found stationary at the second difference. The cointegration test describes that there is a long-run relationship between inflation and devaluation of the currency. The correlation coefficient reveals a negative correlation between inflation and currency devaluation. This study recommends that government should float feasible policies parallel to the exchange rate (currency depreciation/devaluation of PKR) to tackle the persistent rise in the inflation rate.

Keywords: Exchange rate depreciation; currency devaluation; inflation; Pakistan; VECM.

JEL Classification: B55, E00

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1. Introduction

The exchange rate is considered a vital instrument of macroeconomic policy in an economy. Fluctuation in the exchange rate affects the prices of tradable and non-tradable goods in a country (Bobai et al., 2013). Generally, in Pakistan, currency devaluation is the procedure to decline the currency value at the official level and it's a part of central bank monetary policy. Formally it's a procedure adopted by authorities to set the value of a currency at a lower level in relation to currency which is often called the exchange rate. Currency devaluation is a regular depreciation in the value of a currency as compared to other currencies; it may be compared with a single unit of any other currency unit or in a form of the group (currency). Those countries which follow the exchange rate system are either fixed or -fixed, in both cases, they require a monetary policy for their assistance in case of either devaluation or revival of the devalued currency. Thus, the exchange rate influences the movement of inflation in an economy, keeping in view the behavior of nominal and real exchange rates the policymakers have concentrated on the determination of exchange rate, and also used it as a determinant of inflation.

It is the most critical decision to choose the right exchange rate regime, as it affects the economic performance of a country (Obadan, 2007). The economic performance may include economic growth, per capita income, the balance of payments, etc. So, the exchange rate is one of the central macroeconomic policy debates (Sebastian, 2006). By definition, the exchange rate is a ratio between one unit of currency and the amount of another currency for which it is exchanged in a given period (Termunonimim & Reginald, 2013). Resultantly it plays a central role in the trade level of a country. It is classified into nominal and real exchange rates. The former involves the relative price of two currencies of two countries whereas the latter measures the relative price of tradable goods to non-tradable goods. Henceforth, the exchange rate affects the prices of imports and exports. Both the concepts are interrelated so, the domestic prices of traded goods and prices of imports and exports are predominantly affected by the exchange rate (Obadan, 2007).

From 2001 to 2002 steps are taken in Pakistan to reduce the impact of high prices which can also be seen by economic development indicators respectively, also recognized by World Bank statistics. Due to such evaluation steps Pakistani rupee PKR gradually becomes stronger in 2006-2007 (PKR59/60 per \$). This evaluation was transitory and PKR again declined after 2007 which continued till 2020. In such a situation central bank (State Bank of Pakistan) interferes in government action by injecting some amount of dollar into the market for stabilizing the Pakistani rupee. But the immediate effects of this action do not need to be viewed positively and the central bank is successful at its first attempt. This action and reaction process takes more time so eventually, its results are not permanent, but for a short period, it accelerates the inflation in the economy. Devaluation of currency in Pakistan affects the economy in the form of high prices (CPI), enveloping the whole economy in its vicious circle which is still prevailing.

Notwithstanding, the exchange rate has become a central issue in Pakistan's economic policies, to put inflation under effective control. A continuous decline value in Pakistan's domestic currency (PKR) is in line with inflationary growth which in turn is reducing the living standard of residents in the economy. Monetary authorities, policymakers, and practitioners have ever remained concerned with the unfavorable impact of inflation arising from devaluation in the currency as both variables are core determinants of economic performance (Nwosa & Oseni, 2012). Truthfully, inflation is an ongoing rise in price levels in an economy. Put differently, the general price index persistently increases making the value of money decline. Inflation is a vital issue to tackle on the macroeconomic front, especially from an economic and business perspective. Quite considerably, inflation is amongst few other macroeconomic problems of developing or a developed countries. Many demand-side and supply-side factors are detrimental to inflation in Pakistan. One most important reason behind the general price level might be the expansionary monetary policy which reveals the role of the Bank in the credit policy perspective. Keeping the control on price level needs an active monetary policy that plausibly involves policy variables like money supply, interest rate, etc. (Ali et al., 2015).

Globally, the countries have close connections and interactions with one another. Generally, these countries have free markets for trade and the real exchange rate plays a decisive role in this regard. Pakistan does have significant openness to free trade, and so does the imperative role of the exchange rate cannot be ignored. Nonetheless, inflation in the country is closely linked with external price shocks. Bearing in mind, all the above exchange rate is an economic measure that is sensitively analyzed by the monetary authorities. Sometimes unexpected monetary shocks cause massive fluctuations in the exchange rate and instability in domestic currency (Benita & Lauterbach, 2007). The least variations in the exchange rate are crucial in promoting price stability and facilitating investment in the economy at a steady pace. In Pakistan, a formulation in monetary policy is made not only to achieve domestic price stability but also to attain the external value of the currency.

There are numerous causes behind the currency devaluation process in an economy. Pakistan is listed among developing countries in the world ranking and its industrial sector mainly depends upon other countries' raw materials which means Pakistan imports raw materials for finalizing its goods, especially manufactured goods, and other essentials. For such requirements Pakistan has limited resources, thus Pakistan takes a step to devalue its currency for boosting export and earning a balance of payment. Political instability, features of governance, and especially the prices of crude oil remained the major causes of devaluation in Pakistan. Despite all, any gap which exists between demand and supply of traded items may also become a cause of devaluation. This study examines the relationship between currency devaluation and inflation in Pakistan over the period 2001 to 2018.

1.1 A Brief Background

After the failure of the Bretton Wood System in 1971, the floating exchange rate was adopted by many industrial economies. In the aftermath, volatility in the real and nominal exchange rates was observed (Sundquist, 2002). Many economists lamented that monetary authorities were solely responsible for such fluctuations. Similar observations were also made in Pakistan when all private sectors were nationalized while in the 1980s the reversal in the decision was made and the policy of deregulation was adopted. Meanwhile, Pakistan adopted managed float exchange rate system in 1982 which caused depreciation (20%) in the PAK rupee. More so, in 1988 an agreement was signed with IMF which has multiple clauses including devaluation, tariff reduction, and financial sector reforms (Stockman, 1983). In the 1990s Pakistan got a little improvement on the macroeconomic front but in the late 1990s exports reduced alarmingly and the current account deficit turned negative. Furthermore, in the 2000s trade liberalization policy was pursued to impoverish the structural reform program commenced in the 1990s. Quite noticeably, the per capita income in Pakistan raised from \$897 in 2005-06 to \$1368 in 2012-13 due to a stable exchange rate and increase in real GDP growth rate. However, the printing of notes in 2013 raised the price level and the exchange rate was again observed unstable (devalued).

2. Literature review

The exchange rate is considered a key determinant to assess the economic performance of a country (Nwosa & Oseni, 2012). It is pertinent to discuss it as a key determinant while targeting successful inflation-controlling macroeconomic objectives. It is also used as a key determinant to assess the international competitiveness of an economy. Arguably, it is also an indicative measure of international competitiveness (Danmola, 2013).

In my opinion, volatility in the exchange rate makes foreign trade and investment decisions difficult (Adekunle, 2010). Factually, the nature of exchange rate policy in an economy is detrimental in reducing risks related to exchange rate which in turn affects inflation in an economy (Achsani et al., 2010). Stability in the exchange rate causes stability in price levels (Bobai et al., 2013). The stability in the exchange rate attracts foreign direct investment (FDI) in an economy. Generally speaking, stability of prices is needed in an economy which can be gained through exchange rate stability. In a developing country like Pakistan, trade is import-dependent. The country imports to fulfill its fuel needs and other related items as the manufacturing sector remains a neglected sector in Pakistan. The stability in the exchange rate is required for stability in imported items prices as volatility in the exchange rate is causing an unfavorable balance of payments. It is lamented in a study that domestic firms compete with their foreign counterparts in the international markets and their ability to compete is predicted by relative prices of goods which in turn is determined by the exchange rate (Ogbonna, 2009).

Conversely, a negative relationship between the inflation rate and economic growth rate in Pakistan is empirically reported for the period from 1972 to 2010 by applying the OLS technique. Eventually, it is stressed that exchange rate policy plays a key role in reducing risk and fluctuations in the real exchange rate as the exchange rate affects prevailing prices and whole economic activity in the economy (Noer et al., 2010) There are particular challenges to the view that devaluation is inflationary in effects and it is also shown that there is no association in rupee value and prices in short term, and these effects of rupee depreciation had pass-through effects on prices (CPI) in the economy (Chaudary & Khan, 2002).

It is an overt fact that currency depreciation remains responsible for increasing the prices of imported raw materials, and prices of finished goods via the (CPI). Eventually, the cost of domestically produced items increases relatively, which may cause a shrink in the country's export basket and inflationary pressure is observed in Pakistan (Imimole & Enoma, 2011). Generally speaking, money supply, currency value rate, rate of interest, and government deficit budget are the key elements that might be accountable for inflation growth (Umeora, 2010). Additionally, the exchange rate and GDP didn't show any causal link (Mujahid & Zeb, 2014). It is justified in the study that the exchange rate does not directly affect GDP but an indirect effect is observed through imports, exports, and FDI. A further argument is made that the exchange value of the currency may cause a decline in GDP because when the domestic currency depreciates/devalues in comparison to other currency, disequilibrium in markets occur due to inflationary pressure. Various theories present the interaction among foreign exchange, current account, relative prices and relative income which are as under;

2.1 Traditional Flow Model

This model proclaims that the demand and supply forces of foreign exchange are the determining factors of the exchange rate. The very famous doctrine is also documented in this theory that supply creates its demand. Any imbalance in the current account can be offset through the net flow of capital but in opposite direction. Henceforth, any surplus in the current account can be financed through the outflow of capital while the deficit in this account can be maintained through the inflow of capital. Thus, the current account presumably depends upon changes in relative prices and real income. A rise in domestic relative prices in comparison to foreign prices depreciates the exchange rate as higher domestic prices make exports costly (Adeoye & Saibu, 2014). On the other hand, the import level rises, as an inflation-ridden economy assumes to be a profitable place to export which necessarily raises demand for foreign exchange. Keeping in view all the above mentioned, it can be easily portrayed that three main factors are detrimental to exchange rate which includes relative prices, income and relative interest rate. The economy that tends to strengthen its exchange rate must raise the interest rate. Equally, an increase in real income also tends to increase the demand for importing commodities leading the exchange rate to depreciate. Similarly, an upsurge in domestic prices relative to foreign prices brings forth a negative impact on the exchange rate which causes disequilibrium in it.

2.2 *The Monetary Model*

The model illustrates the changes in demand and supply of money between two trading countries which resultantly cause changes in the exchange rate. The model identifies that the main determinants of exchange rate are core macroeconomic variables like money supply, real income and interest rate. The model stresses upon money supply increase which causes inflationary pressure in the economy but the phenomenon works through exchange rate depreciation and devaluation of the currency. The macroeconomic indicators crucially and dynamically work together so inflationary pressure does impact the domestic interest rate making the demand for money lower and resultantly inflationary pressure depreciates the exchange rate so devaluation in domestic currency is observed (Adeoye & Saibu, 2014).

2.3 *Portfolio Balance Model*

It is generally believed that residents of a country distribute their wealth in three forms of assets i.e monetary base, domestic bonds, and foreign bonds. The exchange rate is in equilibrium if these assets are held in desired proportions. An increase in wealth makes the demand for foreign bonds rise or the exchange rate depreciates (Adeoye & Saibu, 2014). Furthermore, an increase in private sector holding of govt bonds raises interest rates by driving down bond prices which in turn appreciates the exchange rate. The phenomenon of appreciation or depreciation of the exchange rate also depends upon the income and substitution effect. Despite all, a major criticism of this model is that it ignores the major determinants of trade and the role of purchasing power parity.

2.4 *The purchasing power parity model*

The model portrayed in purchasing power parity (PPP) is predominantly important in both monetary and portfolio balance models. It is proposed by Gustar Cassel in 1920. Arguably, a consumer can buy the same amount of commodities with the same amount of currencies in any country (Asher, 2012). The equilibrium exchange rate between two inconvertible paper currencies is determined by making the purchasing powers equal. Mainly exchange rate determination depends upon relative prices. The theory explains the difference in the inflation rate of two countries which proposes that the exchange rate of two countries' currencies movement offset the difference in inflation in two economies so the real purchasing power of two currencies is maintained. In the light of the above-mentioned views, the present study adopts purchasing power parity theory to describe the relationship between exchange rate depreciation and inflation in Pakistan.

3. Research method

Secondary data is used in this research. However, data is collected from different sources such as the State Bank of Pakistan (SBP), IMF, World Bank Development indicators, and OECD national account data files. This study is conducted for the period from 2001 to 2018. From the analytical perspective, the study employed an augmented dicker fuller (ADF) test to check the stationary of data and the study also applied different econometric techniques such as co-integration test, vector Error Correction model (VECM) and the analysis for partial correlation coefficients.

In this study co-integration test investigates the equilibrium relationship between variables in the long run, whereas the Vector Error Correction Model (VECM) examines the short-run dynamics and long-run relationship between the exchange rate and inflation. Moreover, the Partial Correlation Coefficient analysis test investigates the degree of correlation between exchange rate and inflation in Pakistan. The inflation rate (INF) is employed as the dependent variable in this study, while exchange rate (EXC), money supply (MS) and gross domestic product (GDP) are included as independent variables.

3.1 Model Specification

The model highlighting the relationship among employed variables in the study is specified in equation 1:

$$\text{INF} = f(\text{EXC}, \text{GDP}, \text{MS}) \quad \text{equation (1)}$$

The linear functional form of the model is expressed in equation 2:

$$\text{INF} = b_0 + b_1(\text{EXC}) + b_2(\text{GDP}) + b_3(\text{MS}) + \mu_t \quad \text{equation (2)}$$

Where INF = Inflation Rate, EXC = Exchange rate (used as a proxy for devaluation of currency), GDP = gross Domestic Product, MS = Supply of Money, μ_t = Error term.

b_0, b_1, b_2, b_3 depict coefficients of the variables in the aforementioned regression equation

To avoid some misleading and spurious estimation the logarithm of all variables is taken, Then the equation become as:

$$\log \text{INF} = b_0 + b_1(\log \text{EXC}) + b_2(\log \text{GDP}) + b_3(\log \text{MS}) + \mu_t \quad \text{equation (3)}$$

or

$$\text{LINF} = b_0 + b_1(\text{LEXC}) + b_2(\text{LGDP}) + b_3(\text{LMS}) + \mu_t \quad \text{equation (4)}$$

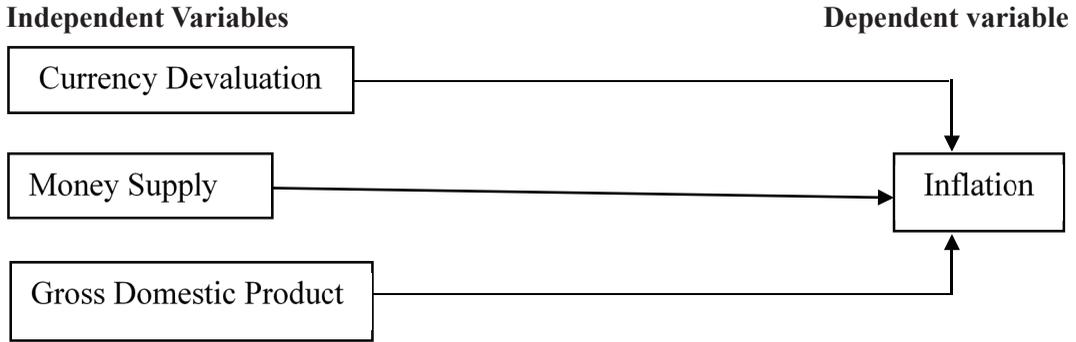


Figure 1: Independent Variables and Dependent variable

3.2 Data Description and sources

The study is examining the relationship between devaluation of currency or exchange rate depreciation and inflation in Pakistan. The inflation rate (INF) represents the per annum percentage change in the price level of commodities in Pakistan. The exchange rate (EXC) is depicting the rate at which one unit of currency of a country is exchanged for another country’s currency. Formally it involves two countries that are involved in bilateral trade and are using an exchange rate. Money supply (MS) is the total volume of money in circulation in a specific time span. Gross domestic product (GDP) is used as a proxy for economic growth.

4. Estimatiuon procedure

4.1 Unit Root Test

The first step in the formal level of this empirical investigation is to check the stationary i.e. tests of a unit root. Mostly, the time series data for macroeconomic variables is found non-stationary, so the application of the OLS (Ordinary Least Square) method leads to spurious results. So testing whether the variable is stationary, ADF unit root test (Augmented dicky fuller 1979; 1981) is applied which also equips the research work to find the order of integration in time series data. So, to handle such an issue augmented Dickey-Fuller test is applied (stated below as equations 5, 6 and 7).

$$\Delta Y_t = B_1 + Z_{yt-1} + ai + e_t \quad \text{with intercept equation (5)}$$

$$\Delta Y_t = B_1 + B_{2t} + Z_{yt-1} + ai + e_t \quad \text{with intercept and trend equation (6)}$$

$$\Delta Y_t = Z_{yt-1} + ai + e_t \quad \text{none equation (7)}$$

It’s compulsory to test the stationarity of all variables in the model.

4.2 *Cointegration Test*

This test is used to estimate the long-run relationship among the same order data series through Johanson Cointegration Test. If data is stationary at first difference or second difference, but the condition of stationarity for both differences is that variables should be integrated in the same order then Johanson cointegration is applied to check association among variables. This method determines the number of cointegrated vectors using the Johanson cointegration method with two different tests, Terrace test statistics and Maximum Eigen-value test statistic. When conditions of Johanson test are verified by earlier mentioned criteria then Johanson cointegration is being applied to see the relationship between different variables.

4.3 *Vector Error Correction Model (VECM)*

Vector Error Correction Model (VECM) is the estimation procedure employed to find the short-run dynamic as well as the long-run relationship among variables. The application of VECM is compulsory to rectify the provisional short-term divergence of series in a long-run equilibrium relationship. VECM approach can be specified as in the following equation 8:

$$\Delta Y_t = a_0 + a_1 \Delta X_t + a_2 U_{t-1} + \varepsilon_t \quad \text{equation (8)}$$

Where;

$Y_t = Y_t - Y_{t-1}$, a_1 and a_2 are the dynamic adjustment coefficients of the data series, U_{t-1} is the residual lag representing the deviation in the short-run from the equilibrium position, and it is estimated to correct long-run equilibrium error, where ε_t is the error term.

The following model expresses the vector error correction model in equation 9.

$$\Delta \text{LINF}_t = \beta_0 + \beta_1 \Delta \text{EXC}_{t-1} + \beta_2 \Delta \text{MS}_{t-1} + \beta_3 \Delta \text{GDP}_{t-1} + \text{ECM}_{t-1} + \mu_t \quad \text{equation (9)}$$

The above model will estimate the dynamic behavior of the variables.

If no cointegration equation is found by the Johanson test then application of VECM is no more required and the Granger causality test is directly applied to proceed further and to establish a causal relationship between variables.

4.4 *Partial Correlation Coefficient*

Such estimation step measures the direction and strength among variables of the model under study. A low value or figure of correlation coefficient reflects a delicate correlation while a high value of the coefficient of correlation reveals a secure correlation among

variables. The coefficient sign indicates the direction of change; a positive sign means the movement of change in two variables in the same direction. Pearson correlation coefficient analysis is being used to calculate the correlation coefficient through equation 10.

$$r_{XY.Z} = \frac{r_{XY} - r_{XZ}r_{YZ}}{\sqrt{(1-r_{XZ}^2)(1-r_{YZ}^2)}} \quad \text{equation (10)}$$

r = Coefficient of correlation

X and Y are variables under examination.

5. Empirical Results and Discussion

5.1 Unit root test

Table 1:

Series at 1st difference (intercept/trend)

SERIES	ADF	5%	10%	PROB	ORDER	REMARKS
LGDP	-4.1153	-3.7332	-3.3103	0.0261	1	STATIONARY
LINF	-4.7111	-3.7332	-3.3103	0.0093	1	STATIONARY
LEXC	-2.9255	-3.7597	-3.3249	0.1825	1	NOT STATIONARY
LMS	-3.4728	-3.7332	-3.3103	0.0770	1	NOT STATIONARY

Table 2:

Series at 2nd difference (intercept)

SERIES	ADF	5%	10%	PROB	ORDER	REMARKS
LGDP	-9.4991	-3.0810	-2.6813	0.0000	2	STATIONARY
LINF	-4.4075	-3.1199	-2.7011	0.0055	2	STATIONARY
LEXC	-4.1937	-3.0988	-2.6904	0.0071	2	STATIONARY
LMS	-4.8226	-3.0988	-2.6904	0.0024	2	STATIONARY

Table 3:
Series at 2nd difference (intercept & trend)

SERIES	ADF	5%	10%	PROB	ORDER	REMARKS
LGDP	-9.333	-3.7597	-3.3249	0.0000	2	STATIONARY
LINK	-4.5915	-3.8289	-3.3629	0.0157	2	STATIONARY
LEXC	-3.8289	-3.7911	-3.3422	0.0472	2	STATIONARY
LMS	-4.7538	-3.7911	-3.3422	0.0108	2	STATIONARY

The above tables 1, 2 & 3 depict the estimation of unit root test. The results reveal that all the variables become integrated of the same order at the second difference, with the application of the Augmented Dickey-Fuller (ADF) unit root test at 5% and 10% critical values. Table 3 shows the comparison of ADF statistics and the critical values implying that ADF statistics of the individual variables of the study are greater than critical values chosen at the second difference. Additionally, the order of integration of the variables meaningfully suggests that the study may attempt the estimation of long-run relationships among variables for achieving better empirical results

5.2 Selection of lag length criteria

Akaike information criterion (AIC) selected one as optimal lag length.

Table 4:
Var lag length selection criteria

Lag	LogI	LR	FPE	AIC	SC	HQ
0	0.519361	NA	1.77e-05	0.409487	0.605537	0.428975
1	58.90026	82.42009*	1.30e-07*	-4.576501*	-3.596250*	-4.479062*

5.3 Co-Integration Test

Table 5:
Unrestricted cointegration test (trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob. **
None*	0.922673	68.26945	47.85613	0.0002
At most 1	0.651793	27.31398	29.79707	0.0942
At most 2	0.466022	10.43467	15.49471	0.2488
At most 3	0.024462	0.396258	3.841466	0.5290

Trace test indicates 1 cointegration eqn(s) at 0.05 level.

Table 6:
Unrestricted cointegration test (maximum-eigenvalues)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Static	Critical Value	Prob. **
None *	0.922673	40.95546	27.58434	0.0006
At most 1	0.651793	16.87931	21.13162	0.1778
At most 2	0.466022	10.03842	14.26460	0.2094
At most 3	0.024462	0.396258	3.841466	0.5290

Max-Eigenvalue test indicates 1 cointegration equation (s) at 0.05 level.

Tables 5 and 6 represent the estimated results of trace statistic and maximum eigenvalue test respectively. Results of the trace test reveal that P-value is less than 0.05 which is significant hence, the null hypothesis of no co-integration is rejected. Results of trace test (table 5) and eigenvalue test (table 6) attested that one cointegrating equation exists at a 5% level which testifies the existence of a long-run relationship among variables. Furthermore, the existence of one cointegrating equation is proved through the Johanson cointegration test. In this way, VECM is a better approach to employ for investigating the long-run and short-run relationship among variables.

5.4 *Vector Error Correction Model (VECM)*

The estimation of VECM is done in two steps. Firstly, the Johanson procedure was used for estimating the cointegrating relation whereas, in the second step, the error correction term (ECT) was calculated by estimated cointegration relation. Moreover, ECT estimated from the first step is represented by cointegrating equation 1. Table 7 portrays the results of error correction t and cointegrating equations, presented as under:

Table 7:

Vector error correction estimates

a) Cointegrating Eq:	CointEq1			
LINF(-1)	1.000000			
LEXC(-1)	7.577747			
	(0.86512)			
	[8.75921]			
LGDP(-1)	-0.800273			
	(0.55354)			
	[-1.44572]			
LMS(-1)	-22.56289			
	(3.74179)			
	[-6.02997]			
C	55.35653			
b) Error Correction:	D(LINF)	D(LEXC)	D(LGDP)	D(LMS)
CointEq1	-0.174634	-0.011771	0.187330	-0.000416
	(0.06120)	(0.00772)	(0.04360)	(0.00807)

Table to be continued...

	[-2.85353]	[-1.52498]	[4.29628]	[-0.05153]
D(LINF(-1))	-0.285085 (0.24007) [-1.18750]	-0.004272 (0.03028) [-0.14108]	0.300407 (0.17104) [1.75631]	-0.016248 (0.03165) [-0.51336]
D(LEXC(-1))	0.107278 (2.44726) [0.04384]	0.060007 (0.30865) [0.19442]	-2.535944 (1.74361) [-1.45442]	-0.235623 (0.32264) [-0.73029]
D(LGDP(-1))	0.321021 (0.29580) [1.08526]	-0.029722 (0.03731) [-0.79668]	-0.418401 (0.21075) [-1.98528]	0.061829 (0.03900) [1.58542]
D(LMS(-1))	-1.175879 (2.37859) [-0.49436]	-0.607242 (0.29999) [-2.02420]	2.647970 (1.69469) [1.56251]	-0.104144 (0.31359) [-0.33210]
C	0.033629 (0.15663) [0.21470]	0.058020 (0.01975) [2.93706]	0.084669 (0.11159) [0.75872]	0.022790 (0.02065) [1.10364]
R-squared	0.523762	0.480151	0.666268	0.379392
Adj. R-squared	0.285643	0.220226	0.499401	0.069088
F-statistic	2.199582	1.847269	3.992824	1.222646

Standard error () and t statistic [].

Equation 11 depicts cointegration equation below (standard error displayed in parenthesis).

$$\text{LINF} + 7.577747\text{LEXC} - 0.800273\text{LGDP} - 22.56289\text{LMS} + 55.35653 = 0$$

or

$$\text{LINF} = -7.577747\text{LEXC} + 0.800273\text{LGDP} + 22.56289\text{LMS} - 55.35653 \quad \text{equation (11)}$$

(0.86512) (0.56354) (3.74179)

The coefficients of cointegrating equations reveal the long-run relationship among variables whereas the coefficients of the VECM term portray how the deviations from a long-run relationship do impact changes in the variables in the next period. Considerably, the coefficients for all variables are long-run elasticities because all variables are taken in long-form having one cointegrating vector. Long-run results portray that all variables in the cointegration equation significantly influence the inflation rate in Pakistan from 2000 to 2018. More so, results also indicate that the exchange rate (a proxy for devaluation) negatively affects the inflation rate at a 5% significance level. It is evident that a 7.57% increase in inflation takes place due to 1% devaluation, while GDP and MS have a significant positive impact on the inflation rate as a 1% change in GDP causes a 0.80% increase in the inflation rate and 1% increase in money supply causes 22.56% increase in inflation.

The results of the error correction term (ECT) are also presented in table 7, the value of it should lie between (0, 1). Its negative sign reveals the convergence by evaluating the speed of adjustment towards equilibrium. It is also indicated in the results that (ECT) for all the variables possesses negative signs within the range of (0, -1) except for GDP. The main feature of ECT is its relevance with convergence towards equilibrium and correction of disequilibrium occurring due to any shock in the economy. It not only corrects disequilibrium but does guides variables for coming back towards equilibrium. It can also be observed from the results that disequilibrium was corrected per annum by 17.46% in the inflation rate.

5.5 Partial Correlation coefficient

Table 8:

Results of Correlation

	LINF	LEXC	LGDP	LMS
LINF	1	-0.043623	-0.372877	0.226458
LEXC	-0.043623	1	0.024566	0.462022
LGDP	-0.372877	0.024566	1	0.368560
LMS	0.226458	0.462022	0.368560	1

Table 9 portrays, the results describing the “partial correlation coefficient test” in matrix form. The obtained results indicate no powerful correlation between inflation (LINF) and explanatory variables when the exchange rate is used as a proxy for currency devaluation (LEXC), Gross Domestic Product (LGDP) and money supply (LMS) are the rest of the explanatory variables. The correlation static (value) of the independent variables comprises -0.044 for (LEXC) and -0.373 for (LGDP) respectively, which implies adverse (negative) and delicate (weak) correlation existence among dependent variable and explanatory variables as designated by negative coefficient values of the variables. Similarly, results show a correlation between dependent variable inflation (LINF) and independent variable money supply (LMS) having a value of 0.226 with a positive sign. The correlation matrix shows the strength of the relationship of variables.

5.6 Conclusion and recommendations

The prime and foremost purpose of this research is to analyze the relationship between devaluation and inflation in Pakistan over the period 2001-2018. As the data is found stationary at the second difference so the cointegration test based on stationarity findings is applied and VECM is employed for checking the long-run association between devaluation and inflation rate in Pakistan. VECM results revealed that devaluation has a significant effect on inflation in Pakistan. Error correction term C (1) describes that it took 17.46% per year to rectify the transitory deviation for long run association. Partial correlation coefficient analysis shows a negative correlation among independent variables (LEXC and LGDP) and dependent variable inflation rate whereas money supply indicates positive correlation with the dependent variable. The study recommends that Government must float activities parallel to the exchange rate (currency depreciation/devaluation of PKR) to tackle the persistent rise in the inflation rate. Government should also adopt flexible policies regarding interest rates to strengthen the economy and boost local industry and export of domestic goods. It is strongly recommended that government should provide a platform for investors to produce exportable than recurrently devalue the currency, and improvement in the balance of payment (BoP) should also be encouraged. The Central bank should keep an eye on the growth rate of the supply of money as this channel also affects inflation.

Conflicts of Interest

The authors declare no conflict of interest.

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- 1 As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.
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- 10 The references should include only the most relevant papers. In the text, references to publications should appear as follows: "Khan (1978) reported that..." Or "This problem has been a subject in literature before [e.g., Khan (1978) p. 102]." The author should make sure that there is a strict "one-to-one correspondence" between the names (years) in the text and those on the list. At the end of the manuscript (after any appendices) the complete references should be listed as: for monographs and books. Ahmad, Jaleel, 1978, Import substitution, trade and development, Amsterdam: North-Holland, For contributions to collective works Newbery, Daved M.G., 1975,. The use of rental contract in peasant agriculture, in: Reynolds, ed., Agriculture in development theory, New Haven: Yale University Press p. 3-40.
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- 13 Papers and references should conform to the APA format.
- 14 No single source of reference should exceed 5% of citation within the paper.
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