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Firms greenwashing practices and consumers' perception: Role of marketing and non-marketing external stake holders in firms greenwashing practices.

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Abstract: The businesses are compelled to adopt sustainable development goals and try to prove their green credentials due to current global environmental revolution. The term sustainable is sold and became a buzz word in recent years. The pressure of being green on firms because of different stakeholders is so immense that firms falsely label their products to be "green", "sustainbale" or eco-friendly, when they are failed to meet the standards. The firms false promtion to be green is known as greenwashing.The objective of this study is to investigate consumers' perception about the marekting and non-marketing external stakeholders' influence on organization adoption of greenwashing practices in developing countries. The conceptual framework developed in this paper refelcts different external pressures compeling firmsto adopt greenwashing practices. The model was analyzed using structural equation modeling on a sample of 358 green consumers in Pakistan. The findings suggest that regulatory and consumer side pressure have a significant impact on organizations adoption of greenwashing practices, while competitive pressure was proved to be insignificant factor. According to our research findings consumers believe that firms get involved in greenwashing practices either to win the consumers heart or to avoid the legal complexities. This study gives an insight that how these external stakeholders are influencing firms negatively to get engage in greenwashing practices .These findings propose important implications to keep an eye on greenwashing practices and reduce the tendency of getting involved in it.

Keywords; Greenwashing practices, Regulatory pressure, Consumer side pressure, Competitive pressure, Green marketing, Eco-friendly behavior.

INTRODUCTION

The environmental issues have gained all stakeholders attention universally and today's consumer isspecfically more inclined towards green consumption (Chang & Chen, 2014). The global green revolution has brought prominent changes in consumer demand, behavioral pattern, values, and decision making due to the adoption of eco-friendly lifestyles (Kim & Chung, 2011).Consumers have demonstrated loyal attitude and repurchase intention toward companies adopting sustainable development practices (Wang, Krishna, & McFerran, 2017), which is compelling companies to adopt green packaging (Wandosell, 2021).According Shabbir et al (2020) in United States green marketing is rapidly increasing. The global purchase of eco-labeled product was estimated to grow by US$230 billion in 2009 and US$ 845 billion by 2015 (Tolliver-Nigro, 2004; Butt, 2017).Corporate environmental sustainability has gained profound importance in the domain of business research in recent time (Hamdoun et al, 2018; Jabbour, 2013; Teixeira et al, 2012, Vander Waal and Thijssens, 2020).

The ever increasing demand for eco-friendly product is putting a continuous pressure on organizations to portray themselves as an eco-friendly organization.To get the competetive edge in this global market, companies are stressed to originate and exchange of green creative ideas constantly (Fields, 2017; Khan et al 2018). To attract the green audience, companies often use vague eco-friendly claims, which are usually unprovable and at times are false. The deceitful promotion of firm's image for being environmental friendly through marketing or public relations is termed as greenwashing (Aji and Sutikno, 2015). According to Delmas and Burbano (2011) bad environmental performance with positive communication of environmental performance is greenwashing. They classified the greenwashing drivers into non-market external derivers, market external drivers, organizational drivers and individual psychological drivers. This study focuses only on non-market and market external factors impact on organizational greenwashing practices.

According to stakeholder theory various external pressure groups exert influence on organization's strategy (Freeman, 1984). Huang et al (2016) demonstrated that adoption of green production strategy is due to customer demand. Other than consumers, there are various other external pressure that drive the firms to adopt environmental friendly practices (Charan & Murty, 2018). In some studies, counter to climate change and global warming challenges were the reasons to adopt green practices (Sikdar, 2019; Paille, Valeau & Renwick, 2020). Sometimes firms employ different environmental tactics to win competitive advantage over others (Esty & Winston, 2009).Many researchers have mentioned government regulatory laws as key external factors on organization's green decision (Yasmeen et al 2019; Huang et al 2016; Biswas & Roy 2015).

The contemporary businesses have lot of sustainable challenges (Tworzydło, Gawronski, & Szuba, 2020) which creates a real pressure on firms. The firms fail to meet the environmental standards have a higher propensity to get involved in greenwashing practices. In a study Agarwal & Helfat (2009) emphasized that failure of meeting the sustainability criteria is the major reason behind adopting green washing practices. Most of the times consumers, regulatory bodies and competitive pressure are the major marketing and non-marketing pressures urging firms to make false green marketing claims. This study highlights that in developing countries like Pakistan how these external stakeholders urge companies to adopt green washing practices, who are unable to meet the sustainability standards. The findings of this study would give an

insight that to what extent regulatory bodies' actions, changes in consumer preferences and competitive actions of rivals have impact on company's strategy in developing countries.

LITERATURE REVIEW

Greenwashing practices

Organizations are in a pressure to perform eco-friendly and promote their green brand image by using slogans 'go-green', 'earth-friendly', 'eco-friendly', and 'save the planet'. When companies are failed to maintain the authenticity of green marketing practices, they greenwash. The term was coined by Jay Westerveldin 1986, itcan be described as "an intentional misleading or deceptive claims of organization's sustainable practices" (Terrachoice, 2010). According to Delmas & Burbano (2011) greenwashing is misleading the consumers by false environmental claims to gain temporary benefits, either at product-level or firm-level. Greenwashing is also known as whitewashing, echo-bleaching, echo-washing, green makeup, green image washing or as green sheen. Consumers have shown higher demand for environment friendly brands (Bhatia & Jain, 2013; Ottman, 2011), consequently global increase in greenwashing practices to meet consumer preference has been observed (Lin, 2013; Mathiyazhagan et al., 2013; Coskun et al., 2016; Huang, 2016). Greenwashing is done to enhance the firm's market share (Chen & Chang, 2013), but it would damage the entire green movement (Hamann & Kapelus, 2004). The biggest threat of greenwashing is losing consumer trust on green marketing activities(Polonsky et al. 2010).This study is to examine theeffect of external stakeholders on firms' adoption of greenwashing practices.

External marketing and non-marketing Pressures to adopt Greenwashing

The stakeholder theory by Edward Freeman (1984) stated that different stakeholders exert pressure on management decision making. They have been categorized in internal and external stakeholders and this paper focus on the impact of external stakeholder on firms' decision making. External stakeholders include suppliers, customers, competitors, regulatory bodies, government and society. Bansal and Roth (2000) identified various level of external pressure draw an impact on firm's to respond by going green. In this sustainability era firms are forced by stakeholders to minimize their damaging image (Talbot et al., 2020). According to Yasmeen et al. (2019) these stakeholders are exercising influence on firms to show higher environmental concern and act more pro-environmentally. Eventually, Organizations are highly engaged to opt different substantive and symbolic sustainable actions to position themselves as environmental friendly firms (Schons & Steinmeier, 2016).However, such extensive pressure from these stakeholders may also lead firms to reveal mislead disclosure of the green actions (Vílchez et al.,2020).After doing extensive literature review and scanning business environment thoroughly, it was observed that overwhelming global consumer demands for green products, government regulation and industry competitive pressure are among the top most factors compelling organizations to opt green washing practices.

Regulatory Pressure

Regulatory pressure is drawn from government institutions and regulatory bodies by crafting legal rules, policies and procedures. Regulatory institutions coercively push firms to implement pro-environmental strategies (Greiner & Kim, 2020). Organizations feel that incorporation of environmental sustainability practices in their business functioning is essential for the sake of their existence (Dalmas&Barbano, 2011).

The organizations following these rules and laws are required to establish environmental management system (Johnstone & Labonne, 2009) like ISO 14001 system and ecological innovation technology. In some empirical studies it was found that organizations are evidenced to spend more on environmental R&D and pollution prevention technologies under the strict regulations (Horbach et al., 2012; Demirel and Kesidou, 2011). Different industry pollutant emissions are controlled by imposing environmental taxation as a penalty (Wang, Li & Qi, 2020). Green taxes impose by authorities bring the ROI and managerial profit on lower side. Compliance with regulatory laws usually result in higher manufacturing and business operating cost, therefore it is very tough for them to put all these standards into practice (Kassinis & Vafeas, 2006). Organizations fail to adopt environmental friendly practices pretend to be a green company, claiming to fulfill all prerequisite. So sometimes tough regulatory laws pressurize organizations to exercise green washing practices.

Consumer Side Pressure:

The growing body of literature on environmental problems influence the consumer awareness regarding ecological issues, which compelling them to engage in green consumer behavior (Pimanenko et al., 2020; Baum, 2012; Paul, Modi, & Patel, 2016; Wu, Wei, Tseng, & Cheng, 2018). Previous studies validated that consumer knowledge and awareness motivate them towards green consumption behavior (Stern, 2000; Lee, 2008; Nguyen et al. 2018). The increased environmental awareness is pushing consumers to choose green products (Witek & Kuzniar, 2020; Sheehan and Atkinson, 2012) and ignoring consumers demand may cause a firm to lose market share and profit shrinkage (Gualandris & Kalchschmidt, 2014). Many consumers are now willing to pay premium price for environmental friendly products (Li et al. 2016). In a study Zhu et al. (2018) pointed out that propelling demand of products' green attributes from customers is pushing firms to incorporate green production and distribution strategies to meet environmental challenges.There is empirical evidence that businesses adopting green practices have been rewarded with more gratitude by external shareholders (Bansal, P.Roth, 2000). Customers acceptance of green marketing as a solution of enviroemental problems, urging firms to build their green brand image to get competteitve advantage (Wu & Lin, 2016; Chen & Wu, 2014; Chen & Chang, 2013). Therefore, to gain market share and position themselves as green brands, firms are most likely to perform as green conscious firms(Chang, 2011). In a study, Huang et al. (2016) also suggested that green production strategy is influenced by customer's pressures. But when firms find it difficult to comply with green standards, the customer side pressure urge them to go for false environmental claims, leading them towards green washing practices (Parguel et al., 2011). This exercise of green washing practice may cost a firm to lose its prestige and trust in consumers' eye (Chen &Cheng, 2013)and may creates consumer confusion (Dahl, 2018).

Competitive Pressure

According to the Delmas and Toffel (2008) any sustainable act of prominent competitor creates pressure on others firms, pushing them to adopt pro-environment strategy. The sustainable development provides an additional dimension of competitive advantage to firms while designing their marketing strategy (DeSarbo et al, 2005; Hart and Dowell, 2010), providing an additional benchmark to senior management while assessing business strategy. In different researches it was stated that more firms showing green orientation in industry would help to adopt environmental technologies for green production and business operations, resulting favorable response from external stakeholders (Dowell & Muthulingam, 2017; Wang , Li, & Qi,

2020).Currently companies are adopting environmental management approach by applying several techniques such as labeling their products recyclable or environmentally friendly (Urbanski 2020;smith, 2008) aiming to reduce environmental impact of firms' production (Fuller and Ottman, 2004). It is done by adopting clean technology (Kuehr, 2007), green finances (Molina-Azorín et al., 2009), green marketing (Rex & Baumann, 2007), Green human resource management(Jackson et al., 2011), environmental training (Unnikrishnan & Hegde, 2007) and green supply chain (Kuei, Madu, Chow &Chen; 2015; Hofer et al. 2012). According to Delmas (2010) the standardize procedure established by industry association to promote environmental friendly atmosphere may create competitive pressure on firms. It has been noticed that firms unable to meet these industry environmental standards and requirements finally landed up to go for false environmental claims (Yang et al,2020). These false green claims by companies make the whole green slogan skeptical in consumers' mind, causing a great damage to pro-environment activities (Lyon & Montgomery, 2013).The adoption of green washing practices by firms on aggregate levelmay destroy all green efforts of the industry (Laufer, 2003; Parguel et al., 2011)

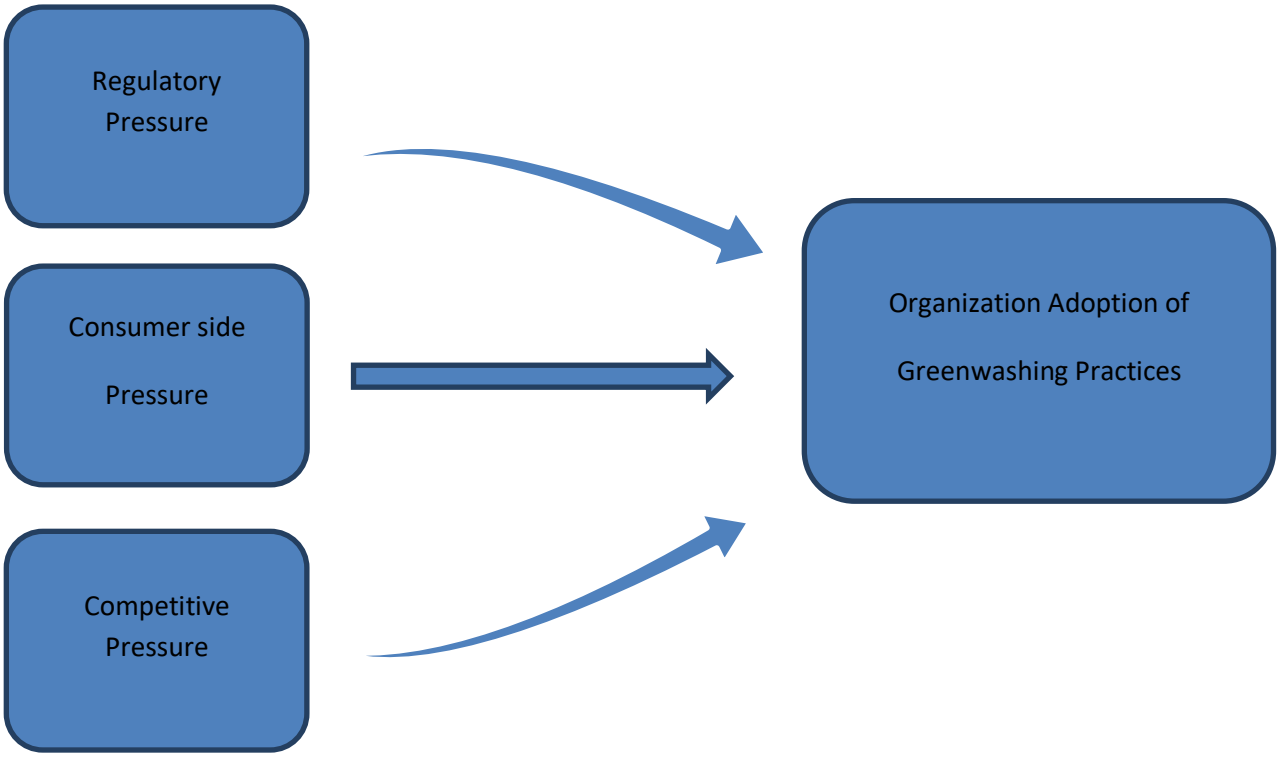

Figure 1: Conceptual Framework

Hypotheses

$H_{1:}$ Regulatory pressurre has a significant impact on orgnaization adoption of greenwashing practices.
$H_{2:}$ Consumer side pressure has a significant impact on orgnaization adoption of greenwashing practices.

H_3: Competitive pressurehas a significant impact on orgnaization adoption of greenwashing practices.

METHODOLOGY

Data collection and sample

The study was carried out to understand the consumer perspective regarding firms greenwashing behavior and the factors compelling them to adopt these practices in developing countries. The data was collected from the consumers involved in green product purchase, so the unit of analysis of this study is green consumers. Non-probability based sampling technique was used to collect the data through online self-administered questionnaire. The google online form was distributed to the respondents through different social media tools. It was circulated on different whatsApp groups, Facebook and email accounts. Responses from 391 respondents were obtained, meeting the Sekran (2003) criteria of 384. Multivariate outlier technique was used to detect the outliers and 33 respondents were detected as outliers and deleted; remaining 358 valid questionnaires were used for further analysis.

Table 1. Respondents' Demographic Profile

Variable	Classification	Frequency	Percentage(%)
Gender	Male	227	63.4
	Female	131	36.6
Age	Lessthan20	23	6.4
	20–30	149	41.6
	31–40	139	38.8
	Morethan41	47	13.1
Highesteducationlevel	Highschool	70	19.5
	University/college	193	53.9
	Postgraduate	644	17.8
	Technical	31	8.6
Occupation	Student	54	15.0
	Employee	268	74.9
	Unemployed	36	10.0
Total		**358**	**100**

Demographic characteristics presented in table 1 indicate that 63.4% of the respondents are male and 36.6% are female. The majority of the respondents are in the age group of 20-30 (41.6%) followed by 31-40 (38.8%) and age group above 41 (13.1%) respectively. Education level of the respondents shows that 53.9% are university graduate followed by 19.5% high school students, Post graduate are 17.8% and technically educated are 8.6% people.74.9% are employed while15.0% are students and rests of 10.0% are unemployed.

Measurement Scales

All of the measurement scales were adopted from previous literature. Regulatory pressure was measured by using 5-items of Huangetal (2016). Customer pressure was measured by 4 items scale of Huangetal (2016). The measurement scale of Greenwashing was adopted from Horiuchi Schuchard (2009) and Laufer (2003) comprising of 5 items. All of the above scales were measured on 5- point likert scale. Competitive Pressure was measured by using 3-items scale of Liu et al. (2010), it was measured on 7-point likert scale.

Table 2: Measurement Scale items

Items	Description	Cronbach's α
	Regulatory Pressure (RP)	
RP1	In my view, Emissionstandardsdrivebusinessfirmstotakeongreeninnovationactivities	
RP2	In my view, Productiontechnologystandardsdrivebusinessfirmstotakeongreeninnovationactivities	0.658
RP3	In my view, Legal risks drive business firms to take on green innovation activities	
RP4	In my view, Governmentsupervisiondrivebusinessfirmstotakeongreeninnovationactivities	
RP5	In my view, Administrativepenaltiesdrivebusinessfirmstotakeongreeninnovationactivities	
	Customer pressure (CUST)	
CUST1	In my view, Increased awareness of environmental issues among customers drive business firms to take on green innovation activities	
CUST2	In my view, Customers' preferences for environmental friendly products drive business firms to take on green Innovation activities.	0.757
CUST3	In my view, Customers' continuous attention to our firm' environmental behavior drive business firms to take on green innovation activities	
CUST4	In my view, Customers who seek green suppliers drive business firms to take on green innovation activities	
	Competitive Pressure (COMP)	
COMP 1	I my view, competitors that have implemented environmental management influence companies to greenwash	
COMP 2	In my view, customer favorability towards companies that have implemented environmental management influence competitors to greenwash	0.831
COMP 3	In my view, companies that have become competitive as a result of environmental management influence competitors to greenwash.	

	Greenwash (GW)	
GW1	In my view, this green product misleads with words in its environmental features.	
GW2	In my view, this green product misleads with visuals or graphics in its environmental features	
GW3	In my view, this green product possesses a green claim that is vague or seemingly un-provable	0.769
GW4	In my view, this green product overstates or exaggerates how its green functionality actually is	
GW5	In my view, this green product leaves out or masks important information, making the green claim sound better than it is.	

Analysis and Results

Confirmatory Factor Analysis (CFA)

The data was initially used to develop the measurement model on AMOS 21, then structural model was developed and tested to check the hypotheses. The model fitness was checked and improved by deleting items having low factor loadings. All the items having factor loading less than 0.50 were deleted as recommended by Hulland, (1999)) and Tsai (2007). The deleted items are RP3, RP4, RP5 and GW5. After deleting all the items having low factor loadings from the constructs respectively, the model fit improved considerably. The values are x^2=2.384; df =59; p<.000; CFI = .940; TLI = .921; RMSEA = .062.

Table 3: Reliability and Confirmatory Factor Loadings

Items	**Factor Loadings**	**Composite Reliability**	**Average Variance Extracted**
Regulatory Pressure (RP)			
RP1	0.551	0.805	0.674
RP2	0.644		
Customer pressure (CUST)			
CUST1	0.680	0.841	0.569
CUST2	0.739		
CUST3	0.665		
CUST4	0.574		
Competitive Pressure (COMP)			
COMP1	0.770	0.894	0.738
COMP2	0.822		
COMP3	0.774		
Greenwash(GW)			
GW1	0.694	0.862	0.610
GW2	0.782		

GW3	0.677		
GW4	0.617		

The constructs reliability was calculated by computing composite reliability (CR) and all the constructs showed CR value greater than 0.80, well above the recommended value 0.70 by Hair et al. (1998). The convergent validity of the constructs was tested through AVE and according to Fornell and Larcker (1981) if all the constructs have AVE values greater than 0.50 then there is no issue of convergent validity. All the constructs in the study showed AVE values greater than 0.56, well above the recommended value. The table 3 shows the factor loadings, CR and AVE values of all items in the model.

The discriminant validity was checked by Fornell and Larcker (1981) method, where AVE value of the latent construct is compared with the construct correlation with other variables. As per Hair et al. (2006) criteria if the square root of constructs AVE is greater than the correlation among the constructs, there would be no significant issue of discriminant validity in the data. In the study all the diagonal values were greater than the individual respective correlation values, showing no discriminant validity issue as shown in table 4.

Table 4 : Discriminant Validity

	RP	CUST	COMP	GW
RP	**0.821***			
CUST	0.420	**0.754**		
COMP	-0.208	-0.225	**0.859**	
GW	0.263	0.286	-0.154	**0.781**

Note: *The diagonal values represents squarer root of AVE of each construct

SEM Estimations and Test of Hypothesis

After finalizing the CFA model, the structural model was run to test the proposed hypotheses. The results show that the first hypothesis, Regulatory pressure directly influences on greenwashing practices, has been accepted (β = .305; P<.05). The results suggest that regualtory pressure influences companies to opt greenwashing practices. This positive impact of government and other regulatory bodies greatly influence on the strategic deicsions of organizations to adopt greenwashing practices. External coercive pressure of government regulatory bodies pressurize the companies to adopt the tag of "being green"to pretend their concern towards environmental sustaniability in most of their business functioning areas. According to Delmas (2011) consequently regulatory pressure make organizations to generate the fake claims for the reason of their existence. This green push of regulatory pressure is the major cause for organizations to opt greenwashing practices.

The second hypothesis, Consumer side pressure directly influences green washing practices has also been accepted (β = .223; P<.05). This shows that there is a positive correlation between adoption of greenwashing practices and custmer pressure. Current global environmental boom has rasied the level of consumer's awareness to fullfill their eco-friendly resonsibilities. The results shows that green marketing has brought changes in the behavior of consumer's and in their shopping pattern trends (Tseng, Wu, Wei & Cheng, 2018) which is compeling firms to do greenwashing.

Table 5: Hypotheses summary

S.N	Hypothesis	Coefficient	t-value	Sig value	Result
1	RP has an impact on GW	.305	2.457	.013	Accepted
2	CUST has an impact on GW	.223	3.246	.001	Accepted
3	COMP has an impact on GW	-.056	-1.437	.151	Rejected

*P<0.05, **p<0.00

The third hypothesis stating that Industry Competitive Pressure directly influences greenwashing practices, has been rejected (β = -.056; P>.05). The rejection of this hypothsis shows that in Pakistani market companies feel no competitive pressure to adopt greenwashing practices. According to our findings, rejection of this hypothesis has proved that in overall Pakistani market greenwashing practices are not being adopted by firms due to competetive pressure. Insignificant relationship between competitive pressure and greenwashing practices has explained the Paksitan's market situation, wherePakistani firms are not practically applying green environmental strategies, so other firms have no competetive for greenwashing.

Discussion and Conclusion

The mounting vague and false environmental claims have created serious doubts in consumers' minds regarding green campaigns (Hamann & Kapelus, 2004). The firms' greenwashing practices are damaging the green cause badly, as it puts questions on the corporate honesty in consumers' minds. This negative perception is creating a real challenge for the companies who are doing sincere efforts to serve the environment. The major purpose of this research was to study consumers' perception about the impact of external marketing and non-marketing stake holders on organizations adoption of greenwashing practices in developing countries. This study gives a deeper understanding of consumers' perception regarding factors compelling firms to adopt greenwashing practices. Unlike previous studies, the conceptual framework presented in the paper combines the marketing and non-marketing external factors having an impact on firm adoption of greenwashing practices. It gives an insight that what can be the potential external factors compelling a firm to opt greenwashing practices. The important contributions of the paper are as follows:

First, most of the existing literature focuses on the consequences of the greenwashing, but very few studies were found focusing antecedents of greenwashing. Moreover, the conceptual framework presented in this study comprises both marketing and non-marketing external stakeholders, not presented together in previous studies. Second, according to our findings competitive pressure was found an insignificant factor to adopt greenwashing practices. This result can serve as the basis of further in-depth analysis. It can help researchers to further explore the reasons behind this insignificant relationship between these variables. Third, the proposed conceptual model shown in paper was tested using structure equation modeling based

on Pakistani consumers data. Its gives an insight that two external pressure, consumers side and regulatory pressures, have significant impact on firms' adoption of greenwashing practices.

The study findings demonstrate consumer and regulatorypressure as detrimental factors of greenwashing practices opt by organization. Consumers higher participation in buying eco-friendly products in Pakistan indicates a positive change in consumers' values, demand, and preferences towards green consumption (Waris and Hameed, 2020). Different researches suggested that firms with better green image receive higher consumer's adherence and repurchase response (Marin, Ruiz & Rubio, 2009; Wang, Krishna & Mc Ferran, 2017), it urges firms to use advertising and other promotional tools to promote eco-friendly image, even if their environmental performance is bad. Many firms take it as a marketing opportunity and try to take advantage of this by using suspicious advertising green claims which require lot of scientific understanding, which turn it into meaningless communication. According to Zhu et al. (2018) consumers appreciate firms' efforts to incorporate eco-design and efficient distribution strategies. Form the findings of this research, it can be concluded that consumers think that higher demand of eco-friendly products is actually putting a lot of pressure on firms to develop positive green brand imageand it may lead companies to adopt greenwashing practices.

The relationship between regulatory pressure and firms' adoption of greenwashing was found significant. It shows consumers belief that sometimes firms opt greenwashing practices to meet legal requirements or avoid legal complexities. It can be inferred that consumers are dubious regarding manufactures sincerity with green cause. It can be justified with a recent example, as government banned use of plastic in all major cities in Pakistan, but practically it is used all over the country. Event like this asserts the consumer thoughts that most of the environmental performance claimed by firms are just to meet the legal requirement, instead of doing something really good for the environment. They believe that execution of environmental laws through regulatory bodies, partnered with increasing consumers' environmental knowledge and concern are compelling companies to opt green washing practices.

The findings revealed that Pakistani consumers don't see competitive pressure as a significant factor in firm's adoption of green practices. This result is inconsistent with the findings of Charan and Murty (2017).The reason behind it would be the deep rooted belief that majority of the corporate sector is not committed to green practices, so any single firms feels negligible pressure from its competitor to lie about its environmental performance. It stressed that consumers believe that environment is not taken as major stakeholder by the corporate sector, when while making business strategies. It is recommended that environment should be made where companies should be in healthy competition regarding their environmental performance, as they do in economic performance.

Research Implications / Limitations

This research offers practical implications to the policymakers and marketers. It is suggested that regulatory bodies and government institutions should implement the green polices with soul and spirit in business sector. In Pakistan PEMRA is the institution which regulates media and all the communication spread through it, so PEMRA should be very watchful in monitoring the communication spread through media. All the environmental claims promoted through advertising must be verifiable, if possible must be backed by proper certification. Greenwashing is used as a short cut to promote green brand image by firms, who are

failed to meet the actual sustainable standard, so regulatory authorities must be watchful to check all the eco-friendly claims and slogans. Practical yardsticks development and proper monitoring mechanism are needed to stop companies opting greenwashing practices. It is suggested that extensive awareness campaign should be run to make consumers more aware of greenwashing practices. Secondly, overall industry needs a green orientation to enhance the environmental performance of firms.

The limitations of this study are as follows. First, the study is limited to urban consumers as data was collected only from Karachi, so the results shown in the study may reflect the perspective of urban consumers only. Second, to generalize the research findings, the study can be done having broad base of consumers from other regions of Pakistan. Third, this study focused only on external pressures and three external factors were shown in research model based on previous research. It is recommended that in future researchers should incorporate other external factors (such as policy incentives) or internal factors (such as top management orientation) compelling firms to opt greenwashing practices.

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