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RESEARCH ARTICLE<https://doi.org/10.56868/ijmt.v1i1.11>**Investigation of Professional, Spiritual and Emotional Intelligence on Organizational Learning**Toheed Fatima¹, Maria Zalfaqaar², Ansar Ali Mehdi³, Shehryar Ahmed^{4*}¹. Allama Iqbal Open University, Islamabad, Pakistan². National University of Modern Languages, Islamabad, Pakistan³. Bahria Business School, Bahria University, Pakistan⁴. Manipal International University, Putra Nilai, Negeri Sembilan, Malaysia

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Abstract

Continuous learning is the norm of the learning organizations. It works like for blood for knowledge workers to proceed and succeed. Moreover, it keeps employees' firms, optimistic and enthusiastic. This study focused on professional, spiritual, and emotional intelligence and their incorporation for organizational learning effectiveness and development. The study is based on the cross sectional quantitative data, which was collected through a structured questionnaire using survey method. The questionnaire was adopted from previous studies. The study adopted convenient sampling technique for the collection of data. A total of 500 questionnaires were distributed, however, only 418 questions were received back, which were complete and considered for inclusion in the study. Moreover, the study used SPSS for the data analysis. The study results admit that professional, spiritual and emotional intelligence have a significant impact on organizational learning and effectiveness. Moreover, the study confirmed that learning organizations give better support to their and have higher level of support for their knowledge worker. The study recommends that all the learning organizations should develop a mechanism for the professional, spiritual and emotional development of their knowledge worker for their better throughput, productivity and efficiency of the organization.

Keywords: Emotional Intelligence, Spiritual Intelligence, Professional Intelligence, organizational learning, organizational learning and development, organizational effectiveness.

INTRODUCTION

Learning organizations are supposed to adopt continuous learning approached for their workers. It will help to develop their human capital asset, which can be used for organizational development, effectiveness and efficiency (Hart, et al, 2016; Talmy, 1995). Different organizations adopt different strategies for the enhancement of their workforce depends upon the need, requirement, context, domain and size of the organization (Adcock, 2012; Academic Skills Center, 2013). It promotes innovation, ideation, resilience, optimism and opportunism among the employees, who can better help to cope with organizational and industrial challenges, opportunities and presents better choices and solutions (Boud, Cohen, & Sampson, 2006; Virtual University, 2012; Tovstiga, Odenthal, & Goerner, 2004).

Organizational learning focuses on the capacity, capability and skill development of the knowledge worker. This development should be holistic, which should include cognitive, social and behavioral aspects of the development (Bloom E. L., 2007; A.Hart, Gilstrap, & C.Bolino, 2016). This

holistic aspect brings together a pragmatic attitude among knowledge workers, which develops new opportunities, insights. Learning charge them socially and emotionally, motivate them and let them go to accept and cope the challenges (Spindell, 2014; Bernstein, 2012). Besides cognitive development, there are different aspects of the workers, which need to be developed to bring consistency in processes, practices and procedures. This stance is supported by both contextual and content analysis (Comedis, 2014; Elbanna, 2015). Learning theories indicate that learning can't be confined to cognitive abilities, even cognitive abilities need to be aligned with the other abilities to comprehend the phenomenon of interest and deliver the desired throughput (Seirafi, 2012; Eryilmaz, 2016; Henri, 2009).

Organization must realize the need of the social capital and its role in the organizational learning effectiveness. Therefore, these days, learning organizations are more focusing on the social, emotional, psychological, professional, and spiritual aspects of their knowledge workers (Göhlich, 2016; Kansas, 2016). Organizational learning is still in infancy, especially in the developing countries, very less concentration is given to the learning modules of the knowledge worker. It can be one of the reason that many organizations could not survive in the turmoil and uncertain situations (Elbanna, 2015; Joseph, 2014; SuccessFactors & Mateo, 2007).

According to current research recommendations, learning organizations need to focus more on the emotional aspects i.e. emotional intelligence (Quotient) (EQ) of the workers for getting optimized results and should investigate their role in the organizational learning effectiveness. Similarly, Andalib, Azizan, Turi, danilla, & Kaman (2022), Hussain, et al., (2022) and Rosak-Szyrocka, Apostu, Turi, & Tanveer (2022) recommends that emotional intelligence complemented by the professional intelligence (Quotient) (PQ) and spiritual intelligence (Quotient) (SQ) may bolster the effectiveness and efficiencies of the workers and organization. Therefore, based on the recommendations, this study focuses on the emotional, professional and spiritual intelligence and their role in organizational learning effectiveness and development.

The study is limited to the learning organizations only. The data was collected from learning organizations, located in the twin capital cities (Islamabad and Rawalpindi) of Pakistan. The study is empirical in nature, which collected and tested quantitative data to assess the relationship among EQ, PQ and SQ. Therefore, the main question of the study was “to examine the impact of EQ, PQ and SQ on OL and also to explore the relationship among these constructs.

LITERATURE REVIEW

Organizational learning

OL is considered as a blood for the learning organizations. OL focus on the organizational problems, their contextualization and provision of best possible, feasible, optimal and suitable solution

according to the context, situations, domains, need, size, structure and complexity of the problem (Ebrahimi, Chamanzamin, Roohbakhsh, & Shaygan, 2017; Schon, 1975; Barr, Stimpert, & Huff, 1992; Turi, Ghani, Sorooshian, & Abbas, 2017). Besides this, OL is proactive in nature, and always focuses on developing aptitude for learning among the workers, so that they can cope with the future challenges, threats and opportunities (Tofan, 2013; Bollinger & Smith, 2001; Borah, 2013; Asim, Turi, Shahab, & Rubab, 2023).

Organizations may not survive without continuous, structures and organized mechanisms for learning inside the organization. It is one the basic reason, that many organizations can't survive, or remain still and stagnant (Conklin, 2001; Gilaninia, Rankouh, & Gildeh, 2013; Toheed, Turi, & Ali, 2019). In contrast to this, many organization flourish and capture the market with no time, as they hunt talent from the market and focus on its continuous training and development, which adds to both individual and organizational performance (Curado, 2004; UNO, 2003; Gilaninia, Rankouh, & Gildeh, 2013; Pu, et al, 2022).

OL can't and should not be confined to the cognitive learning, development of the cognitive capacity and faculties of the individual (Iukke, 2014; Hart, et al, 2016; Eraut & Hirsh, 2008; Bashir, Khwaja, Turi, & Toheed, 2019). The management should arrange the required processes, procedures, and policies, which contribute the holistic development of the workers, which should include and not limited to social, behavioral and emotional aspects of the knowledge workers (Doshi & Khokle, 2011; Choo, 2016; Al-Hussaini, Turi, Altamimi, Khan, & Ahmad, 2019; Bashir, Khwaja, Rashid, Turi, & Waheed, 2020).

Professional intelligence and organizational learning

Professional intelligence (PQ) is the combination of the both cognitive and behavioral phenomenon and can be linked to organizational performance theories like Theory X, Theory Y and also theory Z. it talks about the emerging situational phenomenon, that in one special circumstance, how an individual meet organizational and customer's expectations, needs and requirements (Briz-Ponce, Pereira, Carvalho, Antonio Juanes-Méndez, & José García-Peñalvo, 2017; Adcock, 2012; Ahmad & Lodhi, 2014). PQ talks about the worker's attitude and aptitude to the organizational targets, goals and achievements. Moreover, it also postulates that knowledge workers expect professional development while performing certain challenging tasks (Apostolou, 2014; azma & mostafapour, 2011; Kang, Turi, Bashir, Alam, & Shah, 2021).

According to the leadership theories, it is the main duty of the manager and leader that they should sense the nerves and potentials of the knowledge workers and accordingly should be assigned duty. Moreover, the knowledge workers should not be stacked to certain role and position (Armstrong, 2010; Barr, Stimpert, & Huff, 1992; Rosak-Szyrocka, Apostu, Turi, & Tanveer, 2022). Their role should

be made complex, challenging and even complicated, so that they can learn from this emerging situation and can be best prepared for the upcoming challenges, opportunities and threats (Austina, Evansb, Goldwatera, & Pottera, 2005; Crook, 2012; Sun, Sarfraz, Turi, & Ivascu, 2022).

Similarly, job rotation, job enrichment, job enlargement and also the deputation are the other tools, models and techniques, through which individual professional experiences, exposure, skills and faculties can be explored and exploited for the betterment of that very specific individual and also for the organizational learning, effectiveness and development (Birmingham, 2015; Ford, 2006; Tipu, Turi, & Khan, 2022). These tools techniques have proven results, as it cooks and boost the inner and hidden capacities and capabilities of the individual and utilize them. These processes, practices and procedure adds to both, individual and organization learning (Blerk, 2013). These techniques keep the worker motivated, firmed, optimistic, and pragmatic and contributes to organizational learning and development (Daud & Kamsin, 2003; Swift & Hwang, 2013; Sun, Sarfraz, Turi, & Ivascu, 2022; Turi, Khastoori, SorooshianI, & Campbell, 2022).

Emotional intelligence and organizational learning

Human is more emotionally intelligent. According to certain research papers, more than 90%, human is emotional being and believes in emotionality (Agarwal & Garg, 2012). Its more operations, processes, plans and procedures are based on emotion and heuristics (Crook, 2012; Tipu, Turi, & Khan, 2022). EQ refers to the worker's abilities to recognize his own emotions and the emotions of other and accordingly respond. It means that on the basis of the contextual and situation analysis, a worker should respond to the situation (Castaneda & Rios, 2007; Bustinza, Molina, & Arias-Aranda, 2010).

In any organization, managers and leaders should be socio-psychologist. They should know the interest, like and dislikes of the knowledge workers, their inclination, orientation and amelioration and accordingly assign them a job. It will provide them social, emotional, psychological and moral safety and security (Comfort, 2009; Tipu, Turi, & Iqbal, 2023). In such a situation all their faculties, skills, and sense start working in a complementary way, in a synergetic way and adds to one another, therefore learning at individual, group and organizational level occur. It forms a culture of learning, where knowledge is acquired, stored, shared and disseminated among the knowledge workers (Turi & Sorooshian, Leaders' role: now and then, 2022; Ajzen, 1991).

EQ is considered as prerequisite for organizational learning, development and performance. It develops intrinsic motivation, which persuades individual to learn and operate. It is equally applicable to all classes, color, gender and creed (Boxall & Purcell, 2016). Similarly, it is equally applicable for the development of soft and hard (technical skill). According to previous studies, EQ is applicable to all walks of life and is considered better to synergize, motivate and push workers for learning and working (Danish, Munir, Kausar, Jabbar, & Munawar, 2015; Shareef, Kumar, Kumar, & Hasin, 2009).

EQ is composed of four parts. The first quadrant, it talks about self-recognition and self-regulation. All humans should focus on their inner and hidden faculties, capability and capacities and enrich them with organizational goals and targets (Burns & Bodrogini, 2011). Similarly, it 2nd quadrant admits the knowledge worker should also recognize the emotions of other worker and accordingly responds and behave in certain situations. In simple words it talks about empathy, putting yourself in some other shoes, so that other workers' rights should not be disturbed (A.Schon, 1975; Barros, Ramos, & Perez, 2015). Moreover, social skills postulated that all knowledge workers should develop better social and relational skills and binding, which can be beneficial in knowledge sharing and development at the individual and organizational level (Bierly, Kessler, & Christensen, 2000; Comedis, 2014).

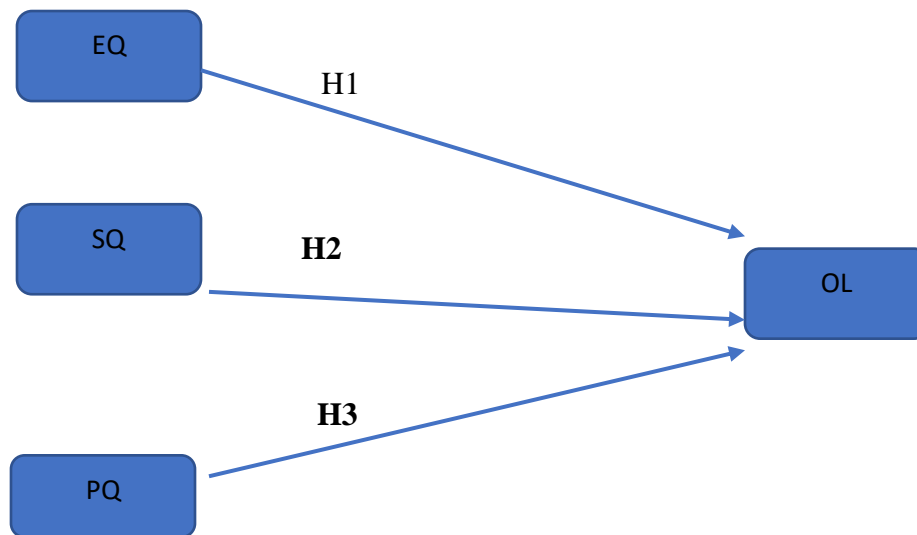
Spiritual intelligence and organizational learning

Spiritual intelligence is sub-part of the professional and emotional intelligence and it is defined as the capacity and strength of the individual that how much rigorously he is carrying out certain task remaining on the job. This phenomenon has need further digging, as the literature is silent on the spiritual inelegance. However, every individual know and practice it in their personal and professional lives (Ahmad & Lodhi, 2014; Coetzer, Kock, & Wallo, 2017; Tiwari, Pandey, & Sharma, 2010; Jing, Turi, Lu, & Rosak-Szyrocka, 2023). Additionally, this construct carries a meaning of the well-being of the individual, group and organization. It proclaims that every individual should perform optimistically, pragmatically, with courage, enthusiasm, and added value. This state of mind will not only enhance individual learning and capacities, but also the organizational learning and growth will happen (Ford, 2006; James G. March, 2006; Rehman, Turi, Rosak-Szyrocka, Alam, & Pilař, 2023).

Furthermore, it is stated that spiritual intelligence brings organizational citizenship behaviors among knowledge workers and they perform all the assigned jobs and responsibilities with the social belongings attitude. The state empowers individual workers, they share their failure and success both in free will among the organizational setting (Goldin, 2014; Hong, 1999; Zulfaqar, Bashir, Yaghmour, Turi, & Hussain, 2013). Besides this, it develops moral and confidence of the knowledge workers, therefore, remain in a better position to perform, and add to personal, group and organizational learning (Hasan & Kazlauskas, 2014; Bavarsad, Ahmadi, Rahimi, & Zamani, 2014).

Conceptual Model for the Study

On the basis of the above-mentioned findings and premises, the study came with the following model and hypothesis.



Source: (Self Developed)

Hypotheses

H1: There is a positive relation EQ with organizational learning.

H2: There is a positive relationship of SQ and organizational learning.

H3: There is a positive relationship of PQ and organizational learning.

RESEARCH METHODOLOGY

The study is based on the quantitative data, which was accumulated from the targeted respondents, working at national and international organizations located at the twin cities of Pakistan i.e. Islamabad, and Rawalpindi. The data was obtained using structured questionnaire, which was adopted from previous study. The questionnaire was twisted according to the need and context of the study. The items were measured using 6-Likert Scale ranging from 1= strongly Disagree and 6= strongly agree. The study adopted cross-sectional approach for the collection data. Moreover, convenient sampling technique was adopted for accessing the target respondents. A total of the 550 questionnaire were distributed, however, the study got back 489 questionnaires back. They were screened out, and 17 questionnaires were found redundant and duplicate, therefore, they were moved in the first stage. Similarly, 11 more questionnaires were removed, as they were having more than 10% missing values. So, the left with 461 questionnaires. The Study used SPSS for the data analysis and result compilation.

In the data collection the data was collected from professionals belonging to different field of life, like engineering, medical science or social sciences. The inclusion of the professional from domain were done with the philosophy to include major field and also to assess certain variations, if any among the professionals of different fields. The respondents were selected to have good professional experiences, knowledge and skills. Moreover, both gender was included in the survey to make it more versatile. The demographic information is given in Table 1.

Table 1. Demographics of the study

Study Items		Frequency	Percentage %	Total
Gender	Female	311	68%	461
	Male	150	32%	461
Qualification	Bachelor	100	22%	461
	Master	276	60%	461
	PhD	52	11%	461
	Professional	33	7%	461
Age	30-40	145	24%	461
	41-50	265	65%	461
	51-60	51	11%	461
Professional Experiences	1-5 years	211	36%	461
	6-10 years	162	45%	461
	11-15 years	88	19%	461

Reliability Analysis

Reliability analysis talks about the reliability and validity of the scale, instrument and its items. In SPSS, it values should be more the 0.7, otherwise the scale and items will not be considered reliable and valid. According to the results, all the items got the reliable score and the overall reliability statistic has been given in the Table 2. The statistic proclaims that the scale and item was found reliable and satisfactory. Moreover, Table 3 indicate the detailed overview of the constructs and their item wise scale reliability. So, reliability was achieved for all the construct.

In current study, analyzing reliability means calculating a construct ability to produce consistent results. Internal consistency analysis was done separately for the variables corresponding to each of the four constructs. Over all reliability of the variables:

Table 2. Reliability analysis

Cronbach's Alpha	N of Items
.952	57

Table 3. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Total Correlation	Item-Cronbach's Alpha if Item Deleted
EQ	10.2282	3.214	.635	.944
PQ	10.5644	2.674	.830	.844
SQ	10.3965	2.723	.834	.825
OL	10.3693	2.802	.837	.849

Descriptive Statistics

Descriptive describes and summarizes value for the constructs of the study. Descriptive statistics also graphically display and present the destruction (distributive values) of the construct graphically. The descriptive statistics of the study are given in Table 4. According to the values, the mean of the construct is higher than their respective standard deviation values, which means, that the professional workers consider that EQ, PQ and SQ are required and have a significant impact on the organizational learning effectiveness and development.

Table 4. Descriptive Statistics of the Questionnaire

	Number of respondents	Minimum	Maximum	Mean	Std. Deviation
EQ	461	1.823	4.725	3.646	.5789
PQ	461	1.273	4.753	3.288	.6132
SQ	461	1.334	4.504	3.464	.2495
OL	461	1.775	4.715	3.834	.3340
Valid N	461				

After descriptive statistics, correlation was calculated to assess the relationship among the constructs of the study. According to the values, all of the variable are significantly correlated to one another, which show a strong association and affiliation to one another. According to the correlation statistics, the respondents admits that EQ, SP, PQ have significant association with OL. This means that the learning organization should develop healthy atmosphere for the sharing of learning among their

workers. If they are professionally, emotionally and spiritually satisfied, they will be greater opportunities learning and development at individual, group and organizational level.

Table 5. Correlations

	EQ	SQ	PQ	OL
EQ	1			
SQ	.583**	1		
PQ	.755**	.787**	1	
OL	.670**	.753**	.796**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

Regression analysis is a powerful analysis to explore the relationship and impact of one variable on other, or to summarize the relationship and impact among themselves. Mostly, regression analysis is applied to examine the impact of independent variables on dependent variables. Table 6, Table 7 and Table 8 summarize the values for the regression analysis. In Table 6, values of the construct in the model i.e. of R, R Square, adjusted R model fitness indicates that the model is fit for the study and found suitable to measure the organizational learning with respect to SQ, PQ and EQ.

Table 6. Regression Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.830 ^a	.662	.673	.3685

- a. Predictors: SQ, PQ and EQ
- b. OL

Similarly, Table 7 holds the values for regression ANOVA. The values for F-statistic were attained significant at 0.000 (which is less than 0.005). The model indicates significant relationship among the dependent and independent variable.

Table 7. Regression ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	30.184	3	10.061	74.355	.000 ^b
	Residual	14.749	109	.135		
	Total	44.934	112			

a. Dependent Variable: organizational performance

b. Predictors: (Constant), EQ, SQ, PQ

Furthermore, Table 8 summarizes the coefficient values for the regression analysis. For all the constructs, i.e. EQ, PQ and SQ, T-statistic was found more than its threshold values i.e. (T=> 1.96). Likewise, all the variable attained the P-value less than 0.005. so the model admits that the independent variables, EQ, SQ and PQ have significant impact on OL. In the same way, the Beta values explain significant relationship, variation and contribution of independent variables (SQ, PQ, EQ) on dependent variable (OL).

Table 8. Coefficients of Regression

Model		Un-standardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.543	.231		2.185	.001
	EQ	.043	.082	.082	2.080	.001
	SQ	.355	.082	.373	4.277	.000
	PQ	.427	.103	.432	4.198	.000

a. Dependent Variable: organizational learning (OL)

Table 9 maintain the values for gender. The data was analyzed keeping the gender variable as a constant or control variable it got amazing results. According to the findings, the values for all constructs are different for male and female, which proclaim that the EQ, SQ and PQ are not same in both the genders.

Table 9. ANOVA for Gender

		Sum of Squares	Df	Mean Square	F	Sig.
OL	Between Groups	10.495	1	10.495	85.092	.000
	Within Groups	31.204	253	.123		
EQ	Between Groups	7.612	1	7.612	28.159	.000
	Within Groups	68.394	253	.270		
	Total	76.007	254			
SQ	Between Groups	4.542	1	4.542	24.350	.000
	Within Groups	47.196	253	.187		
	Total	51.738	254			
PQ	Between Groups	.110	1	.110	.782	.377
	Within Groups	35.721	253	.141		
	Total	35.831	254			

Significant difference is seen in EQ, SQ and PQ on OL the basis of gender on all constructs of the study. It means that EQ, SQ and PQ are different for male and female.

Table 10. Mean Values for Gender

Gender		EQ	SQ	PQ
Female	Mean	3.5765	3.8869	3.1129
Male	Mean	3.2213	3.6125	3.1557
Total	Mean	3.3578	3.7180	3.1392

Mean comparison table. 10 shows that female is having better “EQ” (Mean=3.57) and “SQ” (M=3.88) skills as compared to male colleagues and overall, they are having better emotional and spiritual skills as manifested by the values to “EQ” (M=3.22) and “SQ” (M=3.61) respectively. In contrast Male are having more PQ (M=3.15) and better able to professional work (M=3.10) as compared to female (M= 3.11) and (3.05) respectively.

To see the impact of EQ, SQ and PQ on OL based on Organizational qualification, ANOVA was used, whose results are shown in the below table 11.

Table 11. ANOVA for Qualification

		Sum of Squares	df	Mean Square	F	Sig.
OL	Between Groups	8.664	2	4.332	33.046	.000
	Within Groups	33.035	252	.131		
EQ	Between Groups	5.879	2	2.940	10.564	.000
	Within Groups	70.127	252	.278		
SQ	Between Groups	3.934	2	1.967	10.370	.000
	Within Groups	47.804	252	.190		
PQ	Between Groups	3.348	2	1.674	12.989	.000
	Within Groups	32.483	252	.129		

The study also analyzed the results keeping in view the educational level of the respondents. According to the results, respondents with higher qualifications were having more EQ, SP and PQ. Therefore, the doctoral respondent is better managing their emotions, experiences, and practices. This finding also support that the constructs of EQ, PQ and SQ have direct and significant impact on the organizational learning effectiveness and development.

Table 12. Means Score for Qualifications

Program of Study		EQ	SQ	PQ
BS	Mean	3.2118	3.5986	3.0305
MS	Mean	3.5321	3.8608	3.2761
PhD	Mean	3.5710	3.9801	3.1932
Total	Mean	3.3578	3.7180	3.1392

DISCUSSION

The study focus to assess the impact of EQ, PQ and SQ on OL. The context and domain of the study was to analyze the perception of the professionals working in different walks of life in national and international organization in Pakistan. According to the results of the study, EQ is closely related to organizational learning and development and the same results can be found in the previous studies conducted in different contexts, organizations and different settings (country) (Schon, 1975; Agarwal & Garg, 2012; Austina, Evansb, Goldwatera, & Pottera, 2005; Bierly, Kessler, & Christensen, 2000). So, it is admitted that EQ has greater contribution in the development and effectiveness of the organizational learning.

The second and third construct of the study were PQ and SQ. these constructs are considered as a new entrant to the field of management research, and very rarely have been discussed and explored by the researcher, therefore, need more attention of the practitioners and academicians to explore them in greater details. According to the findings, both SQ and PQ have significant impact on OL and is considered a greater contributor of the organizational learning and effectiveness. Blerk, (2013) and Daud & Kamsin (2003) also predict the same the SQ and PQ are the pre-requests for the organizational learning and development. They develop the atmosphere of trust and develop moral and confidence of the professional worker. It helps in constructing a fear-free environment, where all the professional knowledge workers can share their success and failures with true spirits with the conception of correction and feedback, which not only a source of motivation, social and psychological safety and security but also a great source of organizational learning and development.

CONCLUSION AND RECOMMENDATIONS

The study was comprehensive and empirical, however, it carries certain limitations, which need the attention of future researchers and practitioners. First of all, the study was limited to certain geographical area in the developing country, which can be extended to the international level. Secondly, the constructs of the PQ and SQ are new to business research, therefore, it needs in-depth exploration. Moreover, more refined scales need to be developed for them. Therefore, the study recommends to use a grounded theory approach to explore the phenomenon in greater detail. This will also help to develop sound theoretical aspects and support for the newly emerged construct. Moreover, qualitative studies, based on content and context analysis need to be carried out to assess the chronological development of the constructs and their role in OL and also other walks of life.

Author's contribution:

Toheed Fatima contributed to the main idea, data collection and first draft writing

Maria Zalfaqaar contributed to the literature collection and methods

Shehryar Ahmed worked on formal analysis and English language

Ansar Ali Mehdi worked on methods, reviews and corrections.

Consent to Participate

The authors declared that they have no known competing financial interests or personal relationships, which seem to affect the work reported in this article. We declare that this deals with human participants and human data or human rights issues are discussed and evaluated.

Consent for Publication

We do not have any individual person's data in any form.

Competing Interests

The author declares that there are no competing interests in this work

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REFERENCES

- Academic Skills Center. (2013). Stress management. California: California Polytechnic State University.
- Adcock, A. (2012). Cognitive Dissonance in the Learning Processes. *Encyclopedia of the Sciences of Learning*, 588-590.
- Agarwal, S., & Garg, A. (2012). The importance of communication within organizations: A research on two hotels in Uttarakhand. *IOSR Journal of Business and Management*, 3(2), 40-49.
- Ahmad, M., & Turi, J. A. (2018). Study of air temprature propagation of parked car. *International Journal of Scientific & Engineering Research* Volume 9, Issue 3, 1503-1514.
- Ahmad, N., & Lodhi, S. (2014). Role of Knowledge management on organizational performance. Abbottabad: COMSATS University.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational behavior and human decision processes*, 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Al-Hussaini, S. H., Turi, J. A., Altamimi, A. N. A., Khan, M. A., & Ahmad, M. (2019). Impact of talent management strategies on employee performance behaviour with the mediating role of talent management outputs. *Archives of Business Research*, 7(3). DOI: 10.14738/abr.73.6309.
- Andalib, T. W., Azizan, N. A., Turi, J. A., danilla, N., & Kaman, Z. K. (2022). *Journal of Positive School Psychology* Vol. 6, No. 2, 1348 – 1362.
- Apostolou, K. (2014). The role of organisational learning in maintaining a stable context for transformation: the case of a Scottish SME. UK: University of Edinburgh.
- Armstrong, J. (2010). Naturalistic inquiry. *Encyclopedia of research design*, 2, 880-885.
- Asim, T., Turi, J. A., Shahab, H., & Rubab, A. (2023). Impact of authentic leadership on teachers' performance. *Malaysia online journal of education Management*, vol 11, issue 1, 36-54.
- Austina, E. J., Evansb, P., Goldwatera, R., & Pottera, V. (2005). A preliminary study of emotional intelligence, empathy and exam performance in first year medical students. *Personality and Individual Differences*, 1395–1405. <https://doi.org/10.1016/j.paid.2005.04.014>
- Azma, F., & mostafapour, M. a. (2011). Identify Knowledge management And Organizational Learning Indicators and its Relation with Creativity. *Procedia - Social and Behavioral Sciences* Volume 30, 2249-2252. <https://doi.org/10.1016/j.sbspro.2011.10.439>
- Barr, P. S., Stimpert, J. L., & Huff, A. S. (1992). Cognitive change, strategic action, and organizational renewal. *Strategic Management Journal*, Volume 13, Issue S1, 15–36. <https://doi.org/10.1002/smj.4250131004>
- Barros, V. F., Ramos, I., & Perez, G. (2015). Information systems and organizational memory: a literature review. *Journal of Information Systems and Technology Management*, 11-23. <https://doi.org/10.4301/S1807-17752015000100003>



Bashir, S., Khwaja, M. G., Mahmood, A., Turi, J. A., & Latif, K. F. (2021). Refining e-shoppers' perceived risks: Development and validation of new measurement scale. *Journal of Retailing and Consumer Services* 58, 102285, 1-12. <https://doi.org/10.1016/j.jretconser.2020.102285>

Bashir, S., Khwaja, M. G., Rashid, Y., Turi, J. A., & Waheed, T. (2020). Green Brand Benefits and Brand Outcomes: The Mediating Role of Green Brand Image. *SAGE Open* July-September, 1-11. DOI: 10.1177/2158244020953156

Bashir, S., Khwaja, M. G., Turi, J. A., & Toheed, H. (2019). Extension of planned behavioral theory to consumer behaviors in green hotel. *heliyon*, 1-8. <https://doi.org/10.1016/j.heliyon.2019.e02974>

Bavarsad, B., Ahmadi, R., Rahimi, F., & Zamani, S. (2014). A Study of the Effect of Organizational Intelligence and Spiritual Intelligence on Organizational Health. *International Journal of Psychology and Behavioral Research*. Vol., 3(4), 317-327.

Bernstein, E. S. (2012). The transparency paradox: A role for privacy in organizational learning and operational control. *Administrative Science Quarterly*, 57(2), 181-216. <https://doi.org/10.1177/0001839212453028>

Bierly III, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational learning, knowledge and wisdom. *Journal of organizational change management*, 13(6), 595-618. <https://doi.org/10.1108/09534810010378605>

Birmingham, U. o. (2015). *Learning theories, stages and styles*. Birmingham: University of Birmingham.

Blerk, W. E. (2013). *The role of emotional intelligence in implementing information technology strategies*. Cape Peninsula University of Technology: USA.

Bloom, E. L., Karagiannakis, A., Toste, J. R., Heath, N. L., & Konstantinopoulos, E. (2007). Severity of Academic Achievement and Social Skills Deficits. *Canadian Journal of Education*, 30(3), 911-930.

Bollinger, A. S., & Smith, R. D. (2001). Managing organizational knowledge as a strategic asset. *Journal of knowledge management*. <https://doi.org/10.1108/13673270110384365>

Borah, R. R. (2013). Slow Learners: Role of Teachers and Guardians in Honing their Hidden Skills. *International Journal of Educational Planning & Administration*, 139-143.

Boud, D., Cohen, R., & Sampson, J. (2006). Peer learning and assessment. *Assessment and Evaluation in Higher Education*, 413-426. <https://doi.org/10.1080/0260293990240405>

Boxall, & Purcell. (2016). Strategic human resource management. *Human Resource Development Review*, 71-88.

Briz-Ponce, L., Pereira, A., Carvalho, L., Antonio Juanes-Méndez, J., & José García-Peñalvo, F. (2017). Learning with mobile technologies – Students' behavior. *Computers in Human Behavior* Volume 72, 612-620. <https://doi.org/10.1016/j.chb.2016.05.027>

Burns, M., & Bodrogini, P. W. (2011). "The Wisdom of Practice": Web 2.0 as a Cognitive and Community-Building Tool in Indonesia. *Digital education: Opportunities for social collaboration*, 167-193.

Choo, C. W. (2016). *The Inquiring Organization: How Organizations Acquire Knowledge and Seek Information*. In *Social Epistemology and Organizational Learning*. Oxford.

Coetzer, A., Kock, H., & Wallo, A. (2017). Distinctive characteristics of small businesses as sites for informal learning. *Human Resource Development Review*, 16(2), 111-134. <https://doi.org/10.1177/1534484317704291>

Comedis, E. J. (2014, March). The role of social skills in the academic performance of De La Salle Araneta University freshmen students: Creating a culture. In *The DLSU Research Congress*, De La Salle University, Manila, Philippines.

Comfort, L. K. (2009). Organizational learning and change: Evolving systems in a global community. *Knowledge Management, Organizational Intelligence and Learning, and Complexity*, 3, 1-22.

Conklin, J. (1996). Designing organizational memory: preserving intellectual assets in a knowledge economy. *Group Decision Support Systems*, 1, 362.

Crook, B. J. (2012). Information system and organizational learning. *International Journal of Information sciences*, vol.1, 56-76.

Curado, C. (2004). *Organizational Learning And Organizational Design*. Portugal : Technical University of Lisbon.

Danish, R. Q., Munir, Y., Kausar, A., Jabbar, M., & Munawar, N. (2015). Impact of Change, Culture and Organizational Politics on Organizational Learning. *Review of Contemporary Business Research* March 2014, Vol. 3, No. 1, 115-126.

Daruna, M. R., Adresib, A. A., Turic, J. A., & Maarof, M. G. (2022). Integrating Blockchain Technology for Air Purifier Production System at FIM Learning Factory. *International Journal of Control and Automation* Vol. 13, No.2, 1112 - 1117.

Daud, N. R., & Kamsin, A. (2003). *The Study of Learning Organisations in Malaysia*. Malaysia: University of Malaya.

Doshi, V., & Khokle, P. (2011). *Impact of Inter-organizational Relationships on Organizational Learning*. Indian Institute of Management.

Ebrahimi, P., Chamanzamin, M. R., Roohbakhsh, N., & Shaygan, J. (2017). Transformational and transactional leadership: Which one is more effective in the education of employees' creativity? Considering the moderating role of learning orientation and leader gender. *International Journal of Organizational Leadership*, vol 6, 137–156 .

Elbanna, S. (2015). Intuition in project management and missing links: Analyzing the predicating effects of environment and the mediating role of reflexivity. *International Journal of Project Management* 33 (2015) 1236–1248, 1236–1248. <https://doi.org/10.1016/j.ijproman.2015.02.004>

Eraut, M., & Hirsh, W. (2008). *The Significance of Workplace Learning for Individuals, Groups and Organisations*, Skope/ESRC Centre on Skills. Knowledge and Organisational Performance, Oxford.

Eryilmaz, M. (2016). A Literature Review on Organizational Forgetting. *Annals of the “Constantin Brâncuși” University of Târgu Jiu, Letter and Social Science Series*, 63-73.

Farah, G. A., Ahmad, M., Muqarrab, H., Turi, J. A., & Bashir, S. (2018). Online Shopping Behavior among University Students: Case Study Of Must University. *Advances in Social Sciences Research Journal – Vol.5, No.4*, 228-243. DoI:10.14738/assrj.54.4429.

Ford, R. (2006). Organizational learning, change and power: toward a practice-theory framework. *The Learning Organization*. <https://doi.org/10.1108/09696470610680008>

Gilaninia, S., Rankouh, M. A. A., & Gildeh, M. A. P. (2013). Overview on the importance of organizational learning and learning organization. *Journal of Research and Development*, 187(941), 1-6.

Göhlich, M. (2016). *Theories of Organizational Learning as resources of Organizational Education*. Springer Fachmedien Wiesbaden, 11-22. DOI: 10.1007/978-3-658-10086-5_2

Goldin, C. (2014). *Human Capital*. Harvard University.

Hart, T. A., Gilstrap, J. B., & Bolino, M. C. (2016). Organizational citizenship behavior and the enhancement of absorptive capacity. *Journal of Business Research*, 69(10), 3981-3988. <https://doi.org/10.1016/j.jbusres.2016.06.001>

Hasan, H., & Kazlauskas, A. (2014). *Activity theory: Who is doing what, why and how*. [report] Faculty of Business, University of Wollongong, Australia.

Henri, J. F. (2009). *Performance measurement and organizational effectiveness*. Canada: Université Laval.

Hidayat Ur Rehman, I., Ali Turi, J., Rosak-Szyrocka, J., Alam, M. N., & Pilař, L. (2023). The role of awareness in appraising the success of E-government systems. *Cogent Business & Management*, 10(1), 2186739. <https://doi.org/10.1080/23311975.2023.2186739>

Hong, J. (1999). Structuring for organizational learning. *The Learning Organization*, Vol. 6 Issue: 4, 173-186. <https://doi.org/10.1108/09696479910280631>

Hussain, M., Islam, A., Turi, J. A., Nabi, S., Hamdi, M., Hamam, H., . . . Sehar, T. (2022). Machine Learning-Driven Approach for a COVID-19 Warning System. *Electronics* 11, 3875. <https://doi.org/10.3390/electronics11233875>, 1-15.

James G. March, J. P. (2006). The uncertainty of the past: organizational learning under ambiguity. *European Journal of Political Research*, Volume 3, Issue 2, 147–171. <https://doi.org/10.1111/j.1475-6765.1975.tb00521.x>

Jing, Z., Turi, J. A., Lu, S., & Rosak-Szyrocka, J. (2023). Sustainability through Factory-Based Learning in Higher Education. *Sustainability*, 5376. <https://doi.org/10.3390/su15065376>, 1-16.

Joseph, M. (2014). *Reference memory, working memory and adaptive forgetting: a comparative study in rats*. Lyon : Université Claude Bernard.

Kang, H., Turi, J. A., Bashir, S., Alam, M. N., & Shah, S. A. (2021). Moderating role of information system and mobile technology with learning and forgetting factors on organizational learning effectiveness. *Learning and Motivation*, 1-14. <https://doi.org/10.1016/j.lmot.2021.101757>

Kansas, L. (2016). Bloom's Taxonomy of Educational Objectives and Writing Intended Learning Outcomes Statements. USA: International Assembly for Collegiate Business Education.

lukke. (2014). Validity and reliability of teacher-made tests: Case study of year 11 physics in Nyahururu District of Kenya. *African Educational Research Journal*, 61-72.

Pu, S., Turi, J. A., Bo, W., Zheng, C., Tang, D., & Iqbal, W. (2022). Sustainable impact of COVID 19 on education projects: aspects of naturalism. *Environmental Science and Pollution Research*, 1-18. <https://doi.org/10.1007/s11356-022-20387-8>

Pu, S., Turi, J. A., Bo, W., Zheng, C., Tang, D., & Iqbal, W. (2022). Sustainable impact of COVID 19 on education projects: aspects of naturalism. *Environmental Science and Pollution Research*, 1-18. <https://doi.org/10.1007/s11356-022-20387-8>

Rosak-Szyrocka, J., Apostu, S. A., Turi, J. A., & Tanveer, A. (2022). University 4.0 Sustainable Development in the Way of Society 5.0. *Sustainability* 14, 16043. <https://doi.org/10.3390/su142316043>, 1-17.

Schon, D. A. (1975). Deutero-learning in organizations-Learning for increased effectiveness. *Organizational dynamics*, 4(1), 2-16. [https://doi.org/10.1016/0090-2616\(75\)90001-7](https://doi.org/10.1016/0090-2616(75)90001-7)

Seirafi, K. (2012). Organizational epistemology: a normative understanding of knowledge organizations; philosophical foundations and implications for researchers and PR actioners.

Shareef, M. A., Kumar, V., Kumar, U., & Hasin, A. A. (2009). Theory of planned behavior and reasoned action in predicting technology adoption behavior. In *Handbook of Research on Contemporary Theoretical Models in Information Systems* (pp. 544-562). IGI Global. DOI: 10.4018/978-1-60566-659-4.ch031

Spindell, A. (2014). *Mobile Learning: Getting Started*. edChunk Inc.

SuccessFactors, & Mateo, S. (2007). Organizational transparency drives company performance. *Journal of Management Development*, 411-417.

Sun, J., Sarfraz, M., Turi, J. A., & Ivascu, L. (2022). Organizational Agility and Sustainable Manufacturing Practices in the Context of Emerging Economy: A Mediated Moderation Model. *Processes* 10, 2567. <https://doi.org/10.3390/pr10122567>, 1-19.

Swift, P. E., & Hwang, A. (2013). The impact of affective and cognitive trust on knowledge sharing and organizational learning. *The Learning Organization*. <https://doi.org/10.1108/09696471311288500>

Talmy, L. (1995). The Cognitive Culture System. *The Monist* Vol. 78, No. 1, 80-114.

Tipu, W. A., Turi, J. A., & Iqbal, S. (2023). EVALUATING AGENCY PROBLEM FOR SUSTAINABLE PUBLIC-PRIVATE PARTNERSHIP PROJECT PERFORMANCE. *Journal of Entrepreneurship, Management, and Innovation* Volume 5, Issue 1, 1-19.

Tipu, W. A., Turi, J. A., & Khan, M. A. (2022). Relationship between Critical success factors for public private partnership (ppp) and sustainable ppp project performance. *Journal of social research development*, Volume 3, Issue 2, 263-175.

Tiwari, R., Pandey, M., & Sharma, A. (2010). An Approach to Human Adaptability towards its Built Environment: A Review. *Energy and Power Engineering*, 90-94. doi:10.4236/epe.2010.22013

Tofan, C. A. (2013). INFORMATION SYSTEM - A COMPONENT OF THE MANAGEMENT SYSTEM. *Review of General Management*, 189-196.

Toheed, H. T. (2019). Implications of Women leadership development with respect to Feminism. *Advances in Social Sciences Research Journal*, 6(4). DoI:10.14738/assrj.6332.

Toheed, H., Turi, J. A., & Ramay, M. I. (2019). Exploring the Consequences of Organizational Cynicism. *International Journal of European Studies*, 1-7. doi: 10.11648/j.ijes.20190301.11

Tovstiga, G., Odenthal, S., & Goerner, S. (2004). Sense-Making and learning in Complex Organizations: The String Quartet Revisited. *The Fifth European Conference on Organizational Knowledge, Learning and Capabilities Innsbruck* (pp. 1-12). Austria: Henley Management College, UK.

Turi, J. A., & Sorooshian, S. (2022). Leaders' role: now and then. *Kybernetes*; DOI 10.1108/K-05-2022-0723, 1-5. <https://doi.org/10.1108/K-05-2022-0723>

Turi, J. A., Ghani, M. F., Sorooshian, S., & Abbas, Q. (2017). The impact of socio-emotional intelligence training on teachers' performance. *Journal of Educational Sciences & Research* Volume 4 No.1, 23-35.

Turi, J. A., Khastoori, S., Sorooshian, S., & Campbell, N. (2022). Diversity impact on organizational performance: Moderating and mediating role of diversity beliefs and leadership expertise. *PLOS ONE* | <https://doi.org/10.1371/journal.pone.0270813>, 1-15.

UNO. (2003). *Information and Communication Technology Development Indices*. Geneva: United Nation.

Virtual University. (2012). *Learning Theories*. Lahore: Virtual University.

Zulfaqar, M., Bashir, S., Yaghmour, S. M., Turi, J. A., & Hussain, M. (2013). The Mediating Roles of Economic, Socio-Cultural, and Environmental Factors to Predict Tourism Market Development by Means of Regenerative Travel: An Infrastructural Perspective of China–Pakistan Economic Corridor (CPEC). *Sustainability*, <https://doi.org/10.3390/su15065025>, 1-19.

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RESEARCH ARTICLE<https://doi.org/10.56868/ijmt.v1i1.10>**The Interaction Effect Crisis Communication on Emotional Exhaustion: A Study on the Banking Sector of Pakistan**Unsa Bibi^{1*}, Hafiza Safia Shaukat²¹. University of the Punjab Gujranwala Campus, Pakistan². Lecturer Commerce, University of Punjab, Pakistan

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Abstract

In this study the researcher wants to examine the impact of crisis communication on employee's emotional exhaustion with mediating role of perceived uncertainties in the banking sector of Gujranwala district of Pakistan with the moderating impact of organizational intransigence, which may cause workers to rely less on official communication to alleviate those doubts. Moreover, this study analyses the impact of crisis communication on the perception of uncertainty based on uncertainty reduction theory. Furthermore, the moderating influence of social support in terms of perceived uncertainties on the relationship between crisis communication and emotional exhaustion is investigated in this study. 300 sample sizes are used by the investigator in this study, however 298 responses were selected for final analysis. Employees from all private banks completed a questionnaire in all over the Pakistan. The SPSS and process by Hayes were used for the outcome analysis. SPSS is used for demographic results, Cronbach's alpha and Pearson's model correlation. The results of significances of variables would be determined in the process by HAYES. Results indicate that Crisis communication has correlation with emotional exhaustion. Crisis communication also has a significant negative relationship with emotional exhaustion. Moreover, crisis communication has a negative and significant relationship with perceived uncertainties. Perceived uncertainties have a positive and significant impact on emotional exhaustion. However, perceived uncertainties play a mediating role among crisis communication and emotional exhaustion Practical Implications.

Keywords: Emotional exhaustion, perceived uncertainties, organizational intransigence, communication crisis.

INTRODUCTION

The concept of crisis communication has been examined at various times in the workplace (Charoensukmongkol and Phungsoonthorn 2020). The clarity and accuracy of information of data of knowledge that the organization provides to its employees regarding this poignant situation reflects the quality of crisis communication. However, as a result of the actions that the organization takes, the quality of crisis communication reflects the actions that the organization takes in response (Mroz, Allen et al. 2018). Organizations that provide comprehensive communication during a crisis gather employee input and concerns about the case and provide information to directly address them (Claeys and Coombs 2020). Scholars point out that crisis communication should be properly controlled by the organization's management during the crisis (Mehta, Liu, et al. 2021).

Organizations must provide effective crisis communication in order to improve employees' views of the uncertainty generated by the crisis, as well as the consequences of their actions. Immediate and effective communication is critical for reducing ambiguity during crises because it allows employees to gain a clear grasp of the situation. It all adds up to increased employee trust in management's handling of the situation (Bordia, Hunt et al. 2004). All agencies will judge to face crises that might harm emblem image and reputation, looking forward to how the corporation responds. For that reason, it's far vital to determine how a corporation has to create and broaden techniques to reply to different kinds of crises to first-rate guard the corporation's reputation. Research has tested public responses to company disaster reaction techniques, which includes consumer perceptions of organizational obligation and consumer behavioral intentions as reflected in word-of-mouth (WOM) remarks and buy intentions (Almutairi, Alonazi et al. 2018).

Previous studies has proposed a few disaster reaction techniques utilizing verbal exchange approximately the company's earlier records of company social obligation. The simple assumptions and findings of the research endorse that verbal exchange approximately company social obligation (CSR) has the capacity to set the poor effect of a disaster (Ham and Kim 2020). However, the function of such CSR-primarily based totally disaster reaction messages need to be analyzed in phrases of different situational variables found in a disaster (Dwivedi, Kelly et al. 2018). In different words, CSR-primarily based totally disaster reaction messages have to be cautiously crafted primarily based totally on situational elements unique to a given disaster situation (Almutairi, Alonazi et al. 2018).

Support from the top management and supervisors work as a moderator to thrill the overall performance relationships. The authors hypothesized that supervisors perceived organizational support (POS) would possibly slight the relationships among leader-member alternate (LMX), activity delight, and activity overall performance. On the concept of social alternate theory, supervisor's exchanges with the enterprise and subordinates need to be interconnected. We used general hierarchical regression evaluation to evaluate the moderating impact of the supervisor's perceived organizational fame at the PSS-POS relationship. To lessen the capacity collinearity among the interplay time period and its aspect variables, we observed Aiken and West's (1991) advice to middle the impartial variables (supervisor's perceived organizational fame) worried with inside the presumptive interplay.

Researchers have discovered in prior studies that emotional labor causes emotional dissonance, or a state of discord between an emotional presentation necessary for the use of the enterprise and an actual feeling of one's personal mood (Grandey and Diamond 2010). According to the cognitive dissonance hypothesis (Spence, Ferris, et al. 2011), people experience discomfort or emotional dissonance when they realize they must act or feel in ways that are inconsistent with their own values or cognitions. According to studies, prolonged emotional dissonance lowers or even encourages strong

opposite (pseudo) identification, resulting in tension, dissatisfaction, or burnout/emotional exhaustion. (Judge, Woolf et al, 2009).

Given that changes in the way things are done at work tend to surface slowly in this type of organizational climate, supervisors confront challenges in exercising their expertise to deal with personnel concerns as soon as possible in order to reduce uncertainty. Even though overseers are encouraged to assist employees cope with a crisis, their assistance will be ineffective if the extrude projects are no longer supported by means of the business. Thus, it's far workable that the poor impact of manager help on perceived uncertainties will gift a place of job that is characterized with the aid of using low organizational intransigence, however now no longer with inside the place of job characterized with the aid of using excessive organizational intransigence.

Process of innovation is has a lot of importance in any producing industry, and corporations cannot treat it as further choice ((Barden and Petty 2008). From previous few years, structure innovation in producing industry has been a accepted subject of attention by totally different researchers. In the consequences from the studies suggests that manager aid and perceived uncertainties have been undoubtedly related and the speculation suggesting that the terrible impact of manager aid at the emotional exhaustion of personnel is mediate with the help of exploitation perceived uncertainties was confirmed the employment of the Sober take a look at (Baron & Kenny, 1986).

We tend to believe that the standard of crisis communication given by structure management might negatively impact staff perceptions of the COVID-19 issue after reading and seeing the previous analysis and hypothesis. Perceived uncertainties will act as a mediator between the quality of crisis communication and, as a result, employee emotional fatigue. Employees' emotional fatigue will be accompanied by perceived uncertainty. We'll introduce with adding 2 alleviative effects of structure intransigency on supervisors support and perceived uncertainties and also the other are going to be on emotional exhaustion with perceived uncertainties. Perceived uncertainties beyond any doubt mediate the linkage among manager aid and emotional exhaustion. Given the now non-statistically significant positive association between manager help and emotional tiredness, it'll be all over that perceived uncertainties completely moderate the influence of manager aid on emotional exhaustion. In the consequences from the studies suggests that manager aid and perceived uncertainties have been undoubtedly related and the speculation suggesting that the terrible impact of manager aid at the emotional exhaustion of personnel is mediated with the aid of using perceived uncertainties turned into confirmed the use of the Sober test (Baron & Kenny, 1986). Perceived uncertainties are almost certainly a mediator in the relationship between management assistance and emotional fatigue. Isn't it statistically significant that there's a link between management assistance and emotional exhaustion?

LITERATURE REVIEW***Crisis communication***

Crises communication is go long as defined as "an explosive associate degreed unforeseen occurrence that threatens to disrupt an organization's operations while also posing a financial and reputational risk" (Coombs & Holladay, 2005). A crisis is defined as a "perception of a random incident that threatens stakeholders' need for anticipation and censoriously impacts an organization's performance and results in bad effects" (Coombs, 2012). A problem might be a "debatable point, a difference of opinion about fact, value, or arrangement, the resolution of which has implications for the organization's strategic plan and future success or failure" (Heath, Lee et al. 2009).

Emotional exhaustion

Emotional Exhaustion can be defined as uncertainty generated by crisis situations usually has severe repercussions for employees, leading to a decline in mental health. Emotional fatigue, in particular, is a typical psychological condition that employees face when confronted with uncertainty connected to crises. Emotional weariness is a form of duty burnout that occurs when personnel are subjected to psychological stress for a lengthy period of time and are unable to properly deal with the stresses (Charoensukmongkol 2021). Employees at non-public foreign institutions affected by the COVID-19 situation are frequently expected to suffer from emotional weariness.

Organizational intransigence

Research focuses in particular on the role of resistance to climate change in a highly spatial context, notably structural bullheadedness. Which might limit the supervisor's ability to provide support in order to alleviate employee anxiety? At its core, a corporation defined by pleasant stubbornness tends to cling to antiquated methods of organizing workplace operations (Haakonsson, Burton et al. 2008). Furthermore, top managers in this type of organization are less likely to try out new ideas, preferring to stick to tried and true geographical point procedures and processes. Furthermore, changes in how things are wiped away in an organization tend to occur at a glacial pace (Patterson et al., 2005). Given that the discretion of supervisors is strongly bounded by the influence of this organizational climate (Dov, 2008).

Perceived uncertainties

In various ways crisis creates uncertainty for bank employees. To begin with, the crisis has resulted in a sharp reduction in student enrolment. Given that personal international colleges' earnings are primarily reliant on the enrolment of new students from outside, this dramatic drop in registration has the potential to create job instability among employees due to the probability of layoffs Furthermore,

administration, as well as college members and staff, should devise strategies for maintaining student involvement throughout the crisis. COVID-19 might be a new disease, posing a significant challenge to the global health system. The COVID-19 eruption has become a symbol for enterprises and organizations all around the world. Private international universities are one industry that has been hit hard by the recession (Gonzales, Gonzales et al. 2020).

H1: The standard of crisis communication given by structural management may interact negatively with workers' perceptions of the COVID-19 issue.

The idea of disaster conversation has been widely explored with inside the place of business setting (Charoensukmongkol and Phungsoonthorn 2020) The pleasant of disaster conversation displays the readability and accuracy of statistics that the agency affords to its personnel concerning the current state of affairs affecting the agency, in addition to the actions taken by the agency in response (Allen et al., 2007). Organizations that provide extensive communication during a catastrophe also pay attention to employees' remarks and concerns about the situation and provide data to address them quickly (Schulte, Alegret et al. 2021). Intellectuals accentuate that disaster conversation remains an exercise that desires to be achieved correctly via way of means of the agency's control in the course of the time of disaster (Ikonen, Luoma-Aho et al. 2017; Zerbino, Achuthan et al. 2018).

H2: Perceived uncertainties will mediate the relationship between the quality of crisis communication and, as a result, employee emotional fatigue.

Intellectuals accentuate that disaster conversation remains an exercise that desires to be achieved correctly via way of means of the agency's control in the course of the time of disaster (Ikonen, Luoma-Aho et al. 2017; Zerbino, Achuthan et al. 2018). Effective disaster conversation supplied via way of means of businesses is vital to enhance personnel' perceptions approximately the uncertainties induced via way of means of the disaster and the following influences skilled via way of means of them. Emotional fatigue, in particular, is a typical mental annoyance that personnel experience when confronted with crises-related uncertainty. Emotional fatigue is an essential component of activity burnout, which occurs when employees are exposed to mental tensions for a lengthy period of time and are unable to effectively deal with the stresses. Employees at personal international colleges afflicted by the COVID-19 tragedy are frequently warned that they may suffer from emotional weariness If the accident disrupts normal painting operations, planning, financial circumstances, or even the institutions' existence, it will create a lot of uncertainty amongst university staff about what will happen next. Modeling with the (COR) model (Hobfoll & Freedy, 1993).

H3: Employees' emotional fatigue will be entirely associated with perceived uncertainty.

A catastrophe is defined as "an unforeseen event that threatens to interrupt an organization's operations while also posing a financial and reputational risk" (Coombs & Holladay, 2005). According to previous research, crises often cause an excessive feeling of uncertainty among those who are directly impacted by them (Liu et al., 2016). Uncertainties brought on by disasters usually result in negative consequences for workers, leading to a decline in mental health. Emotional fatigue, in particular, is a typical mental annoyance that personnel experience when confronted with crises-related uncertainty. Emotional fatigue is an essential component of activity burnout, which occurs when employees are exposed to mental tensions for a lengthy period of time and are unable to effectively deal with the stresses. Demands, such as display dominance, the body of employees might squander their resources, imagination and this leads to feelings of weariness. The level of demand imposed on people by the show rules formula varies. Despite the fact that display rules play a critical role in workplace emotion management, there has been little systematic research into the characteristics that predict worker reactions to display rules. according to the COR hypothesis, we tend to examine 2 potential moderators of the display-rules emotional exhaustion relationship: self-efficacy and career line identity.

H4: The calming effect of organizational intransigence on crisis communication.

Organizations must deliver effective crisis communication in order to increase employees' awareness of the crisis's uncertainties and, as a result, the consequences they will face. Rapid and effective communication is critical for reducing ambiguity during crises because it allows workers to have a clear picture of the issue and determine what they should do to deal with it. It also boosts employees' trust in management's handling of the situation at hand (Bordia et al., 2004). Organizations that maintain open lines of contact with workers during a crisis also listen to their concerns and suggestions and give information to directly address them (Schulte, Alegret et al. 2010). Although supervisory assistance is thought to reduce employees' perceived uncertainty, it's possible that this benefit is limited by qualities inherent in the organization's work environment. This research focuses in particular on the role of resistance to climate change in a highly spatial context, notably structural bullheadedness. Which might limit the supervisor's ability to provide support in order to alleviate employee anxiety? At its core, a corporation defined by pleasant stubbornness tends to cling to antiquated methods of organizing workplace operations (Haakonsson, Burton et al. 2008).

H5: Organizational stubbornness has a moderating influence on perceived uncertainty.

Caregiver support describes how much younger children will receive caregiver support (Montag, Maertz Jr et al. 2012). Superintendents reaffirm employee knowledge about the quality of their relationship with supervisors (Marique, Stinglhamber et al. 2013). It also reflects how many employees feel their boss cares about their anxiety and well-being. The importance of support is defined as the position in which the leader evaluates the employee's contribution. Why is support for caregivers

so important for effective leadership? For example, Kelliath has shown strong (and weak) support for supervisors, and therefore a skilled manager is one of the most important services provided after an employee passes to a supervisor. Beck (2001) found that robust attention support helped scale back fatigue and a temperament to quit smoking. Munn et al. (1996) found that nursing support was the most effective read of retirement plans and job satisfaction. This research focuses in particular on the role of resistance to climate change in a highly spatial context, notably structural bullheadedness. Which might limit the supervisor’s ability to provide support in order to alleviate employee anxiety? At its core, a corporation defined by pleasant stubbornness tends to cling to antiquated methods of organizing workplace operations. According to research, companies and work units that are known for their obstinacy are less efficient at handling change and uncertainty in a fast-paced environment (Almutairi, Alonazi et al. 2018).

The theoretical framework of this study

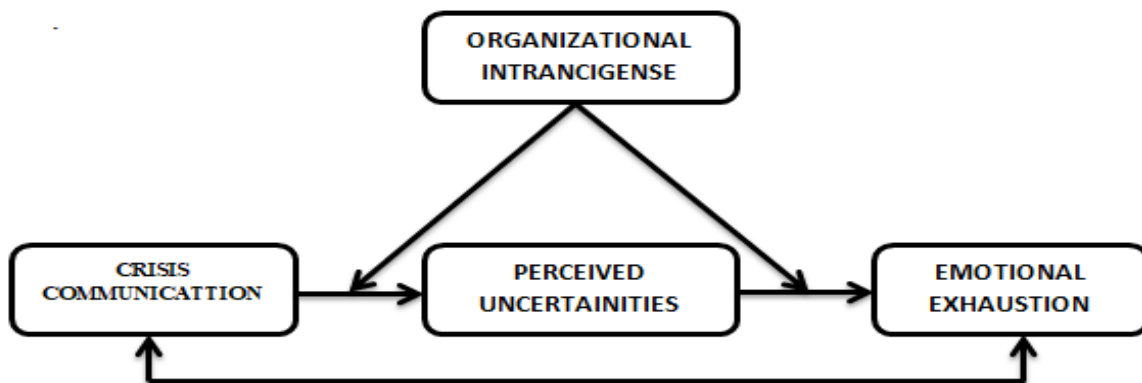


Figure 1: Research Model for the Study

RESEARCH DESIGN

The investigator used probability sampling and non-probability sampling techniques for survey. A total of 300 research questionnaires were distributed in banking sector of Gujranwala District which is easily available in this sector.. Out of the total 298 responses, 20-24 years old respondents were 126, 25-29 years old were 59, 30-35 years old were 59 and 12 respondents were 36 years old or above. Moreover, the banking sector of Pakistan is a male dominant sector therefore ratio of male respondents is higher than female respondents which are 129 and 102 respectively. All the information are recorded in the Table 1.

Demographic Description of Participants

Table 1: Demographics of the Study

Demographic	Demographic Features	Frequency	Percentage%
Age	20-24	4	54.5%
	25-29	103	25.5%
	30-35	137	14.5%
	36 or greater	41	5.2%
	Total	231	100%
Gender	Male	268	87.2%
	Female	36	12.8%
Qualification	Under graduation	19	6.4%
	Graduation	195	65.4%
	Post-graduation	84	28.2%
	Total	298	100%
Marital Status	Married	177	59.4%
	Unmarried	121	40.6%
	Total	298	100%
Job Experience	Less than 1 year	87	29.2%
	1-5 years	142	47.7%
	6-10 years	51	17.1%
	Above	18	6%
	Total	298	100%

Measures

Instrument for the study was adopted from the previous studies. For emotional fatigue, 5-items instrument was adopted from Maslach and Jackson (1981). Similarly, to assess the structural stubborn 5-item questionnaire was adopted from Patterson et al., (2005) study, who used Likert scale its measurement.

To measure the crises communication 41 minutes (average time) interview was conducted with the respondents online to get and measure the responses. They were also asked the same kind of questions

and rated with the 5-Likert scale. For the measuring uncertainties of the COVID-19, items from Allen Jimmison (1996) were adopted.

RESULTS

Table 2. Preliminary analysis and descriptive statistics Correlation analysis:

Variables	M	SD	EE	OI	PU	CC
EE	3.86	1.0	1			
OI	2.50	0.70	.449**	1		
PU	3.76	0.71	.789**	.480**	1	
CC	3.77	0.79	.739**	.430	.790**	1

(Means, Standard Deviation and Pearson’s Moment Correlation)

***P<.01; M= Mean; SD= Standard Deviation; CC= crisis communication; OI= organizational intransigence; PU =; perceived uncertainties; EE= emotional exhaustion.*

In the above table the mean of E.E is 3.86 whereas 1.0 is its standard deviation

Table 3. Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Emotional exhaustion	298	1	5	3.74	.779
Organizational intransigence	298	1	5	3.71	.633
PU	298	1	5	3.78	.782
CC	298	1.29	5.00	3.8212	.76452
Valid N (list wise)	298				

Descriptive facts are accustomed justify the first functions of the statistics in Associate in Nursing observer. They provide straightforward summaries or so the pattern and also the measures. Along with easy pictures analysis, they form the premise of very every quantitative evaluation of statistics.

Process macro hayess

The PROCESS macro developed by Hayes was used in this work to assess all three theoretical hypotheses in SPSS (2013). Using model 5 of the PROCESS macro, we were able to do simple mediation, simple moderation, and conditional indirect impact analyses. To evaluate Hypothesis 1 and Hypothesis 2, model number 5 was used to place employee creativity in the Outcome Variable (Y) box, crisis communication in the Independent Variable (X) box, and transparent internal communication in the Outcome Variable (M) box. Model number 5 elucidates the link between many empowered leaders

And employee innovation, as well as the same link through open internal communication. Next, using model 5, the leader's encouragement was added to the Proposed Moderator W box to assess the last hypothesis. Model 5 shows how the conditional indirect effect changes with the proposed moderator's value. Results the number of participants, averages, standard deviations, minimum scores, maximum scores, and correlations among all predictor and control variables employed in this study were all examined to acquire a better understanding of the data under review. Table 2 shows the descriptive statistics. A correlation matrix based on a Pearson Correlation analysis is shown in table 3 to see if the variables are associated. Hayes (2013) used model 5 of the PROCESS macro to test the hypotheses of this study. Model 5 was used to conduct a basic mediation analysis, as well as to test and conduct a simple moderation analysis and a moderated mediation analysis.

Regression analysis

Square define total variation explain by (actual variation) significant variable in dependent variable the purpose of this test is to check the association among independent and dependent variables. Adjusted R. This test also gives assurance that the model is fit, suitable or not. Through this researcher decide further analysis can be run or not. Through the coefficient table it defines with the change of independent variable from 1 unit how much it affects the dependent variable and with the help of this test multi collinearity can also check for it tolerance and FIV available. The range of tolerance is +1 and of VIF does +5 if values come under this range then no M.C exist.

Table 4

Model : 5
Y : Emotional Exhaustion
X : Crisis Communication
M1: Perceived uncertainty
W : organizational intransigencies

First Model

In first model independent variable is crisis communication and mediator is perceived uncertainty. In model summary R Square defines .6493 or 64.93 % crisis communication effect on the perceived uncertainty. ANOVA table determine that model is accurate, fit and it is testable for further analysis. It is highly significant at point P.000

Outcome variable:

Table 5. Perceived Uncertainty Model Summary

R	R-sq	MSE	F	df1	df2	p
.8058	.6493	.2167	181.4660	3.0000	294.0000	.0000

Model

	coeff	Se	T	p	LLCI	ULCI
Constant	-.3007	.6200	-.4851	.6280	-1.5209	.9195
Crisis communication	.8732	.1748	4.9946	.0000	.5291	1.2172

Coefficient table define if I unit increase in crisis communication then .8732 or 87.32% increment in perceived uncertainty. It is highly significant which is P=0.000. With the help of unstandardized coefficient.

Second Model

In second model independent variable is crisis communication and dependent variable is emotional exhaustion. In model summary R Square define .6580 or 65.81% crisis communication affect emotional exhaustion. The amount of Durbin Watson comes under the range 959 which is good. Its range is 1 to 4. ANOVA table determine that model is accurate, fit and it is testable for further analysis. It is highly significant at point P = .000.

Outcome variable:

Table 6. Emotional exhaustion

Model Summary

R	R-sq.	MSE	F	df1	df2	p
.8111	.6580	.2088	283.7248	2.0000	295.0000	.0000

Model

	coeff	Se	T	p	LLCI	ULCI
Constant	.4890	.1404	3.4824	.0006	.2126	.7653
Crisis communication	.3141	.0566	5.5497	.0000	.2027	.4255

Coefficient table define if I unit increase in crisis communication then .3141 or 31.41% increment in emotional exhaustion. It is highly significant at the point of P=.000

Third Model

In third model dependent variable is emotional exhaustion and mediating variable is perceived uncertainty. In model summary R Square define .6580 or 65.8% emotional exhaustion effect on perceived uncertainty. Its range is 1 to 4. ANOVA table determine that model is fit and it is testable for further analysis. It is significant at point $P = .0000$.

Outcome variable:

Table 7. Emotional Exhaustion Model Summary

R	R-sq	MSE	F	df1	df2	p
.8111	.6580	.2088	283.7248	2.0000	295.0000	.0000

Model

	Coeff	Se	T	P	LLCI	ULCI
Constant	.4890	.1404	3.4824	.0006	.2126	.7653
Perceived uncertainty	.5428	.0553	9.8123	.0000	.4339	.6517

Coefficient table define if I unit increase in perceived uncertainty then .5428 or increment in emotional exhaustion. It is highly significant at the point of $P=.000$.

Moderation analysis

Moderation test's applicable at that time when actual relationship is significant. If actual relationship is not significant then not question of moderation exist. It is moderated regression. Relation of crisis communication and perceived uncertainty is insignificant now moderation can exist or not this is a question. Interaction between crisis communication and organization intransigencies has insignificant relationship at the point of 0.4104 which is more than 0.05, which show that moderation does not exist. Now examine the coefficients and the moderation is $-.3007$ or -30.07%

Outcome variable:

Table 8. Perceived uncertainty Model Summary

R	R-sq	MSE	F	df1	df2	P
.8058	.6493	.2167	181.4660	3.0000	294.0000	.0000

Model

	Coeff	se	t	p	LLCI	ULCI
Constant	-.3007	.6200	-.4851	.6280	-1.5209	.9195
Crisis communication	.8732	.1748	4.9946	.0000	.5291	1.2172
Int_1	-.0398	.0482	-.8244	.4104	-.1347	.0552

Under this study organizational intransigence is not affecting the relationship between crisis communication and perceived uncertainty.

Moderating model 2

Relation of emotional exhaustion and perceived uncertainty is insignificant now moderation can exist or not this is a question. Interaction between emotional exhaustion and perceived uncertainty has insignificant relationship at the point of 0.6280 which is more than 0.05, which show that moderation does not exist. Now examine the coefficients and the moderation is -.3007 or -30.07%

Outcome Variable:

Table 9. Emotional exhaustion Model Summary

R	R-sq.	MSE	F	df1	df2	P
.8058	.6493	.2167	181.4660	3.0000	294.0000	.0000

Table 10. Model

	Coeff	se	T	p	LLCI	ULCI
Constant	-.3007	.6200	-.4851	.6280	-1.5209	.9195
Perceived uncertainty	.5428	.0553	9.8123	.0000	.4339	.6517
Int_1	-.0398	.0482	-.8244	.4104	-.1347	.0552

Under this study organizational intransigence is not affecting the relationship between crisis communication and employee’s emotional exhaustion.

DISCUSSION

In the present day research, the investigator used such contraptions for operationalization which have been already utilized in preceding research however in different international locations with distinct contextual elements which includes servant management is operationalized with the aid of using 14 objects scale evolved with the aid of using Ehrhart (1998) that have 2 objects on every measurement of crisis communication which might be on emotional healing, growing fee for others, conceptual skills, empowering subordinates, assisting subordinates to develop and succeed, placed subordinates first and behave ethically. Emotional exhaustion is measured with the aid of using 5 object scales from distinct scales that is evolved with the aid of using Scale (Maslach et al., 1996). In this look at perceived uncertainties may be operationalized with the aid of using a seven objects scale evolved with the aid which is likewise followed with the aid of using Real et al (2014).

Additionally, for operationalization, the assemble of organizational crisis communication may be measured with the aid of using 7 objects scales. Organizational intransigence may be measured by 15 objects scale. Furthermore, the researcher additionally calculated the values of Cronbach’s alphas of every scale in line with this context that allows you to be useful for upcoming research. Contextually, this research has any other contribution that those variables usually investigated in western international locations and additionally omitted in Asian studies mainly in production region. To date, the investigator did now no longer observed any look at of crisis communication with mentioned variables in banking sector of Punjab.

LIMITATIONS

The investigator tried to analyse an extensive variety of things that have an impact on at the organizational crisis communication of the banking area of Gujranwala. However, the investigator confronted a few constraints even as finishing this take a look at which have to be prevented through the researcher in subsequent studies. Theoretically, every assemble of this take a look at is primarily based totally on unmarried thing and does now no longer investigated through every dimension. Perceived uncertainties have mediation among crisis communication and emotional exhaustion, however there is probably a mediation of perceived uncertainties amongst one of kind dimensions of crisis communication and emotional exhaustion.

Moreover, perceived uncertainties have a full mediation among those variables and there are probably probabilities of complete mediation amongst their dimensions. Furthermore, this take a look at suggests the consequences of simplest banking area of Pakistan so; it's also its quandary that because of problems of generalizability, consequences might not be relevant on some other district or country. This take a look at used non-chance sampling through adopting handy sampling method and because of having constrained assets in addition to time pass sectional statistics has been used it's also its quandary. Unit of evaluation for this take a look at changed into companies so researcher collects statistics from to be had consultant of the organization who can be from center control, directors, and supervisors or some other so it's every other quandary that can be each stage of control companies have one of a kind response.

The CAMELS version was utilized by Rastogi and Saxena (2013) to analyze and examine the overall performance of public and private quarter banks. The Bank of India, Punjab National Bank, HDFC Bank, and AXIS Bank are the four basic public and private sector banks in the applied mathematics pattern. The findings revealed that private banks had attempted greater overall performance on all CAMELS sizes. Bhatt (2013) reviewed the CAMELS scoring method in today's dynamic environment in order to deal with the consequences of the subprime and monetary unit area disasters. The author put it to the test using a selection of hand-picked Indian banks: SBI, Union Bank, IDBI Bank, HDFC Bank, BOB, AXIS Bank, IndusInd Bank and PNB, which are a mix of public and private banks. Banks' balance on capital adequacy ratio, plus fine ratio, management fine ratio, incomes ratio, liquidity ratios, and sensitivity ratio are all evaluated by CAMELS. Perceived uncertainty have a full mediation among those variables and there are probably probabilities of complete mediation amongst their dimensions.

Furthermore, this take a look at suggests the consequences of simplest production area of Gujranwala District of Pakistan so; it's also its quandary that because of problems of generalizability,

consequences might not be relevant on some other district or country. This take a look at used non-chance sampling through adopting handy sampling method and because of having constrained assets in addition to time pass sectional statistics has been used it's also its quandary. Unit of evaluation for this take a look at changed into companies so researcher collects statistics from to be had consultant of the organization who can be from center control, directors, and supervisors or some other so it's every other quandary that can be each stage of control companies have one of a kind response. The findings of this investigation revealed that this strategy is critical in the bank's present lackluster scrutiny balance. However, it may also be utilized to make an initial funding choice.

CONCLUSION

In above mentioned discussions, the investigator investigates the mediating position of structure perceived uncertainties among higher-up facilitate and personnel emotional exhaustion. However, perceived uncertainty shows any mediation amongst both. Therefore, its miles the duty of the head management that they need to make a easy environment in which all subordinates and colleagues can perform and understand their duties as well. They need to try to recognition of problems which are the banks facing. Innovation can't be followed at excessive degree on this sector, attributable to power crises, political instability and regulation and order conditions so, anytime those conditions can't be changed uncertainties can't be oriented through the banking sector. However, this analysis failed to make sure the numerous alleviative results of crisis communications, significantly once.

The role of organizational stubbornness as a moderator was considered. This conclusion contrasts earlier study findings, which suggested that supervisors might play a significant role in giving support, particularly in terms of resources and data, to help workers cope with the crisis (Lucia-Casademunt et al., 2018). The many types of crises that employees encountered might explain some possible explanations for this unsubstantiated conclusion. The COVID-19, for example, is considered an external, non-preventable, and non-intentional catastrophe, similar to a natural disaster (Marsen, 2020). According to Morris and Goldsworthy (2012), a catastrophe crisis can have negative effects for companies that are comparable to those of an accident or natural disaster. Basically, COVID-19 may result in new natural disaster phenomena.

The consequences of this open crisis communication remain unclear and unexpected. Workers may not anticipate managers to provide help since the COVID-19 epidemic is a new problem for businesses and their employees, and they recognize the inherent uncertainty even for their superiors. Similarly, the attribution theory of crisis management predicts how people tally up a negative fourteen International Journal of Business Communication 00(0) episode of the crisis, which explains this, unsupported finding (Weiner, 1985). According to Coombs (2014), the attribution theory may be used to determine whether or not the organization should be blamed for the disaster and how much responsibility they

should bear. Coombs (2010) divided crises into three categories based on the amount of culpability: victim crisis, accidental crisis, and preventable crisis (Coombs & Holladay, 2002).

The COVID-19 pandemic appears to be a victim crisis, implying that the organization is also a victim and suffers severe consequences as a result of the crisis. When it comes to victim situations, the organization is the least responsible and cannot be held responsible (Zhou & Ki, 2018). As a result, workers are more understanding and should not expect their bosses to demand action to deal with the crisis' uncertainty. Overall, this may explain why supervisor support hasn't played a significant part in the COVID-19 situation at banks. Nonetheless, the choice model study suggests that supervisor assistance may play an important role in helping employees minimize uncertainty by enabling their subordinates to provide more support to their peers during a crisis. This enabling function of supervisors may be aided in some way by the organization's standard of crisis communication. In this sense, good organizational communication may help supervisors have a better awareness of the crises and the difficulties that their subordinates face, enabling them to encourage service behaviors in their subordinates of department or staff. Because banking management has a strong link to organizational innovation, it's worth praising, especially because the COVID-19 event has had a significant impact on employees' work and mental health. This study demonstrates that communication from college administration about catastrophe updates, as well as how colleges may influence or relieve people's issues and uncertainties at some point during the disaster, may be critical in assisting employees to deal more successfully.

A forceful verbal interchange from the universities' control is particularly important to allow workers to get greater confidence in control's objectives to help them influence the catastrophe. When communication isn't managed well, employees may need to rely on a variety of social-oriented banks to help them cope with their problems at some purpose of the disaster. In addition, managers must motivate employees to provide guidance and assistance to one another so that they can deal with the issues that they encounter throughout the catastrophe. The advice that employees receive from their coworkers, in particular, may be critical in helping them deal with the uncertainties that arise as a result of the tragedy. But the level of catastrophe communication from universities is ineffective or insufficient to alleviate their problems.

Author's contribution:

Unsa Bibi contributed to the main idea, data collection and first draft writing, and contributed to the literature collection and methods

Hafiza Safia Shaukat worked on formal analysis and English language and worked on methods, reviews and corrections.

Consent to Participate

The authors declared that they have no known competing financial interests or personal relationships, which seem to affect the work reported in this article. We declare that this deals with human participants and human data or human rights issues are discussed and evaluated.

Consent for Publication

We do not have any individual person's data in any form.

Competing Interests

The author declares that there are no competing interests in this work

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REFERENCES

- Charoensukmongkol, P., & Phungsoonthorn, T. (2020). The effectiveness of supervisor support in lessening perceived uncertainties and emotional exhaustion of university employees during the COVID-19 crisis: the constraining role of organizational intransigence. *The Journal of general psychology*, 1-20. <https://doi.org/10.1080/00221309.2020.1795613>
- Mroz, J. E., Allen, J. A., Verhoeven, D. C., & Shuffler, M. L. (2018). Do we really need another meeting? The science of workplace meetings. *Current Directions in Psychological Science*, 27(6), 484-491. <https://doi.org/10.1177/0963721418776307>
- Claeys, A. S., & Coombs, W. T. (2020). Organizational crisis communication: Suboptimal crisis response selection decisions and behavioral economics. *Communication Theory*, 30(3), 290-309. <https://doi.org/10.1093/ct/qtz002>
- Dwivedi, Y. K., Kelly, G., Janssen, M., Rana, N. P., Slade, E. L., & Clement, M. (2018). Social media: The good, the bad, and the ugly. *Information Systems Frontiers*, 20(3), 419-423. <https://doi.org/10.1007/s10796-018-9848-5>
- Grandey, A. A., & Diamond, J. A. (2010). Interactions with the public: Bridging job design and emotional labor perspectives. *Journal of Organizational Behavior*, 31(2/3), 338-350.
- Coombs, W. T., & Holladay, S. J. (2005). An exploratory study of stakeholder emotions: Affect and crises. In *The effect of affect in organizational settings*. Emerald Group Publishing Limited. [https://doi.org/10.1016/S1746-9791\(05\)01111-9](https://doi.org/10.1016/S1746-9791(05)01111-9)
- Coombs, W. T., & Holladay, J. S. (2012). The paracrisis: The challenges created by publicly managing crisis prevention. *Public Relations Review*, 38(3), 408-415. <https://doi.org/10.1016/j.pubrev.2012.04.004>
- Heath, R. L., Lee, J., & Ni, L. (2009). Crisis and risk approaches to emergency management planning and communication: The role of similarity and sensitivity. *Journal of Public Relations Research*, 21(2), 123-141. <https://doi.org/10.1080/10627260802557415>
- Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., ... & Wallace, A. M. (2005). Validating the organizational climate measure: links to managerial practices, productivity and innovation. *Journal of organizational behavior*, 26(4), 379-408. <https://doi.org/10.1002/job.312>
- Schulte, F. M., Wittmann, A., Jung, S., Morgan, J. V., Gulick, S. P., Kring, D. A., ... & Riller, U. (2021). Ocean resurge-induced impact melt dynamics on the peak-ring of the Chicxulub impact

structure, Mexico. *International Journal of Earth Sciences*, 1-18. <https://doi.org/10.1007/s00531-021-02008-w>

Ikonen, P., Luoma-Aho, V., & Bowen, S. A. (2017). Transparency for sponsored content: Analysing codes of ethics in public relations, marketing, advertising and journalism. *International Journal of Strategic Communication*, 11(2), 165-178. <https://doi.org/10.1080/1553118X.2016.1252917>

Zerbino, D. R., Achuthan, P., Akanni, W., Amode, M. R., Barrell, D., Bhai, J., ... & Flicek, P. (2018). Ensembl 2018. *Nucleic acids research*, 46(D1), D754-D761. <https://doi.org/10.1093/nar/gkx1098>

Liu, L., Utiyama, M., Finch, A., & Sumita, E. (2016, June). Agreement on target-bidirectional neural machine translation. In *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (pp. 411-416).

Haakonsson, D. D., Burton, R. M., Obel, B., & Lauridsen, J. (2008). How failure to align organizational climate and leadership style affects performance. *Management Decision*. <https://doi.org/10.1108/00251740810863861>

Montag, T., Maertz Jr, C. P., & Baer, M. (2012). A critical analysis of the workplace creativity criterion space. *Journal of Management*, 38(4), 1362-1386. <https://doi.org/10.1177/0149206312441835>

Marique, G., Stinglhamber, F., Desmette, D., Caesens, G., & De Zanet, F. (2013). The relationship between perceived organizational support and affective commitment: A social identity perspective. *Group & Organization Management*, 38(1), 68-100. <https://doi.org/10.1177/1059601112457200>

Almutairi, K. M., Alonazi, W. B., Vinluan, J. M., Almigbal, T. H., Batais, M. A., Alodhayani, A. A., ... & Alhoqail, R. I. (2018). Health promoting lifestyle of university students in Saudi Arabia: a cross-sectional assessment. *BMC public health*, 18(1), 1-10. <https://doi.org/10.1186/s12889-018-5999-z>

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *MBI: Maslach burnout inventory*. Sunnyvale, CA: CPP, Incorporated.

Marsen, S. (2020). Navigating crisis: The role of communication in organizational crisis. *International Journal of Business Communication*, 57(2), 163-175. <https://doi.org/10.1177/2329488419882981>

Zhou, Z., & Ki, E. J. (2018). Does severity matter? An investigation of crisis severity from defensive attribution theory perspective. *Public Relations Review*, 44(4), 610-618. <https://doi.org/10.1016/j.pubrev.2018.08.008>

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological review*, 92(4), 548. <https://psycnet.apa.org/doi/10.1037/0033-295X.92.4.548>

Dov, Z. (2008). Safety climate and beyond: A multi-level multi-climate framework. *Safety science*, 46(3), 376-387. <https://doi.org/10.1016/j.ssci.2007.03.006>



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RESEARCH ARTICLE<https://doi.org/10.56868/ijmt.v1i1.12>**Gender Diversity Management Practices in the Hotel Industry: An Analysis of
Philippine Hotel Industry**Marmie R. Poquiz^{1*}, Rania Hassan², Shehryar Ahmed³¹ Hospitality Management Department, Pangasinan State University² National Defense University (NDU) Islamabad³ Manipal International University, Putra Nilai, Negeri Sembilan, Malaysia

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Abstract

This study endeavors to investigate the gender diversity management practices (DMPs) in the hotel industry of and the considerable effect of gender, inclusion or exclusion, on hotel employees' perceptions of those practices in Philippine. A quantitative method using personal administered survey was employed and total 300 above questionnaires were sent online to the staff working in the 4–5-star hotels in Manila and only 185 usable questionnaires received. The findings indicated that young, female hotel staff made up the majority. A significant number of hotels were successful in implementing DMPs, and the staff members were conscious of how their employers were working to give both genders the same opportunity for recruiting, decision-making, development and training, a raise, and remuneration. However, the study additionally revealed that the strategy employed by hotel businesses to assist their staff members in balancing their professional and familial responsibilities may contribute in impeding instead of advancing gender parity. Specifically, the study found that hotel companies often offered childcare benefits and flexible work arrangements, but these benefits were not always accessible to all employees. The findings of this research indicate that hotel corporations need to take further steps to make sure that their DMPs are successful and do not obstruct gender parity.

Keywords: gender, diversity management, diverse workforce, hotel, Philippine**INTRODUCTION**

It has become imperative for big hotels to embrace staff diversity as a result of the rise of globalization (Childs, 2005). Diversity management (DM) is a practical method for effectively identifying and valuing individual and group diversity within organizations (Aretz & Hansen, 2003). Hotels that adopt diversity management make sure that every employee, irrespective of group affiliation, has the chance to make the most of their skill set and capabilities (Kandola & Fullerton, 1998; Al-Hussaini et al., 2019). Additionally, diversity management may help hotels cut costs by decreasing turnover of employees, absences from work, and disagreements among the staff (Bassett, 2005). By cultivating a diverse workforce, the hospitality industry not only enables employees to develop strong cross-cultural communication skills through group training, but also fosters a unique cultural atmosphere that attracts customers (Grobelna, 2016). Corporations that accomplish actual gender equality, especially among executive roles, have proven improved efficiency and considerable increase in profits, according to the most recent study from the Employers' Activities Bureau of the International Labor Organization (2019).

Despite being important, gender diversity is not being handled effectively in the hospitality sector (Korjala, 2013). There are almost 70% women workers in the tourist and hotel sector, yet females only occupy fewer than 20% of executive roles in hotels, such as managing director, president, partner, or a CEO (Blayney & Blotnicky, 2017). Additionally, the sector has struggled with concerns of unequal pay and bias against women (Crafts and Thompson, 1997; Allen and Sachs, 2007). In the Philippines, there exists a considerable disparity in the employment rates of both genders, with men being more likely to secure employment, resulting in a decrease in women's employment rate. Although the female labor force participation rate has been increasing, such as the case of Philippine women aged 15 and above, reaching approximately 64% in 2010 and 65.5% in 2011 (Labour Force Survey, 2001 and 2010), this does not imply equal treatment between genders in the labor market. Therefore, the purpose of this study is to evaluate the adoption of gender diversity management practices in the hotel sector in the Philippines. (Poquiz, 2018)

LITERATURE REVIEW

Gender Diversity Management

In general, gender differences have minimal impact on work efficiency considering the disparities in learning and abilities among men and women are insignificant, making both genders effective leaders (Robbins & Judge, 2017; Halou, Samin, & Ahmad, 2019). The concept of gender balance in senior management is defined as having a proportion of 40%-60% for any gender among managers, and this composition should be reflected in the overall labor force as well. The benefits of gender diversity begin to emerge when women make up at least 30% of management and leadership positions. Nevertheless, this goal has not been attained by approximately 60% of the market's businesses (Bureau for Employers' Activities, 2019). Additionally, Women are often underrepresented in crucial decision-making roles within the industry. According to Duncan and Loretto's (2004) research, Women across all age categories are more vulnerable to age prejudice because of physical characteristics or gender-related variables. In the global market environment, only a small percentage (1-5%) of executives are women, largely due to the lack of women on boards of directors, which stems from gender discrimination and bias (Yemisi et al., 2012; Ahmad et al., 2019).

According to several studies, there is an unfair wage gap between men and women working in the hospitality sector, with women making a lower salary than males (Pinar, McCuddy, Birkan, & Kozak, 2011). The Yonhap News Agency (2020) reported a preference for male employees during the hiring process, possibly influenced by the nature of the company's work. Male employees have traditionally been perceived as more productive, resilient, and suitable for workplaces with potential safety hazards. Similarly, Kyalo (2015) argues that organizations tend to favor male workers over women, perceiving them to possess better performance capabilities. According to the International Labour Office (2017), women bear family responsibilities, and corporate cultures with unrestricted

sexual expectations have a greater impact on them. In addition, women frequently demand more accommodative policies from employers than do males, particularly with regards to their maternity leave and policies that support balance between work and life. (Poquiz, 2019). Additionally, a prevalent trend in social enterprises is the inverse relationship between management level and the proportion of women; female managers are often concentrated in roles related to human resources, finance, and administration, which are often deemed as lower positions. (Poquiz, 2019) This limits their prospects for advancement to CEO or board member positions in the coming future (EMP, 2019). As a result, male CEOs make up more than 78% of social enterprise CEOs, whereas female CEOs are more common in small businesses (ACT, 2019).

RESEARCH METHODOLOGY

A quantitative method using personal administered survey was employed. This study's target demographic comprises employees from 4-5-star hotels in Manila, Philippines. There are over 100 4–5-star hotels in Manila, the Philippines. The most popular areas for these hotels are Makati City and Bonifacio Global City. However, in this study only selected hotels were sent emails about the study scope and most of the senior staff were targeted.

A thorough literature research of relevant factors under study was used to design the questionnaire and determine the quantitative parameters of each variable. It consisted of 2 parts: demographic characteristics (gender, age, education, etc.) and gender DMPs (16 attributes) which was a bench marked from Elkhwesky, Salem, & Barakat (2019). The questionnaires used a five-point Likert scale was used (1 being “strongly disagree” and 5 being “strongly agree”). The system's reliability was verified and the Cronbach's Alpha was 0.94, indicating that the system is extremely reliable.

A total of 35 hotels were contacted, and 11 hotels agreed to support the study and assist us to fill the questionnaires. Questionnaires were distributed to human resources departments, who informed their workers that their participation was voluntary. Questionnaires were distributed among 400 different hotel staff, however, only 201 questionnaires were returned and only 185 found usable questionnaire.

RESULTS AND DISCUSSION

The table provided displays demographic information about the participants in the study. Here is an explanation of each category: Gender: The table shows the number of participants categorized by their gender. There were 110 male participants, accounting for 59.5% of the total, and 75 female participants, representing 40.5% of the total. Position: This category indicates the participants' job positions within the hotel industry. The table reveals that 79 participants were in operational staff roles, comprising 42% of the total. There were 67 participants in supervisor positions, accounting for 36% of the total, and 39 participants held the `manager or assistant positions, representing 21% of the total.

Age: The age distribution of the participants is represented in this category. There were 13 participants below the age of 20, making up 7% of the total. The majority of participants, 128 individuals, fell into the age range of 21-40 years, constituting 69% of the total. Additionally, there were 44 participants aged between 41-60 years, accounting for 23% of the total. Educational background: This category illustrates the participants' educational qualifications. The table indicates that 34 participants had a high school education or lower, representing 18% of the total. The majority of participants, 122 individuals, held a graduate degree (Bachelor's Degree), comprising 66% of the total. Furthermore, 29 participants had post-graduate qualifications, making up 15% of the total.

The table provides a breakdown of the participants based on gender, position, age, and educational background, allowing for a comprehensive understanding of the demographic composition of the study sample.

Table 1: Respondents' profile

Descriptions	No	%	Descriptions	No	%
Gender			Position		
Male	110	59.5	Operational staff	79	42
Female	75	40.5	Supervisor	67	36
			Manager/Assistant	39	21
Age			Educational background		
Less than 20 years	13	7	High/Vocational school or lower	34	18
21-40 years	128	69	Graduate (Bachelor's Degree)	122	66
41-60years	44	23	Post-graduate	29	15

The table 2 shows the survey's findings on gender diversity management practises (DMPs) in Manila's 4–5-star hotels. Each DMP's mean and standard deviation (S.D.) scores for male and female workers are included in the table along with the p-value, which denotes the statistical significance of any gender-based disparities that were found. The hotels encourage women to participate fully in the workforce: The mean score for male employees is 4.02, and for female employees, it is 3.98. The p-value of 0.75 suggests no significant difference between male and female employees' perceptions of this DMP. The hotel industry does not have gender discrimination when publicizing job postings: Both male and female employees reported high mean scores (4.00 and 4.02, respectively), with a p-value of 0.89, indicating no significant difference. The provision of equal employment opportunities for men and women upon their recruitment as senior managers: Male employees scored this DMP at 4.07, while female employees scored it at 4.09. The p-value of 0.87 indicates no significant difference.

The hotels offer equal training opportunities and career development strategies for male and female staff: Male employees scored this DMP at 4.05, and female employees scored it at 4.18. The p-value of 0.24 suggests no significant difference, although there is a slight variation in perceptions between the genders. The hotels educate the employees about cultural awareness of gender parity: Both male and female employees reported relatively high mean scores (3.98 and 4.08, respectively), with a p-value of 0.37, indicating no significant difference. The hotels offer staff members, both male and female, equal possibilities for promotion: Male employees scored this DMP at 4.08, and female employees scored it at 4.11. The p-value of 0.80 suggests no significant difference.

The table continues with similar patterns for the remaining DMPs, providing mean scores, standard deviations, and p-values for each item. Although there may be minor variances in their mean scores, the p-values typically show no statistically significant distinction comparing male and female staff' opinions of the DMPs.

Table 2: The comparison between male and female employees' opinion towards the enforcement of gender DMPs

Gender DMPs	Male		Female		p-value
	mean	S.D.	mean	S.D.	
1. The hotels supports women to participate fully in the workforce	4.02	1.09	3.98	1.11	0.75
2. The hotel industry does not have gender discrimination when publicizing job postings (except for special positions)	4.00	1.09	4.02	1.11	0.89
3. The provision of equal employment opportunities for men and women upon their recruitment as senior managers	4.07	1.13	4.09	1.11	0.87
4. The hotels offer equal training opportunities and career development strategies for male and female staff	4.05	1.11	4.18	0.98	0.24
5. The hotels educate the employees about cultural awareness of gender parity	3.98	1.12	4.08	1.00	0.37
6. The hotels offer staff members, both male and female, equal possibilities for promotion	4.08	1.04	4.11	1.07	0.80
7. The company pays male and female staff the same salaries and benefits	4.02	1.19	4.05	1.12	0.78
8. The company can evaluate the job performance of both male and female workers in an impartial and equitable manner	4.06	1.11	4.11	1.13	0.64

9. The company makes every effort to guarantee that there are no clashes between male and female staff members' professional and familial lives in terms of working hours and workplaces	3.96	1.15	4.18	0.99	0.05
10. The company will offer flexible work schedules for women	3.85	1.22	3.94	1.17	0.49
11. The company offers its female staff free childcare services while they are at work (for example, the company maintains a specialized child care area)	3.80	1.21	3.67	1.22	0.28
12. The company provides its male and female employees with routinely physical examinations	4.05	1.09	4.08	1.09	0.82
13. The company offers expectant mothers the opportunity to take maternity leave	4.03	1.16	4.09	1.12	0.66
14. The company provides the male staff members with an opportunity to take paternity leave	4.04	1.17	4.00	1.17	0.72
15. The company offers both male and female workers marriage, ordination, and funeral leave.	4.09	1.09	4.06	1.09	0.77
16. The company gives both the male and female employees the same chance to submit feedback in order to tackle issues or improve your performance	4.08	1.08	4.11	1.07	0.80

DISCUSSION

Despite long-standing notions that women should stay at home and care for their families, there has been a noticeable rise in the number of women entering the professional employment in the past few decades. There is a global focus on providing equal opportunities, attracting, retaining, developing, and empowering women within organizations. Gender prejudices are being steadily addressed as more women leave the house in quest of employment possibilities. According to the gender distribution in the hotel sector in the Philippines, women make up more than half of the workforce. This shows that women may have an edge due to the significant dominance of women in the Philippines' hospitality sector. This study discovered that hotel companies place significant emphasis on managing gender diversity and have effectively implemented gender diversity management practices (DMPs). This contradicts the findings of the Yonhap News Agency (2020) and Kyalo (2015), where it was revealed that a preference for male workers in hospitality organizations because they were thought to be more capable employees. The findings of the research showed that hotel businesses give their staff despite of their gender similar access to jobs, training, learning and growth opportunities, professional promotion, and salary and incentives. However, women expressed that their companies were more supportive in helping them balance work and family life compared to their male counterparts. Notably, the major

chunk (68%) of hotel employees in this research is the younger generation. Chung & Van der Lippe (2018) argued that the demand for workplace flexibility is increasing, particularly among young individuals. While flexible working arrangements can enhance work-life balance, it is essential to recognize the potential gender-based implications associated with its usage. Gender plays a crucial role in recognizing the consequences of flexible working hours, as male and female employees tend to utilize flexible working arrangements differently, resulting in varying outcomes in terms of well-being, work-life balance, and work intensity. The findings of this study indicated that the efforts made by companies for conflict minimization to balance their work and life, in terms of working hours and workplaces, may inadvertently reinforce a more traditional division of labor, hindering rather than promoting gender equality.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the study highlights the progress made in promoting gender equality in the hospitality industry. While there are still challenges and biases to overcome, hotel companies have shown a commitment to managing gender diversity and implementing effective gender diversity management practices. The findings indicate that both male and female employees are provided with equal job opportunities, training, career advancement, and compensation and benefits. However, there are still areas where improvements can be made, particularly in supporting work-life balance for female employees and addressing potential gender-based implications of flexible working arrangements. It is important to recognize that gender biases and the traditional division of labor can hinder the advancement of gender equality in the industry. Based on the findings, the following recommendations are suggested to further promote gender equality in the hotel industry:

Enhance work-life balance support: Hotel companies should focus on implementing policies and initiatives that assist both the male and female employees in balancing their work and familial responsibilities. This could include flexible working arrangements, parental leave policies, and childcare support. Companies should be mindful of potential gender biases in the utilization and outcomes of flexible working arrangements. Efforts should be made to ensure that flexible working options are equally accessible and beneficial for men and women. Encourage the development of diverse leadership teams within hotel companies. This can be achieved through targeted initiatives to identify and support high-potential female employees, mentoring programs, and training opportunities to enhance leadership skills. Regularly monitor and assess the effectiveness of gender diversity management practices and policies. Gather data regarding the key indicators such as gender representation at various organizational levels, pay equity, and employee satisfaction with work. Use this data to identify areas for improvement and guide future initiatives. By implementing these recommendations, hotel companies can further advance gender equality and create a more inclusive and diverse workforce in the hospitality industry.

Author's contribution:

Marmie R. Poquiz contributed to the main idea, data collection and first draft writing, and contributed to the literature collection and methods

Rania Hassan worked on formal analysis and English language

Shehryar Ahmed worked on methods, reviews and corrections.

Consent to Participate

The authors declared that they have no known competing financial interests or personal relationships, which seem to affect the work reported in this article. We declare that this deals with human participants and human data or human rights issues are discussed and evaluated.

Consent for Publication

We do not have any individual person's data in any form.

Competing Interests

The author declares that there are no competing interests in this work

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REFERENCES

Ahmad, M., Beddu, S., binti Itam, Z., & Alanimi, F. B. I. (2019). State of the art compendium of macro and micro energies. *Advances in Science and Technology Research Journal*. Volume 13, Issue 1, March 2019, pages 88–109 <https://doi.org/10.12913/22998624/103425>

Al-Hussaini, S. H., Turi, J. A., Altamimi, A. N. A., Khan, M. A., & Ahmad, M. (2019). Impact of talent management strategies on employee performance behaviour with the mediating role of talent management outputs. *Archives of Business Research*, 7(3). DOI: 10.14738/abr.73.6309

Allen, P., Sachs, C. (2007), "Women and food chains: the gendered politics of food", *International Journal of Sociology of Agriculture and Food*, Vol. 15 No. 1, pp. 1-23. <https://doi.org/10.48416/ijaf.v15i1.424>

Aretz, H.J., Hansen, K. (2003), "Successful management of diversity: the multicultural organization as a strategy to improve sustainable competitiveness", *Journal of Personnel Research/German Journal of Research in Human Resource Management*, Vol. 17 No. 1, pp. 9-36. <https://doi.org/10.1177/239700220301700103>

Bassett-Jones, N. (2005). The paradox of diversity management, creativity and innovation. *Creativity and Innovation Management*. <https://doi.org/10.1111/j.1467-8691.00337.x>

Blayney, C., & Blotnicky, K. (2017). Women's representation in the hotel industry: An update five years later. *International Journal of Management and Human Resources*, 5(1), 1-16.

Bureau for Employers' Activities (ACT/EMP) (2019), *Women in Business and Management: A global survey of enterprises*.

Childs, J. T. (2005). *Managing workforce diversity at IBM: A global HR topic that has arrived*. *Human Resource Management*. <https://doi.org/10.1002/hrm.20042>

Chung, H., & Van der Lippe, T. (2020). *Flexible working, work–life balance, and gender equality: Introduction*. *Social Indicators Research*, 151(2), 365-381. <https://doi.org/10.1007/s11205-018-2025-x>

Crafts, D.D., Thompson, L.M. (1997), “Managers’ perceptions of career advancement obstacles for women managers in the foodservice industry”, *Journal of College & University Foodservice*, Vol. 3 Nos 1-2, pp. 41-56.

Duncan, C., & Loretto, W. (2004). *Never the right age? Gender and age-based discrimination in employment*. *Gender, Work and Organization*. <https://doi.org/10.1111/j.1468-0432.2004.00222.x>

Elkhwesky, Z., Salem, I. E., & Barakat, M. (2019). *Diversity management in hotels: The moderating role of empowerment and capability development*. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/JHTI-09-2018-0058>

Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). *Age Discrimination in Simulated Employment Contexts: An Integrative Analysis*. *Journal of Applied Psychology*. <https://doi.org/10.1037/0021-9010.80.6.652>

Grobelna, A. (2016). *Intercultural Challenges Facing the Hospitality Industry. Implications for Education and Hospitality Management*. *Journal of Intercultural Management*. <https://doi.org/10.1515/joim-2015-0023>

Halou, M., Samin, R., & Ahmad, M. (2019). *Impacts of change management on risk and cost management of a construction projects*. *Journal of Project Management*, 4(2), 157-164. DOI: [10.5267/j.jpms.2019.1.005](https://doi.org/10.5267/j.jpms.2019.1.005)

Kandola, R. S., Fullerton, J (1998). *Diversity in Action: Managing the Mosaic. Developing strategies*.

Korjala, V. (2013), “Cultural diversity in hospitality management: how to improve cultural diversity workforce”, (published bachelor’s thesis), Universities of Applied Sciences, available at: www.theseus.fi/handle/10024/55331

Kyalo, J. M. K., & Gachunga, H. (2015). *Effect of diversity in workplace on employee performance in the banking industry in Kenya*. *Strategic Journal of Business & Change Management*, 2(2).



Pinar, M., McCuddy, M. K., Birkan, I., & Kozak, M. (2011). Gender diversity in the hospitality industry: An empirical study in Turkey. *International Journal of Hospitality Management*, 30(1), 73-81. <https://doi.org/10.1016/j.ijhm.2010.06.007>

Poquiz, M. (2019). Instructional Materials in Teaching Quality Services Management In Hospitality and Tourism Industry. *Southeast Asian Journal of Science and Technology*, 4(1), 173-182. Retrieved from <https://www.sajst.org/online/index.php/sajst/article/view/217>

Poquiz, M. R. (2018). Organic SunRice Corn Tea (SCT) Product. *Asian Journal of Multidisciplinary Studies*, 1(2), 202-207.

Poquiz, M. R. (2019). Factors Influencing the Attractiveness, Tourist Destination Image, and Level of Cultural Identity of La Union Province. *Online Journal of Technology Innovation*, 2.

Robbins, Stephen P., & Judge, T. A. (2017). *Organizational Behavior* (17th Edition). Pearson Education Limited.

Yemisi, F., Olusoji, J., & J. Oluwakemi, J. (2012). 'Women in Purgatory: The case of Nigerian Women in the Boardrooms', *Asian Journal of Business & Management Sciences*, 1(10), 134-150.

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RESEARCH ARTICLE<https://doi.org/10.56868/ijmt.v1i1.9>**Macroeconomic Determinants of Income Inequality in Sri Lanka**

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¹ Senior Lecturer, Dept. of Economics, University of Kelaniyachampikas@kln.ac.lkORCID: <https://orcid.org/0000-0002-7525-1053>**Abstract**

Even though several different income redistribution plans have been put in place by succeeding governments, income disparity has persisted in Sri Lanka over the past 50 years. Using secondary data from 1978 to 2021, this study aims to pinpoint the macroeconomic factors that contribute to income inequality in Sri Lanka. The basic estimating method is the autoregressive distributed lag model (ARDL), a rarely used analytical tool in Sri Lanka. The results show that the primary macroeconomic predictors of income inequality in Sri Lanka among the selected variables are government spending, trade openness, average prices, the share of agriculture in the GDP, and per capita GDP. Additionally, the findings demonstrate that trade openness and government spending cause income inequality, supporting Barro's theory. Additionally, the average price level and the percentage of agriculture in the GDP have helped to lessen income disparity in the nation. Per capita GDP also shows a marginal significance, supporting Kuznets' view, which stresses that increasing a country's GDP increases inequality. However, financial deepening and secondary school enrolment ratios do not show significant impacts emphasizing that financial and education factors do not contribute to inequality in the Sri Lankan setting. The study suggested that policy priority should be given to developing the agricultural sector and catching the spillover effect of international trade to reduce income inequality. That would ultimately lead to lowering trade-induced inequality. Furthermore, a crucial policy choice to lower the expense of daily life for the poor is to maintain a constant overall price level. Government transfer programs should primarily target the poor and maintain a proper monitoring mechanism to capture the outcome of those transfers also important. Currently, such a follow-up system is not in place; therefore, the government's targets of reducing inequality couldn't be realized to the fullest.

Keywords: ARDL model, income inequality, openness, trade spillover JEL Code: C32, D63, E60**INTRODUCTION**

Even though successive administrations have implemented various income redistribution schemes intended to reduce income inequality, economic inequality has persisted in Sri Lanka for the past 50 years. The Gini coefficient, which measures income inequality, was 0.51 in 2018, indicating a high level of income disparity in Sri Lanka.). As shown in HIES-2016 report, though the poverty headcount index has declined from 6.7 percent in 2012 to 4.1 percent in 2016, inequality remains relatively high (the Gini coefficient was 0.48 in 2012 and 0.45 in 2016)¹. This indicates sectoral variances in income inequality across the country. In Sri Lanka's cities, and particularly in the Colombo district, the level of income disparity is five times more than in other districts. Recent polls reveal that the Colombo district's 'richest group'

¹ Household Income & Expenditure Survey -2016 of the Department of Census & Statistics (DCS), 2017, Sri Lanka

takes home 72.9 percent of the area's total household income. More than 41% of the households in this district are categorized as being part of "the most affluent group" because they make an average monthly income of at least Rs. 81,372 (Nanayakkara, 2018). Internal migration and skill mismatch have been recognized as reasons for this situation. As stressed by this research, income inequality in rural areas is also relatively high. It is attributed to inadequate job opportunities, insufficient attention to the agricultural sector, lack of infrastructure facilities to connect with urban industrial centers, and low female labor force participation (only 36 percent of females in the rural sector).

The concept of 'Inequality,' in a sense, describes disparities in income, assets, and wealth distribution among communities or individuals. This can be described in terms of opportunities, abilities, and spatiality. Large income inequality tends to impede the development of material as well as human capital, according to IADB and Gallo (2002). The first to propose a connection between income inequality and economic growth was Kuznets (1955), who emphasised that when a country's per capita income increases, inequality initially worsens before progressively improving. His thesis made clear that when a country is in the preindustrial stage initially, everybody is equally poor with low income. However, when the country experiences industrialization, people with potential earn more, creating an income gap in society.

This has become a common phenomenon in many countries regardless of the level of development at present. According to Allison et al.'s (2014) study, the rise in income disparity between developed and developing nations over the past three decades has shown that the richest 10% of OECD citizens have incomes that are ten times higher than those of the poorest 10% in developing nations. The wealthiest 10 percent earned seven times higher than the poorest 10 percent. Based on these scenarios, Piketty (2014) has challenged the famous Kuznets curve emphasizing that countries tend to experience income inequality even after they have reached the advanced stage of development. He further stressed that the inverted 'U' shape curve no longer exists; instead, an 'S' curve can be observed.

As previously discussed, sectorial income inequality is high in Sri Lanka (Table 1). As shown in HIES-2016 report, though the poverty headcount index has declined from 6.7 percent in 2012 to 4.1 percent in 2016, inequality remains relatively high (the Gini coefficient was 0.48 in 2012 and 0.45 in 2016). Over the years, a difference in the Gini coefficient cannot be observed in all three sectors in Sri Lanka. The estate sector maintains low-income inequality as almost all in the estate sector shares equal earnings and other related assets. However, there are large income gaps between the urban and rural sectors, where formal sector employees earn significantly more than informal sector workers. The consumption of goods and services differs between the official and informal sectors and between urban and rural households according to their job status. It is clear that there are more income disparities between the rural and urban sectors than there are in the real estate sector.

Table 1 - Gini Coefficient in Sri Lanka (by Sectors)

Sector	2016	2012/13	2009/10
Sri Lanka	0.45	0.48	0.49
Urban	0.48	0.51	0.48
Rural	0.44	0.45	0.49
Estate	0.36	0.39	0.43

Source: HIES-2016, Department of Census and Statistics, 2017

Compared to the other Asian counterparts, income inequality in Sri Lanka was lower in 2019 (Figure 1). In comparison to other Asian nations, income inequality has been notably high in Indonesia (0.83 and India (0.83). Nepal and Bangladesh have the highest levels of economic disparity among the nations of South Asia. Sri Lanka has the lowest level of income disparity in the entire South Asian region.

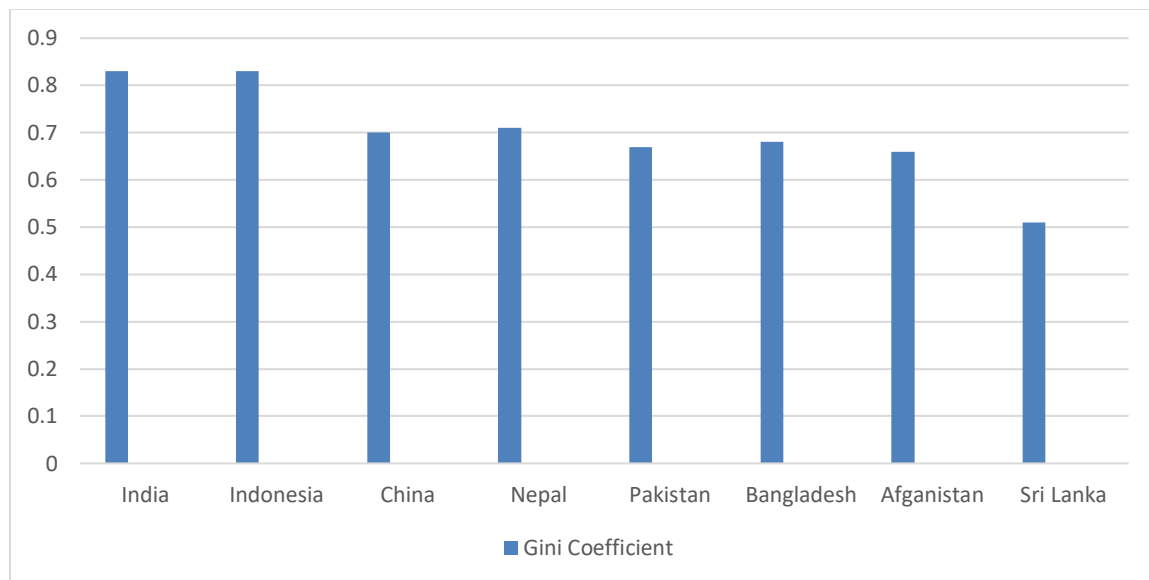


Figure 1 - Gini coefficient in Sri Lanka with an international comparison- 2018/2020

Source: Worldpopulationview.com

To comprehend the income disparity in Sri Lanka, one can also use the quintile income distribution. In 2016, the top 10 percent of the overall population received 32,9 percent of the total income, while the bottom 10 percent received 2.9 percent. The top 20% of the population also received 47.6% of the overall revenue in 2016, compared to a minimum of 41% in 1985. In 2016, only 7% of income went to the bottom 20% of the population, a percentage that has mostly remained constant throughout time and has been below 5% for nearly 31 years. (DCS, 2017). As indicated in Table 1, income inequality or relative poverty has remained significantly high in Sri Lanka for the past four decades despite various public policy measures taken by the government.

This compels us to investigate what macroeconomic factors significantly affect income inequality in Sri Lanka. Generally, factors such as per capita GDP, trade openness, financial deepening, average price level, government expenditure, agriculture share of GDP, and secondary school enrollment are believed to be affected by personal well-being². This study analysed the influence of such factors on income inequality (which is measured by the Gini coefficient) in order to ascertain if they have significant effects (positive or negative) on economic inequalities in the country. This makes it possible for us to provide useful policy ideas. The research was conducted using the rarely applied analytical technique called the autoregressive distributed lag (ARDL) approach in Sri Lanka. Except for the methodological value, the paper discloses some influential factors in determining income inequality to the limited literature, which is significant.

The essay is organized with the following structure for the remaining portions. The consideration of relevant research on the causes of income disparity in Section 2 establishes the justification for the investigation. The theoretical underpinnings of the analytical approach, variables, data, and estimating method are explained in section three. Part four of the study presents and discusses the findings, and part five of the study concludes with some possible policy implications.

LITERATURE REVIEW

Theoretical background

The impact of income inequality has a long-standing history in economics, and it has continued to rise over the past 35 years (Piketty 2014, Goda 2016). David Ricardo, Karl Marx, and Keynes, in their respective economic theories, have stressed that a high level of income inequality brings adverse social outcomes destabilizing the economy (Atkinson 1997, Goda 2017). Income inequality manifests in two forms, namely, functional income inequality and personal income inequality, as outlined in the relevant theories. Functional income distribution makes a distinction between the factors of production, which calculate the wage part of the national income and the profit portion of capitalists and rentiers. Personal income distribution, in contrast, gauges how evenly households and individuals are spread across the nation's income (Bigsten 1983; referenced in Gallo, 2002). Classical economists have discussed functional income distribution, whereas neo-classical economists have mostly stressed the importance of personal income distribution (Bigsten 1983- cited in Gallo 2002).

The Kuznets hypothesis offers the best theoretical foundation for analysing the factors that contribute to income disparity. The idea contends that inequality rises in underdeveloped countries and falls after they reach their highest level of development. The correlation between inequality and economic development is thus shaped like an inverted 'U' (Kuznets, 1955). Robinson (1976, cited in Barro 1999) has, however, emphasized that shifting man-power from agricultural to industry is

² A detailed description on the choice of the variable is given in Section 4 of this paper.

necessary for economic progress. People have low GDP per capita because of the low wages in the agricultural sector; but, as they move into the industrial sector in urban areas, their earnings increase and the disparity does as well. A theory put forth and proven by Barro (1999) contends that inequality tends to promote growth in more developed countries while slowing it in less developed ones.

The relationship between inequality and economic growth is a topic covered by endogenous growth theory. Under this theory, views are expressed on four primary categories, namely imperfect credit market, savings rate, political economy (government redistribution policies), and socio-political unrest (Atkinson 1997, Stiglitz 1982, Loury 1981, Barro 1999). Credit market imperfection implies that when access to credit is limited, investment opportunities are grabbed only by individuals with assets. As a result, the net profit margin will not equally distribute among individuals (Loury 1981). Imperfect credit distribution also leads to lower investment in human capital, especially the poor are prevented from investing in education due to borrowing constraints (Galor & Zeira 1993, Piketty 1996). The political economy view of income inequality postulates the effect of redistributive policies (taxes and transfers) on the government. It states that heavy taxation induces income inequality, while marginal tax rate enhances economic growth (Perotti 1996, Easterly & Rebelo 1993, Alesina & Rodrik 1994). The social unrest view of inequality describes that social unrest promotes rent-seeking activities and discourages investments and thereby weakening the investments (Benhabib & Rustichini 1996, Alesina & Perotti 1996). However, Barro (1999) has synthesized that what matters in this context is income redistribution and political power. Thus, transfers as an income equalizing program promote temporary stability and stop their tendency towards rebellious behavior.

Another strand of literature has emphasized the link between savings rate and income inequality. It postulates that individuals' savings rise when their income level rises. Thus, when inequality increases, so do investments. But transferring wealth from the wealthy to the poor will reduce national savings (Barro 1999).

Empirical Evidence

The growth impact of income disparity and the causes of income inequality have been the two main topics of empirical studies on income inequality. Numerous studies have examined the link between wealth inequality and economic growth (Barro 2000, Forbes 2000, Azzoni 2001, Beckfield 2009, Bandelj and Mahutga, 2010). This research has stressed that while income disparity has no negative effects in prosperous countries, it has a detrimental effect on the growth of the economy in less developed countries. Endowment inequality is a factor in income inequality and has a detrimental impact on growth. Uneven land ownership has a negative effect on economic growth, according to various studies (Alesina and Rodrik 1994, Persson and Tabellini 1994, Alesina and Perotti 1996).

However, studies on the causes of income disparity have mostly concentrated on three aspects: microeconomic, macroeconomic, and structural issues. Okatch (2013) investigated the microeconomic elements that contribute to income disparity in Botswana. He has stressed that a number of factors, including the value-added tax, secondary schooling, training, the number of children residing in a household, and some working adults, are significant contributors to the economic inequality in Botswana. Age, having a primary education, and possessing 1 to 10 cattle head tend to balance out income differences. A study concerning Pakistan has revealed that land ownership, education, and household location are highly significant determinants of income inequality in Pakistan (Naschold 2017). Similar conclusions have also been drawn previously by various other studies (Adams and Alderman 1992, Adams 1994, Mengesha 2019). The basis for all of these analyses is the decomposition approach, namely decomposition by income source (Fei et al. 1978, Shorrocks 1982, Fields 1988) and decomposition by population sub-groups of Blinder (1973) and Oaxaca (1973). According to this research, the micro determinants of income disparity include things like education, land ownership, age, gender, household members, and place of residence, livestock ownership, non-farm activities, urbanisation, and the extent of government involvement.

An increase in income inequality is caused by financial development, greater worker flexibility, and weaker trade unions, according to a recent OECD study on the macroeconomic causes of income disparity (Tridico 2017). According to studies on India and Pakistan, elements that affect income disparity frequently include characteristics like per capita GDP, government spending on consumption, birth rates, the value generated by the agricultural sector, per capita arable land, urban population, and globalization. They have stressed that a specific effort must be devoted to reducing high fertility rates, particularly among the poorer strata of society, in order to minimize income imbalance. Additionally, tax incentives and salary disparities have been proven to influence income inequality in the USA, according to Feenberg and Poterba (1993). According to Mocan (1999), structural unemployment is a significant factor in determining income disparity, and hyperinflation has also had a progressive effect on it. Odedokun and Round's (2004) study of the determinants of income inequality and the relationship between inequality and economic growth focused on African countries. They found that the percentage of the labor force employed in the agricultural industry, regional features, the rate of economic growth, the quantity of the government allocated funds, and endowments in terms of both land and people resources were the main causes of income differences in those countries. They also found a poor association in African countries between growth and wealth disparity.

There haven't been many studies on Sri Lanka in this area. In 33 Asian nations, including Sri Lanka, Deshappriya (2017) examined the effects of macroeconomic factors on income inequality, distribution, and economic growth and discovered evidence in favor of the Kuznets hypothesis. Additionally, his study has demonstrated that while factors such as rising prices, political risk, poorer trade conditions, and joblessness tend to make the inequality in Asian countries worse, factors like

official development aid (ODA), education, and participation in the labor force tend to make it worse. Age disparities between income receivers have a substantial impact on Sri Lanka's economic inequality, according to a study done by Karunaratna in 2000. The study found that, in terms of the Theil L index, age differences contributed much to the total income inequality in the urban sector. Perera et al. (2014) highlighted that trade liberalization tends to lessen both the overall income disparity and the income inequality across various families in their micro-level analysis of Sri Lanka. How greater gender and racial/ethnic equality in the distribution of incomes would affect earnings inequality in Sri Lanka is an issue that is addressed by Arun et al. in 2003. The findings revealed that men had high average earnings having a discriminatory impact against women earners. On the other hand, Gunatilake et al. (2006) examined whether structural change leads to changes in income distribution in Sri Lanka. Structural changes in education, industry, and infrastructural access following trade liberalization in 1977 affected more on income distribution. The study claimed that the middle class, as opposed to the destitute, appeared to have benefited more from the availability of education and infrastructure access.

Despite the fact that this research on Sri Lanka has made a substantial contribution to our understanding of the reasons for income disparity from various angles, one drawback of these analyses is the lack of a thorough methodology. By enabling the quantification of the immediate and long-term effects of macroeconomic variables specific to Sri Lanka on income inequality, the application of a detailed analytical technique in this research contributes to the existing pool of knowledge. The goal of this study is to ascertain the immediate and lasting effects of income disparity in Sri Lanka using data from secondary sources.

MODEL AND DATA

The study used a quantitative approach to achieve the desired objectives. The analytical procedure started with a diagnostic analysis of the stationarity of variables of the model using Augmented Dickey-Fuller (ADF) test, followed by the estimation of the autoregressive distributed lag model, which is the focal estimation of the paper. The analysis then extends to test the ECM to observe short-term dynamics.

ARDL-based co-integration tests have widely been used for analyzing the long-run relationship between macroeconomic variables that face a common problem of stationary. Residual-based tests (see Angle and Granger 1987, Shin 1994), variable addition approach (see Park 1992), stochastic common trend approach (see Stock and Watson 1988), and a system-based ranking regressions framework (see Johanson 1991) are the most popular analytical methods that have previously been employed. However, a common problem associated with these tests is that these tests can only be used when the underline economic variables in the model are either stationary at their levels $-I(0)$ or they are integrated of order one $-I(1)$, which requires pretesting of variables. However, Pesaran et al. (2001)'s autoregressive

distributed lag (ARDL) approach has been developed to address these problems. The ARDL is a superior method because it can be applied regardless of whether a series is I(0) or I(1), and because it can be used to generate an unrestricted error correction model from ARDL bound testing and encompasses both short-run and long-run dynamics.. The model can be described as follows:

$$Y_t = a_0 + a_1t + \sum_{i=1}^p \phi Y_{t-i} + \beta'X_t + \sum_{i=0}^q \beta_1^* \Delta X_{t-i} + u_t \dots \dots \dots (1)$$

$$\Delta X_t = P_1 \Delta X_{t-1} + P_2 \Delta X_{t-2} + \dots + P_s \Delta X_{t-s} + \varepsilon_t \dots \dots \dots (2)$$

Where X_t is the set of k dimensional I (1) variables that are not co-integrated with each other and Y is the dependent variable. Serially uncorrelated disturbances u and e exist. The dependent variable's and explanatory variables' respective lagged values are denoted by the letters p and q , respectively. In the above model, short-run dynamics are represented by a differenced lag of explanatory variables, and the variables without the difference represent long-run dynamics. Lag lengths of variables are different since the ARDL method allows using variables with different lag lengths.

The above equations are tested for Sri Lanka using eight variables. The Gini coefficient (GINI), which has been used as a proxy for income inequality globally for a long time, is the dependent variable in the model and serves as a representation of income inequality in Sri Lanka. The model uses seven explanatory variables that are based on both theoretical and empirical research. In this regard, GDP per capita (PGDP) is chosen since it is frequently regarded as a general indicator of the average living conditions or financial security of people in society. Theoretically, it is said that trade openness (TO), which measures the actual size of the registered imports and exports of the country, help reduce inequality. However, empirical studies have found mixed results (Perera et. al., 2004; Hamori & Yohihiro, 2012). Therefore, (TO) is also utilized to check its impact on inequality in the Sri Lankan context. Many argued that financial deepening (FD) with a well-developed financial sector provides affordable financial services to people, which enhances the real income of the poor and there in reduces inequality (Hamori & Yohihiro, 2012). The choice of the average price level (P) as a variable is based on its direct impact on consumption. Some studies have argued that price hike directly reduces the disposable income of the people disregarding their income status; therefore, inequality reduces (Bulier, 1998), while some other have explained that inflation forces to reduce working hours and hence, reduce income (Fischer, 1993; King and Wolman, 1996). Government expenditure (GE), on the other hand, is an essential factor for inequality. Transfers in GE help enhance the living status of the poor (Barro, 1999). The choice of the agricultural sector share in the GDP (AGRI) is because poverty is disproportionately concentrated in rural areas in Sri Lank (Refer Table 1) and agriculture is the main occupation is most of the households in rural areas. Their income regularly changes with the volatility in agricultural production and prices. Therefore, including that variable in the model helps identify its

impact on inequality as well. Secondary school enrollment ratio (SER) is also vital as it is said that educational attainments help reduce income inequality among households in some parts in Sri Lanka (Deshapriya, 2017; Gunatilake et al. 2006); therefore, it is included in the model to recheck the validity of previous findings.

Annual data from 1978 to 2021 that are collected from secondary sources are used for the analysis. The time frame is decided because the study used trade openness (TO) as an explanatory variable. Sri Lanka removed barriers to free and fair international trade in 1977.

As described above, the ARDL approach examined the macroeconomic determinants of income inequality in Sri Lanka. Thus, in line with the equation 1 and 2 above, the following model is specified by fitting the selected variables:

$$\begin{aligned}
 \Delta GINI_t = & \alpha_{10} + \alpha_{11}GINI_{t-1} + \alpha_{12}PGDP_{t-1} + \alpha_{13}TO_{t-1} + \alpha_{14}FD_{t-1} + \alpha_{15}P_{t-1} \\
 & + \alpha_{16}GCE_{t-1} + \alpha_{17}AGRI_{t-1} + \alpha_{18}SER_{t-1} + \beta_{11} \sum_{i=1}^p \Delta GINI_{t-i} \\
 & + \beta_{12} \sum_{i=0}^q \Delta PGDP_{t-i} + \beta_{13} \sum_{i=0}^q \Delta TO_{t-i} + \beta_{14} \sum_{i=0}^q \Delta FD_{t-i} \\
 & + \beta_{15} \sum_{i=0}^q \Delta P_{t-i} + \beta_{16} \sum_{i=0}^q \Delta GCE_{t-i} + \beta_{17} \sum_{i=0}^q \Delta AGRI_{t-i} + \beta_{18} \sum_{i=0}^q \Delta SER_{t-i} \\
 & + \varepsilon_1 \dots \dots \dots (3)
 \end{aligned}$$

Where, the long run effects inferred by the coefficients represented by the term α placed near the variables which are assumed to be the determinants of income inequality in Sri Lanka. The null hypotheses of ($H_0: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = \alpha_6 = \alpha_7 = \alpha_8 = 0$), which states that co-integration doesn't exist among the variables tested against the alternative hypotheses of ($H_1: \alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5 \neq \alpha_6 \neq \alpha_7 \neq \alpha_8 \neq 0$), that indicate the presence of co-integration between the utilized variables.

To measure the speed of adjustments with short run dynamics in the above equation can be explained by the following specification:

$$\begin{aligned}
 \Delta GINI_t = & \beta_{10} + \beta_{11} \sum_{i=1}^p \Delta GINI_{t-i} + \beta_{12} \sum_{i=0}^q \Delta PGDP_{t-i} + \beta_{13} \sum_{i=0}^q \Delta TO_{t-i} + \beta_{14} \sum_{i=0}^q \Delta FD_{t-i} \\
 & + \beta_{15} \sum_{i=0}^q \Delta P_{t-i} + \beta_{16} \sum_{i=0}^q \Delta GCE_{t-i} \\
 & + \beta_{17} \sum_{i=0}^q \Delta AGRI_{t-i} + \beta_{18} \sum_{i=0}^q \Delta SER_{t-i} + \mu_{11} ECM_{t-1} \\
 & + \eta_1 \dots \dots \dots (4)
 \end{aligned}$$

The results of the test are explained in the subsequent sections of the paper.

RESULTS AND DISCUSSION

As described the preceding section, presence of unit root of variables utilized for the model gives spurious results. Besides, unit root test is important here to identify the level of stationary as the proposed ARDL method cannot be utilized if any variable became stationary at their second differenced- I(2). Therefore, unit root test is carried out to check the level of stationary of variables as the first step of the analysis. The results are shown in Table 2.

Table 2 – Results of the Unit Root Test

Variable	ADF Test (Level)	ADF Test (1 st Diff.)	Variable	ADF Test (Level)	ADF Test (1 st Diff.)
GINI	-3.956511 (0.0185)**	-3.485163 (0.0547)**	TO	-1.638645 (0.7594)	-4.861962 (0.0018)***
PGDP	0.592673 (0.9992)	-4.643776 (0.0032)***	FD	-2.625340 (0.2718)	-4.456314 (0.0053)***
GE	-2.075246 (0.5433)	-4.493877 (0.0048)***	AGRI	-2.467613 (0.3415)	-5.045410 (0.0011)***
P	-1.036662 (0.9270)	-3.865059 (0.0233)**	SER	-1.800432 (0.6853)	-4.206068 (0.0103)**

*, **, *** represent the level of significant at 10%, 5% and 1% respectively. (P value is in parenthesis) level of significance is based on Akaike information Criteria (AIC).

Source: Authors own estimations

All variables become stationary at their first difference, according to the Augmented Dickey-Fuller (ADF) test results, with the exception of GINI, which is stationary at its level. None of them exhibit second order stationary I (2), hence the ARDL approach may be used.

ARDL Test Results

Results of the ARDL test (shown in Table 3) indicated several relationships. First, per capita GDP (PGDP), which represents economic growth, indicates a positive relationship with income inequality showing that enhancing economic growth leads to widen the inequality. This finding is in consistent with many existing studies which have emphasized that economic growth induces income inequality (Nielsen & Alderson 1995, De Gregorio & Lee 2002). The result also confirms the Barro's hypothesis which states that economic growth increases income inequality in poor countries than it does in the rich nations (Barro, 1999). However, since the magnitude of the coefficient is smaller, it can be stated that the effect of economic growth to income inequality is not severe compared to the effects of other variables on inequality.

Second, government expenditure (GE) did not show any significance, however its lagged value was significant at 5 percent level, indicating a positive sign, which emphasizes that increase in government expenditure increases income inequality in the Sri Lankan setting. This finding is in line with the findings of Dong-Hyuk & Samarasekara, (2022). The fact that government consumption positively affect income inequality indicates that underlying arguments of provisions of government facilities for the community may not equally benefit the entire population (Milanovic, 1994). Some segments of population are benefited less while some enjoys a bigger share due to political reasons (Rhee et al, 2014).

Third, trade openness (TO) have shown a positive and significant, emphasizing openness induces income inequality, which is contrast to the findings of Perera et. al. (2004) and Hamori & Yohihiro (2012). However, Perera et. al. (2004) conducted a micro level study using households and therefore, results of that study cannot be generalized to the entire country. Sri Lanka is still an upper middle-income country, where around 70 percent of population is still living in rural areas. Most industries are still urban centered and so does the trade and investment opportunities. Therefore, most of the rural population does not have equal opportunities to engage in trade and investments. Thus, they cannot reap the opportunities generated by trade openness, like urban counterparts, which results in greater inequality.

Table 3 – Results of the ARDL estimation

Variable	Coefficient	Prob.*
GINI (-1)	0.945291	0.000***
PGDP	0.003534	0.0251**
GCE	-0.019600	0.8843
GCE(-1)	0.219498	0.0583**
P	-0.13758	0.0128**
TO	0.09712	0.0201
FD	0.022096	0.5174
AGRI	-0.321092	0.0882**
AGRI(-1)	0.244448	0.2960
SER	0.085948	0.1129
C	-6.828953	0.4863
Adjusted R ²	66.45	
DW Statistics	2.0776	

*, **, ***, indicates the level of significance

At 10%, 5% and 1% respectively

Source: Author’s own estimation

Fourth, the findings suggest that average prices (P) have the tendency to lessen income inequality. However, the connection between inflation and inequality lacks a firm theoretical foundation. Although some studies have claimed that inflation lowers income inequality (Bulier, 1998; Maestri & Roventini 2012; Monnin 2014), this is because inflation lowers the average wealth of the population, which can have some implications on income inequality. The empirical literature in this area is also yielding mixed results. Galli and van der Hoeven (2001) also found that growing inflation is linked to both an increase and a decrease in inequality, depending on the starting inflation rate. This can be the current situation in Sri Lanka.

Fifth, the results of the proxy for agricultural development also significant with negative sign implying that agricultural development reduces income inequality. This finding supports long-standing argument that agricultural development helps people to strengthen their livelihoods and stabilize their income (Johnston and Mellor 1966, Rains et al. 1990, World Bank 2008, Lee et.al., 2013). This is also consistent with the results of some studies of the economies that have similar characteristics to the economy of Sri Lanka. In a study in Vietnam, Cuong (2010) stressed that agricultural production reduces rural income and expenditure inequality. Even though industry and services sector occupy the biggest share of GDP, the agricultural sector remains the mainstay for most of the population and continues to be an important source of income (Ravallion and Chen 2007) which is a condition that is valid to Sri Lanka as well. Most of the rural population is stills engaged in agriculture and the country’s

main exports consist of agricultural products. Even though industry and services sector occupy the biggest share of GDP, the agricultural sector remains the mainstay for most of the population and continues to be an important source of income (Ravallion and Chen 2007) which is a condition that is valid to Sri Lanka as well³. Most of the rural population is stills engaged in agriculture and the country's main exports consist of agricultural product⁴

Sixth, results of financial deepening didn't show any significance. This may be due the fact that stage of financial development in Sri Lanka is still low where some segments of the population do not even have a formal bank account or access to formal credit in both rural and urban low-income families. Even though Central Bank of Sri Lanka asserts that there are 89 percent account holders in Sri Lanka, most of the accounts are not regularly active (CBSL, 2019).

Lastly, although secondary school enrolment (SER) seems to have a beneficial impact on income inequality in Sri Lanka, the correlation is not statistically significant. The finding, however, goes against most of the existing literature, which emphasized that, in many countries, a greater secondary school enrolment ratio reduces income disparity (Bourguignon & Morrisson 1990, Barro 2000, Alderson & Nielsen 1995). In contrast, the result of the present analysis supports some. In contrast, the result of the present analysis supports some of the findings that claim that secondary school enrollment induces income inequality (Milanovic & Square, 2005; De Gregorio & Lee 2002). Barro (1999) has found that link between primary education and income inequality is negative, though it is positive for higher education attainment. When population has a higher average number of years of primary education per person (aged 15 and over), inequality is lower. However, inequality increases as communities have higher average levels of higher education per individuals. Number of years of secondary schooling in Sri Lanka is 8 years and the age limit for secondary education is decided by the government. Even though there is a public funded education system in Sri Lanka, uneven distribution of educational facilities and poverty related social issues appear to prevent young generation from attending schools. A survey reveals that 23.8 percent of poor children in 15-16-year age group and 64.7 percent of poor children in 17-18-year age group are not attending schools due to economic difficulties (Nanayakkara 2017). In addition, the share of skilled labor in the labor force, and the share of female labor in the total labor force may also explain this situation.

At the final stage of the analysis, ECM test was conducted to test the influence of deviation of variables from the long run equilibrium on its short run dynamics, and results are shown in Table 4.

³ Agricultural statistics have shown that the sectoral contribution of agriculture to the GDP is gradually declining in Sri Lanka; however, it is still the main income-generating activity in most of the rural population. Thus, development occurs in the agricultural sector benefits rural poor

⁴ After 2019 and till now, Sri Lanka has been experiencing a high inflation rate, which started with Covid-19 pandemic-led supply shortage. After that, global energy price hikes and severe foreign currency shortages in the country caused another supply shortage of food and fuel which led to significant price hikes in food and fuel; therefore, the comment on single-digit inflation cannot be applied to the present Sri Lankan scenario.

Table 4 – Error Correction Results

Variable	Coefficient	Prob.
C	-6.828953	0.0000
D(GCE)	-0.019600	0.8309
D(TO)	0.097102	0.0057
D(AGRI)	-0.321092	0.0040
CoIntEq(-1)*	-0.054709	0.0000

Source: Authors’ own estimation

As indicated by the results, the existence of one co-integration link between variables except secondary enrolment ratio and financial deepening (Table 4). Short run dynamics of trade openness indicates 9.7% of slow adjustment towards the equilibrium, while agricultural share indicates 32% of speed of adjustment towards the equilibrium

The adjusted R2 was 0.66, indicating that 66 percent of the variation of the response variable explained in the model, which is a good sign that indicates the model is good fit, while the residual autocorrelation test indicates the absence of serial correlations among residuals. In addition, CUSUM and CUSUM of Square test indicated that the model is stable at 5 percent significant level.

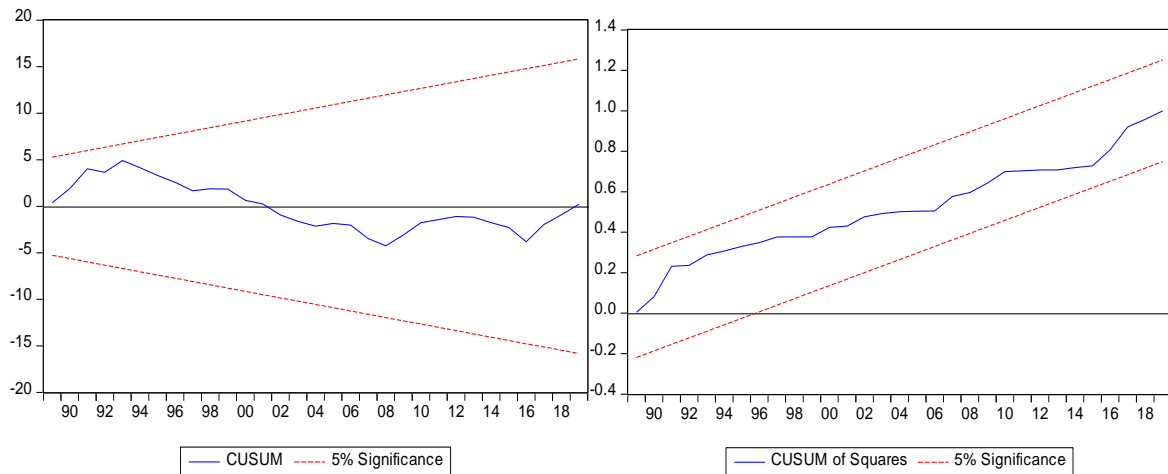


Figure 2 – Results of CUSUM and CUSUM of Squared Test

Source: Authors’ own estimation.

For the confirmation of results, the study ran a residual diagnostic test, in which it indicated that residuals are normally distributed.

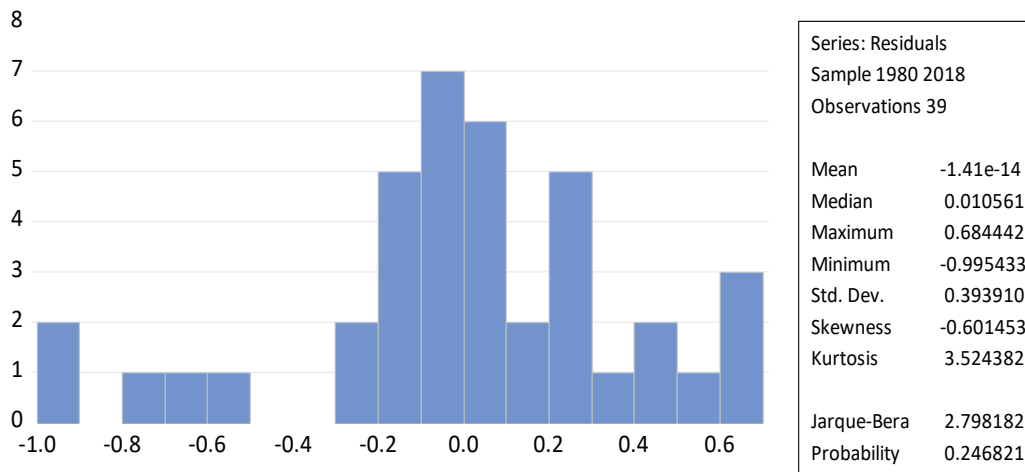


Figure 3- Residual Diagnostic Test

CONCLUSION

Income inequality has been significantly high in Sri Lanka in recent times despite the existence of well-established social security network within the country. In this backdrop, the focus of this paper was to identify the macroeconomic determinants of income inequality in Sri Lanka. Results of the analysis have revealed that government final consumption expenditure and trade openness seemingly induce income inequality, while average price level and the share of agriculture to the GDP have contributed to reducing income inequality of the country. Per capita GDP also shows a significant and smaller positive effect on income inequality showing that increase in country’s per capita GDP increase income inequality. However, financial deepening and school enrollment ratio do not have significant impact on income inequality in the country. Thus, the paper concludes that government consumption, trade openness, average prices, agricultural development, and per capita GDP are the main macroeconomic determinants of income inequality in Sri Lanka among the chosen variables. Results support Barro’s view of income inequality with reference to trade openness in which he stressed that trade openness induces inequality in poor countries.

Policy implications that can be drawn from the study includes government should provide incentives for agricultural sector introducing modern farming methods and high yielding variety of crops to earn more income from agricultural activities as the results have shown that agricultural development reduces income inequality. This would be more beneficial to rural sector in enhancing income of the rural population and it will help reducing the rural poverty as most of the population in rural sector engage in agriculture related employments. On the other hand, encouraging youth to engage in agricultural sector work like agribusiness and strengthening agricultural supply chain will also be benefited in this regard. In addition, provide trade facilitation through infrastructure development, reduction in transaction cost, and providing incentives to encourage e-business and other measures should be taken to capture the positive spillover effects of international which benefits economic growth

as well as the rural poor. That would ultimately lead to reduce trade induce inequality in the open economic environment. Further, maintaining a stable general price level also important policy option to reduce the cost of living of the poor. To the end, government transfer programs should especially target the poor and proper monitoring mechanism should be maintained to capture the outcome of those transfers. Currently, such follow up system is not in place therefore, the government's targets of reducing inequality to the fullest is not practical.

Data (and Software) Availability

Data are available upon request

Consent for Publication

We do not have any individual person's data in any form.

Competing Interests

The author declares that there are no competing interests in this work

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REFERENCES

Adams, R. H. (1994). Non-farm income and inequality in rural Pakistan: a decomposition analysis. *Journal of Development Studies*, 31(1), 110-133. <https://doi.org/10.1080/00220389408422350>

Adams, R. H., & Alderman, H. (1992). Sources of income inequality in rural Pakistan. *Oxford Bulletin of Economics and Statistics*, 54(4), 591-608.

Alesina, A., Rodrik, D. (1994). Distributive Politics and Economic Growth, the *Quarterly Journal of Economics*, 109(2), 465-490. <https://doi.org/10.2307/2118470>

Alesina, Alberto, and Perotti, Roberto. (1996). Income distribution, political instability, and investment. *European Economic Review*, 40(6), 1203-1228. [https://doi.org/10.1016/0014-2921\(95\)00030-5](https://doi.org/10.1016/0014-2921(95)00030-5)

Arun, T., Borooh, V., and Arun, S. (2013). Earnings Inequality in Sri Lanka. *The Journal of Developing Areas*, 47(1), 355-371.

<http://www.jstor.org/stable/23612274>

Atkinson, A. B. (1999). Is Rising Inequality Inevitable? A Critique of the Transatlantic Consensus, WIDER Annual Lectures 3. World Institute for Development Economic Research, the United Nations University.

Azzoni, C.R. (2001). Economic Growth and Regional Income Inequality in Brazil. *Annals of Regional Sciences*, 35(1), 133-152. <https://doi.org/10.1007/s001680000038>

Bandelj, N., Mahutga, M.C. (2010). How Socio-Economic Change Shapes Income Inequality in Post-Socialist Europe? *Social Forces*, 88(5), 2133-2161. <https://doi.org/10.1353/sof.2010.0042>

Barro, R. J. (1999) Inequality, growth, and investment. NBER Working Paper No. W7038,

Cambridge, MA, National Bureau of Economic Research (NBER).

Barro, R.J. (2000). Inequality and Growth in a Panel of Countries. *Journal of Economic Growth*, 5(1), 5-32.

Benabou, R. (1996). Inequality and growth. *NBER macroeconomics annual*, 11, 11-74.

Benhabib, J., Rustichini, Aldo (1996). Social Conflict and Growth. *Journal of Economic Growth*, 1(1), 125-142. <https://doi.org/10.1007/BF00163345>

Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *Journal of Human Resources*, 8(4), 436-455. <https://doi.org/10.2307/144855>

Bourguignon, F. & Morrisson, C. (1990) Income distribution, development and foreign trade: a cross-sectional analysis, *European Economic Review*, 34, 1113–1132. [https://doi.org/10.1016/0014-2921\(90\)90071-6](https://doi.org/10.1016/0014-2921(90)90071-6)

Central Bank of Sri Lanka (CBSL). (2019). Annual Report, Central Bank of Sri Lanka

Cuong, V. N. (2010). Does Agriculture help Poverty and Inequality reduction: Evidence from Vietnam? *Agricultural Economic Review*, 11(1), 44-56. <http://dx.doi.org/10.22004/ag.econ.118576>

De Gregorio, J., & Lee, J., (2002). Education and income inequality: New evidence from cross country data. *The Review of Income and Wealth*, 48, 395-416. <https://doi.org/10.1111/1475-4991.00060>

Department of Census and Statistics (DCS). (2017). Household Income and Expenditure Survey (HIES)-2016. Department of Census and Statistics.

Deyshappriya, N. P. (2017). Impact of macroeconomic factors on income inequality and income distribution in Asian countries.

Dong-Hyuk Kim, Samarasekara, A. L (2022). The effect of government expenditure on income inequality in Sri Lanka, *Applied Economics Letters*

DOI: 10.1080/13504851.2022.2073328

Feenberg, D. R., Poterba, J. M. (1993). Income Inequality and the Incomes of Very High-Income Taxpayers: Evidence from Tax Returns, Tax Policy and the Economy, NBER Working Paper 7, 145-177.

Fei, J., Ranis, G. and Kuo, S. (1978). Growth and the family distribution of income by factor components. *Quarterly Journal of Economics*, 92(1), 17-53. <https://doi.org/10.2307/1885997>

Fields, Gary. (1988). Income Distribution and Economic Growth, in Gustav Ranis and T. Paul Schultz, (eds.), *the State of Development Economics: Progress and Perspectives*, (pp. 459-481). Basil Blackwell, Oxford.

Fisher, S. (1993). The Role of macroeconomic Factors in Growth. *Journal of Monetary Economics*, 32(December), 485-512. [https://doi.org/10.1016/0304-3932\(93\)90027-D](https://doi.org/10.1016/0304-3932(93)90027-D)

Forbes, K.J. (2000). A Reassessment of the Relationship between Inequality and Growth. *American Economic Review*, 90(4), 869-887. DOI: 10.1257/aer.90.4.869

Galli and van der Hoeven (2001). Is inflation bad for income inequality: the importance of the initial rate of inflation. *Employment Paper 2001/29*, International labour Organization.

Gallo, C. (2002). *Economic growth and income inequality: theoretical background and empirical evidence*. London: Development Planning Unit, University College London.

Galor, O., & Zeira, J. (1993). Income distribution and macroeconomics. *The review of economic studies*, 60(1), 35-52. <https://doi.org/10.2307/2297811>

Goda, T (2016). Global trends in relative and absolute income inequality. *Ecos de Economía: A Latin American Journal of Applied Economics*, 20(42), 46-69.

Gunatilaka, Ramani., Chotikapanich, Dugankamon, Brett, Inder. (2006). *Impact of Structural Change in Education, Industry and Infrastructure on Income Distribution in Sri Lanka*, Monash University Working Paper

<https://www.monash.edu/business/ebs/our-research/publications/ebs/wp21-06.pdf>

Hamori, S., Yohihiro, H. (2012). The effect of financial deepening on Inequality: Some International Evidence. *Journal of Asian Economics*, 23(4), 353-359. <https://doi.org/10.1016/j.asieco.2011.12.001>

Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *Econometrica: journal of the Econometric Society*, 1551-1580. <https://doi.org/10.2307/2938278>

- Karunaratne, H. D. (2000). Age as a factor determining income inequality in Sri Lanka. *The Developing Economies*, 38(2), 211-242.
- Karunaratna H.D. (2008). The impact of Industrial structural changes on income inequality in Sri Lanka. <http://archive.cmb.ac.lk:8080/research/bitstream/70130/1079/1/FPAPER1-1.pdf>
- King, R.G., Wolman, A.L. (1996). Inflation Targeting in a St. Louis Model of the 21st Century, *Review, Federal Reserve bank of St. Louise*, 87(May/June), 83-107. DOI 10.3386/w5507
- Kuznets, S. (1955). Economic Growth and Income inequality. *The American Economic Review*, 45(1), 1-28.
- Lee, H.Y., Kim, J. and Chin, B.C. (2013). Empirical analysis on the determinants of income inequality in Korea. *International Journal of Advanced Science and Technology*, 53, 95-110.
- Loury, G. (1981). Intergenerational Transfers and the Distribution of Earnings. *Econometrica*, 49, 843-867. <https://doi.org/10.2307/1912506>
- Maestri, V., & Roventini, A. (2012). Inequality and macroeconomic factors: A time-series analysis for a set of OECD countries. Available at SSRN 2181399.
- Mengesha, G. (2019). Determinant of Income Inequality in Ethiopia: Regression Based Inequality Decomposition. *European Business & Management*, 5(3), 42-50. doi: 10.11648/j.ebm.20190503.12
- Milanovic, B. & Squire, L. (2005) does tariff liberalization increase wage inequality? Some empirical evidence. World Bank Policy Research Working Paper No. 3571, the World Bank, Washington, DC.
- Mocan, H. (1999). Structural Unemployment, Cyclical Unemployment, and Income Inequality. *The Review of Economics and Statistics*, 81(1), 122-134. <http://www.jstor.org/stable/2646791>
- Monnin, P. (2014). Inflation and income inequality in Developed Countries. CEP Working Paper 2014/1, Council on Economic Policy. <https://dx.doi.org/10.2139/ssrn.2444710>
- Munir, K., & Sultan, M. (2017). Macroeconomic determinants of income inequality in India and Pakistan. *Theoretical & Applied Economics*, 24(4).
- Nanayakkara, Wimal. (2018). A Balancing Act: can Sri Lanka overcome regional income inequalities? IPS Talking Economics, Institute of Policy Studies. Colombo. <https://www.ips.lk/talkingeconomics/2018/12/27/a-balancing-act-can-sri-lanka-overcome-regional-income-inequalities>
- Nanayakkara, Wimal. (2017). Poverty and Access to Education: an old problem affecting the young generation in Sri Lanka. IPS Talking Economics, Institute of policy Studies, Colombo.

Naschod, F. (2009). Microeconomic determinants of income inequality of rural Pakistan. *Journal of Development Studies* 45(5), 746-768.

Nielsen, F., & Alderson, A. S. (1995). Income inequality, development, and dualism: Results from an unbalanced cross-national panel. *American Sociological Review*, 60, 674-701.

<https://doi.org/10.2307/2096317>

Oaxaca, R. L. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3), 693-709. <https://doi.org/10.2307/2525981>

Odedokun, M. O., & Round, J. I. (2001). Determinants of income inequality and its effects on economic growth: Evidence from African countries (No. 2001/103). WIDER Discussion Paper.

Okatch, Z., Siddique, A., & Rammohan, A. (2013). Determinants of income inequality in Botswana (No. 13-15).

Park, J. Y. (1992). Canonical cointegrating regressions. *Econometrica: Journal of the Econometric Society*, 119-143. <https://doi.org/10.2307/2951679>

Park, K. (1996) Educational expansion and educational inequality on income distribution.

Economics of Education Review, 15(1), 51–58. [https://doi.org/10.1016/0272-7757\(95\)00000-3](https://doi.org/10.1016/0272-7757(95)00000-3)

Perotti, R. (1993). “Political Equilibrium, Income Distribution and Growth,” *Review of Economic Studies*, 60, 755-776. <https://doi.org/10.2307/2298098>

Perera, S., Siriwardana, M., and Stuart, Mounter. (2014). Reducing poverty and income inequality in Sri Lanka: does trade liberalization help?. *Journal of the Asia Pacific Economy*, 19(4), 629-655.

<https://doi.org/10.1080/13547860.2014.920595>

Persson, Torstan., Tabellini, G. (1994). Is Inequality Harmful for Growth? *The American Economic Review*, 84(3), 600-621.

Pesaran, M. H., Shin, (1999). An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis. In Storm, S. (ed.) *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, Chapter 11, Cambridge University Press, and Cambridge.

Piketty, T. (2014). *Capital in the Twenty-First Century*, Belknap Press.

Rhee, C., Zhuang, J., Kanbur, R. and Felipe, J. (2014). Confronting Asia’s rising inequality: policy options. In Kanbur, R., Rhee, C. and Zhuang, J. (eds), *Inequality in Asia and the Pacific: Trends, Drivers, and Policy Implications*. Routledge: London.

Ravallion, M. and Chen, S. (1997). What can new survey data tell us about recent changes in distribution and poverty?, *World Bank Economic Review*, 11(2),
<https://doi.org/10.1093/wber/11.2.357>

Shin, Y. (1994). A Residual-Based Test of the Null of Cointegration against the Alternative of No Cointegration. *Econometric Theory*, 10 (1), 91-115. <https://doi.org/10.1017/S0266466600008240>

Shorrocks, T. (1982). Inequality decomposition by factor component. *Econometrica*, 50(1), 193-211.
<https://doi.org/10.2307/1912537>

Stiglitz, J. E. (1981). Information and capital markets (No. w0678). National Bureau of Economic Research. DOI 10.3386/w0678

Stock, J. H., Watson, W. M. (1993). A Simple Estimator of Counteracting Vectors in Higher Order Integrated Systems, *Econometrica*, 61, 783-820. <https://doi.org/10.2307/2951763>

Tridico, Pasquale. (2017). the Determinants of Income Inequality in OECD Countries. *Cambridge Journal of Economics*, 42, 1009–1042. <https://doi.org/10.1093/cje/bex069>

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RESEARCH ARTICLE

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Exploring External Stakeholder Engagement Strategies and their Impact on Project Success

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Abstract

In the past few years, it can be observed that business norms and practices have changed and the market has now a wide circle of stakeholders as compared to past eras. The main purpose of the current study is to explore the impact of ESE strategies on project success in the IT industry (Information Technology) of Pakistan. The study is based on mixed methods. In the first phase, an in-depth Systematic Literature Review (SLR) was performed. In the next phase, face-to-face & virtual interviews were conducted with senior IT leads to develop various themes. Moreover, a word cloud and frequency chart was extracted using NVivo 12 to strengthen the argument. The findings show that there is a strong relationship between stakeholder engagement and project success in the IT industry. Likewise, the findings of the study suggest that a successful Strategy for External Stakeholder Engagement (SESE) is possible by using a collaborative and participatory approach. The study provides greater insights into the engagement of external stakeholders. Moreover, the study recommends exploring new means of communication that remain helpful in engaging stakeholders and should be aligned with the local and organizational culture.

Keywords: External Stakeholders Engagement Strategies, Project Success & Information Technology

INTRODUCTION

In the world of businesses and projects, failure has always been considered fatal (Baden, 2010; Albats, Alexander, Mahdad, Miller, & Post, 2020). Many internal and external stimuli affect projects' goals (Lee, 2007). There can be many factors like, but are not limited to, miss-management of the resources, miscommunication, change in regulations, and miss-engagement of the project's internal and external stakeholders (Jonas, Boha, Sörhammar, & Moeslein, 2018; Project Management Institute, 2017).

Every project has a diversified pool of external stakeholders. Due to their conflicting perspectives, different priorities, and approaches regarding the consequences of a project's success, their engagement has always remained a dilemma for the project manager and the performing organization (Derakhshan, Turner, & Mancini, 2019; Jonas, Boha, Sörhammar, & Moeslein, 2018). Although in some industries like construction and manufacturing, engagement of the external stakeholders remains

a little easier, however, in the Information Technology (IT) industry, due to its agility, velocity variety, and veracity, expansions of the virtual world, cloud computing, Internet of Things (IoT), virtual and augmented realities, engagement of the external stakeholders has always been a problem for the management and organizations (Saad, Zahid, & Muhammad, 2022; Derakhshan, Turner, & Mancini, 2019).

Researchers have been working to develop optimized ways for the active engagement of external stakeholders in the IT industry (Giacomarra, Crescimanno, Sakka, & Galati, 2020; Derakhshan, Turner, & Mancini, 2019). Khristiningrum, Gustomo, & Ginting (2021) proposes that effective communication can be one of the possible ways for the active engagement of external stakeholders in the IT industry. Similarly, Lehtinen & Aaltonen (2020) suggest adding values for the external stakeholder to creep their engagement. In the same way, Khan, Waris, Panigrahi, Sajid, & Rana (2022) support the idea that active collaboration and negotiation among the organization and external stakeholders can render better results. Likewise, Silvius & Graaf (2019), Martinsuo & Geraldi (2020), and Winch & Cha (2020) believes in sharing the responsibility for bolstering stakeholder engagement. But it has been observed that still, multi-national organizations, having a rich history, traditions and experience fail to engage their valued stakeholder (Barendsen, Mu, & Silvius, 2021; Derakhshan, Turner, & Mancini, 2019). They are spending millions and billions of USD on research and development funds to address the missing links among the performing organizations and external stakeholders' engagement, however, due to the complexity and customization of the IT industry, almost 70% of IT companies continuously fail to complete their projects successfully, and a major reason highlighted is a non-participatory approach of the external stakeholder (Rasool, et al., 2022; Guertler & Sick, 2021). Most of the time, the external stakeholder is not aware of the requirements and needs of the industry, although, the IT industry tries to keep them in constant a loop, uses agile methods and retrospective approaches for stakeholder engagement and value delivery (Project Management Institute, 2017; Kineber, Othman, Oke, Chileshe, & Zayed, 2021; Barendsen, Mu, & Silvius, 2021).

The situation becomes more challenging in societies like Pakistan, where IT-related practices have not matured over time. The processes, practices, and frameworks have not been either developed, or are not operationalized fully (Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022; Bhatti, Santoro, Sarwar, & Pellicelli, 2021; Guertler & Sick, 2021). Moreover, the contextualization of the industry and the Strategies for External Stakeholder Engagement (SESE) remain different (Acebo, Miguel-Dávila, & Nieto, 2021; Buuse, Winden, & Schrama, 2021). Furthermore, literature is also little silent on the SESE in the IT industry (Fashina, Omar, Sheikh, & Fakunled, 2021; Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022; Albats, Alexander, Mahdad, Miller, & Post, 2020; Bhatti, Santoro, Sarwar, & Pellicelli, 2021). Therefore, realizing external stakeholders as an influencing group for IT projects, the study has evaluated and documented the engaging strategies for external stakeholders in information

technology. Therefore, the main objective of the study was to explore the SESE strategies in Pakistani IT projects.

The structure of the study was aligned with the objectives of the study. In the first phase, a detailed Systematic Literature Review (SLR) was adopted to explore the strategies for the external stakeholders' engagement. The reason for SLR to comprehend the phenomenon in detail. This helped in theme selection, however, the literature was a bit silent on the agreed-upon strategies. However, the literature was found inadequate and comprehensive, therefore, in the 2nd phase, the qualitative survey planned the themes presented in a prescriptive way through thematic analysis, to present socio-culturally supported strategies for SESE. Moreover, NVivo 12 was used for the extraction of the word cloud and the development of a frequency chart followed by a conclusion and recommendations.

METHODOLOGY

The paper is based on a mixed-method approach. In the first phase, SRL was adopted to explore the Phenomenon of Interest (POI) in depth. The main keywords for the search were "External Stakeholder Engagement", "External Stakeholder Engagement Strategies", "External Stakeholder Engagement Strategies in the IT industry", and "External Stakeholder engagement for project success". The databases used were "Google Scholar", "Microsoft Academic", "Semantic Scholar", "Science Direct", "Emerald", and "Elsevier". The period used for the research was confined from 1990 to 2022, however, more focus was concentrated on the recently published literature. Moreover, scholarly work published in journals, proceedings, books, periodicals, and conference proceedings published in the English language were included in the study. A total of 127 manuscripts were considered in the study. The main focus areas for the selection were computer science, software management, information technology, and other closely related areas. In the initial screening, 13 publications were removed. Similarly, 8 more publications were removed, as the projects were purely from biological sciences and were having no coherence and connection with the current study. Furthermore, 6 more documents were excluded due to duplications of concepts and constructs. Forty-four (44) articles were removed due to language (not in English) concerns, duplication, relevance, and other issues. So, the study concluded with 17 reviews and 39 full-length articles, therefore, the total publications included in the study were 56 as portrayed in Figure 1.

In the 2nd phase, themes extracted from the SLR were taken to the industry and were discussed in detail with the project managers and leaders, as they remain engaged most of the time in SESE and information gathering. An open-ended structured questionnaire was developed for the interview, which was revised and rated time and again by the academicians and industrial professionals. The software houses were selected from Rawalpindi and Islamabad, as most of the national and international software houses are based here. A total of forty-four (44) software houses were contacted initially, however, only thirty-six (36) participated in the interview. The rest of them were excused due to their internal

departmental policies. Furthermore, only thirty-one (31) interviews were considered complete, because many of the project managers and leaders did not answer all questions of the interview and it was difficult to contact them and present them in a coherent form. The respondents (Project managers and project leads) were asked only one question “what are the SESE in your organization”? The responses have been maintained in the thematic analysis part of the study. In the 3rd phase, with the help of NVIVO 12, the world cloud and frequency table was constructed from themes, to support and generalize the findings.

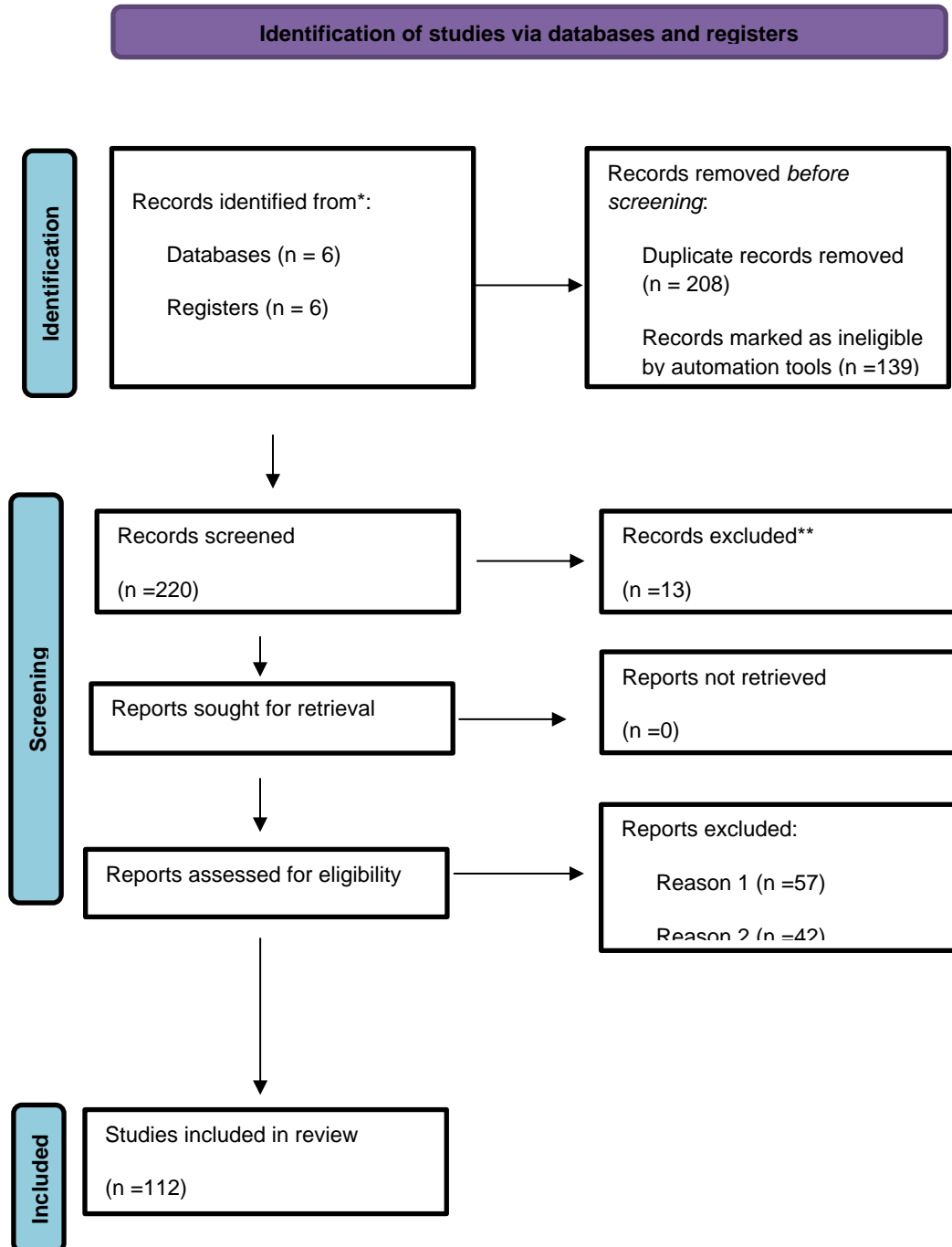


Figure 1: PRISMA for the SRL

FINDINGS

After SRL, data was analyzed using data extraction using NVivo 12 from the 56 sources as given in Table 1. A total of 8 themes were extracted, which are being used across the globe for SESE in the IT industry. The major focus of the themes was on effective communication and inclusion of the stakeholder in the development loop. Similarly, cooperation, creating awareness and educating them, using local intelligence and practices based on the need and context of the project.

Table 1: Themes Extracted from Literature

S/No.	Strategy	References
1	Effective Communication with the general public that is open and honest	(Albats, Alexander, Mahdad, Miller, & Post, 2020; Barendsen, Mu, & Silvius, 2021; Derakhshan, Turner, & Mancini, 2019; Khristiningrum, Gustomo, & Ginting, 2021)
2	Form community advisory boards.	(Lee, 2007; Lieshou, Nijhof, Naarding, & Blomme, 2021; Jones, Maas, Kraus, & Reason, 2021)
3	Engage the general community when designing and shaping assessment criteria.	(Lieshou, Nijhof, Naarding, & Blomme, 2021; Kaboré & Sané, 2022; Kaboré & Sané, 2022)
4	Educating, conversing, and socializing	(Khristiningrum, Gustomo, & Ginting, 2021; Khristiningrum, Gustomo, & Ginting, 2021)
5	Collaboration, mutual understanding, and partnership	(Lalic, Lalic, Delić, Gracanin, & Stefanovic, 2022; Lehtinen & Aaltonen, 2020; Saad, Zahid, & Muhammad, 2022)
6	Effective use of digital tools in external-engagement activities.	(Jonas, Boha, Sörhammar, & Moeslein, 2018; Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022; Gemino, Reich, & Serrador, 2021)
7	Corporate stories.	(Khan, Waris, Panigrahi, Sajid, & Rana, 2022; Ika, Diallo, & Thuillier, 2011)
8	Stakeholder meetings and workshops	(Kineber, Othman, Oke, Chileshe, & Zayed, 2021; Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022)

Projects are surrounded by internal and external stakeholders (Akbar & Shahid, 2022). It is easy to engage the internal stakeholders due to formal regulations, rules, and other statutory bodies (Ayat, Ullah, & Kang, 2022; Baah, Acquah, & Ofori, 2022). However external stakeholders, such as regulatory agencies and local communities that do not have formal or contractual contact with the project organization but may have an impact or influence on the project are critical to the PS (Castro, 2021; Magano, Silvius, Silva, & Leite, 2021; Olander & Landin, 2008). There are certain recommended strategies in the literature, however, for different projects, SESE strategies remain different. Among them, negotiating with external stakeholders as a strategy has been focused more in literature, that involves external stakeholders in project implementation or decision-making processes for co-creation of value and overcoming the underlying challenges (Greenwood, 2007; Barendsen, Mu, & Silvius, 2021; Lieshou, Nijhof, Naarding, & Blomme, 2021; Mayor, et al., 2021).

When it comes to tackle the issue of external stakeholder involvement in Information technology organizations, research on managing project stakeholders assumes that project managers play a critical role (Gil, 2009). In this regard, some attention has been paid to the responsibilities and actions of project owners (Bhatti, Santoro, Sarwar, & Pellicelli, 2021; Guertler & Sick, 2021). Barendsen, Mu, & Silvius (2021) and clients' (2017) in-depth studies on planning for engagement of external stakeholders, notably IT need special attention and care as the organization's capabilities were significantly vulnerable in the past.

Knowing external stakeholders is important to increase the organization's business operations, day-to-day activities, processes, and procedures. It converts "stakeholders' expressions" into "stakeholders' journeys" (Kirmizi & Kocaoglu, 2022; Guertler & Sick, 2021; Oppong, Chan, Ameyaw, Frimpong, & Dansoh, 2021). In certain situations, a shared knowledge of the communication methods between internal stakeholders working toward the same goal is critical to ensure that actions involving external stakeholders are arranged consistently and appropriately (Buuse, Winden, & Schrama, 2021; Buuse, Winden, & Schrama, 2021). After assigning roles and responsibilities, a project manager or project management team is to organize activities and arrangements to involve external stakeholders in project activities and decision-making through communication and negotiation (Gemino, Reich, & Serrador, 2021; Boaz, Borst, Kok, & O'Shea, 2021). This includes identifying and categorizing external stakeholders and studying their location, using best practice guidelines, frameworks, and tools like energy gain matrix (Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022).

They may include active dialogue, workshops, working groups, face-to-face, and phone meetings, as well as a variety of seminars and roundtable discussions to develop repetitive and one-on-one organizational practices (Köpsel, Kiipper, & Peck, 2021; Derakhshan, Turner, & Mancini, 2019).

Separate personal relations and communication teams, in addition to the project manager, are mentioned in some research as an important element in executing such processes (Acebo, Miguel-Dávila, & Nieto, 2021; Baah, Acquah, & Ofori, 2022).

Previous research studies provide a limited perspective on addressing the role of SESE in organizational projects by giving agency and responsibility to the person who does so (Fashina, Omar, Sheikh, & Fakunled, 2021; Buuse, Winden, & Schrama, 2021; Gemino, Reich, & Serrador, 2021). These studies recommend that roles, obligations, and functions associated with planning to negotiate with external stakeholders should be handled separately (Boaz, Borst, Kok, & O'Shea, 2021). However, handling every stakeholder expectation and defining their role individually, although, it remains primary, but too difficult, especially in larger projects, therefore, it is recommended that a common platform or an advisory board should be there for stakeholder negotiation and recommendations (Zenk, et al., 2022; Acebo, Miguel-Dávila, & Nieto, 2021). Moreover, aspects such as organizational contexts and how internal stakeholders link collaborative actions need also be defined with the level of authority (Bhatti, Santoro, Sarwar, & Pellicelli, 2021; Buuse, Winden, & Schrama, 2021).

Furthermore, stakeholders need to be engaged in the planning phase to design a success and implementation and assessment criteria for the project, based on local and contextual needs and requirements (Rondi, Massis, & Kraus, 2021; Winch, 2017). However, sometimes stakeholders don't know their needs and requirement, therefore, for the value creation and its alignment with the local standards and artifacts, the project team should educate, and train the locals regarding the project objective and possible outcomes (Derakhshan, Turner, & Mancini, 2019; Jones, Maas, Kraus, & Reason, 2021). They should moderate the sessions ensuring external stakeholders' active engagement, and address project challenges, especially, those that arise from the local context and need tacit and local knowledge for their solution (Huang & Chen, 2022; Baah, Acquah, & Ofori, 2022; Buuse, Winden, & Schrama, 2021).

This will help in developing rapport, raising trust, faith, and support levels, and may increase collaboration, mutual understanding, and partnership among the project team and external stakeholders (Avotra, Chengang, Marcelline, Asad, & Yingfei, 2021; Bhatti, Santoro, Sarwar, & Pellicelli, 2021). Cooperation and coordination can be further improved via digital communication or nondigital methods, however, digital communication networks have reshaped the working mechanism, therefore, locals can also be connected in the active loops through these for better outcome (Jones, Maas, Kraus, & Reason, 2021; Jonas, Boha, Sörhammar, & Moeslein, 2018; Wang, et al., 2021; Fashina, Omar, Sheikh, & Fakunled, 2021).

In the same way, workshops, formal, informal, and nonformal training, visits, and gatherings, sharing corporate success stories, and listening to folk knowledge and success criteria can help in PS and SESE (Jonas, Boha, Sörhammar, & Moeslein, 2018; Saad, Zahid, & Muhammad, 2022).

Summarizing, the most important aspect of project success, according to many researchers, is good and effective communication with project external stakeholders (Gemino, Reich, & Serrador, 2021; Derakhshan, Turner, & Mancini, 2019; Lee, 2007). It provides project participants with a sense of ownership and worth (Baden, 2010). Moreover, stakeholders believe that they are important and are fully engaged in project activities. Furthermore, involving stakeholders early in the planning process reduces the number of difficulties that may arise during the project execution phase. In addition to analyzing and engaging stakeholders in the project delivery process, a systematic approach can be an effective method (Huang & Chen, 2022; Jones, Maas, Kraus, & Reason, 2021).

Project Success

Project success is considered vital for the success of the organization and its stakeholders (Ika, Diallo, & Thuillier, 2011). Liu, Cao, Duan, & Wu (2021) explicated that projects are often evaluated based on three factors: cost, time, and quality. A productive and effective project meets its objectives on time, under budget, and according to specifications, all while satisfying the customer (Sawadogo, Sané, & Kaboré, 2022; Fashina, Omar, Sheikh, & Fakunled, 2021; Guertler & Sick, 2021). However, managing project context through stakeholders is the most effective way to eliminate project ambiguity and uncertainty (Boaz, Borst, Kok, & O'Shea, 2021; Zaman, Damij, Khaliq, Nawaz, & Pradana, 2022). Stakeholders have an exceptional role in the success of any project as they help in providing the requisite resources to the company needed for the completion of the project (Lalic, Lalic, Delić, Gracanin, & Stefanovic, 2022). According to Baah, Acquah, & Ofori, (2022) partnerships between different organizations and external stakeholders need to be developed based on the level of interest that further enhances the success of the projects.

The current understanding is that the stakeholders, particularly the primary sponsor, are the best judges of the project success (Baden, 2010). Additionally, success is measured at the end of the project by analyzing whether the scope is completed within budget and time constraints and whether the project's output is delivered to specification (Buuse, Winden, & Schrama, 2021; Greenwood, 2007). Similarly, success is measured after project completion by assessing expected and obtained benefits; and whether the organization achieves higher-order strategic objectives simultaneously (Wang, Xu, He, Chan, & Owusu, 2022). Baden (2010) distinguished between the success of project management, which occurs when the project is well-managed to complete the desired scope on time and within budget, and project success, which occurs when the project meets its business objectives. The importance of larger

project performance metrics has become the standard (Kaboré & Sané, 2022; Boaz, Borst, Kok, & O'Shea, 2021).

Ayat, Ullah, & Kang (2022) illustrated that project success criterion differ from one to the other. He investigated whether such differences are merely a function of the external situation, such as the parent organization's strategic goals for the project, or whether there is something inbuilt in different types of projects, or projects from different industries, that results in a common pattern for a particular type of project (Gemino, Reich, & Serrador, 2021). People also assess project success differently depending on their own goals, and one person can rate a project as a success while another rate it as a failure (Jones, Maas, Kraus, & Reason, 2021). Only one manager can "win" if two managers wish to utilize a project to expand their power base at the cost of the other. In this research, we investigated whether a person's personal preferences can be anticipated based on their demographic profile. If such were the case, it would impact a project manager's decision on which project management approach to utilize for the project being managed (Jonas, Boha, Sörhammar, & Moeslein, 2018; Jonas, Boha, Sörhammar, & Moeslein, 2018).

However, over time different researchers found that multiple criterion help in the success of any project, which requires engagement and communication between internal and external stakeholders (Bhatti, Santoro, Sarwar, & Pellicelli, 2021; Jonas, Boha, Sörhammar, & Moeslein, 2018; Buuse, Winden, & Schrama, 2021). Customer and end-user satisfaction is very essential because it affects all success metrics except recurring business (Burton, 1996; Huang & Chen, 2022; Guertler & Sick, 2021). Henceforth, the research available on project success shows the way different aspects help in the success of any project through the implementation of various strategies (Ika, Diallo, & Thuillier, 2011).

Theoretical Support of the Study

The stakeholder theory pushes to engage all the external elements, organizations, and customers in a productive way to the processes inside the organization (Buuse, Winden, & Schrama, 2021; Hummels, 1998). It proclaims that not only the shareholders, but all stakeholders need to be interconnected in a loop, so that organization can full its vision, mission, and strategies in the best possible way (Castro, 2021; Magano, Silvius, Silva, & Leite, 2021).

The theory of the stakeholder of organizational management and business ethics was presented by R. Edwards in 1984 (Guertler & Sick, 2021). It postulates that more values should be given to the concern of the external stakeholder morally so that it extends cooperation and coordination, trust and belief among organizational mission, and stakeholders can be engaged in a productive way (Guertler & Sick, 2021). Therefore, it is the primary responsibility of the organization to engage its stakeholders for value creation. In the same way, the new classical theory state that stakeholders can be used in an integrated way to support the organizational goal and also value

creation for the stakeholders and demands for the development of a unified platform for stakeholder engagement through effective communication (Ika, Diallo, & Thuillier, 2011; Kaboré & Sané, 2022).

Likewise, a framework for the stakeholders' engagement supports the integrated engagement of the external stakeholders through developing good relations, effective communication, and dialogue, and involvement/engagement of the stakeholders in an active organizational learning process (Boaz, Borst, Kok, & O'Shea, 2021; Guertler & Sick, 2021). According to Acciarini, Borelli, Capo, Cappa, & Sarrocco (2022) Baah, Acquah, & Ofori (2022), and Jonas, Boha, Sörhammar, & Moeslein (2018), those organizations, that engage their external stakeholders in a continuous loop, through retrospectives, formal, informal, and non-formal meetings, they are getting the best from the markets, and stakeholders. Criticism and feedback will co-create values, and open new ways of doing business (Gemino, Reich, & Serrador, 2021; Jones, Maas, Kraus, & Reason, 2021).

Thematic Analysis of the Interviews

Negotiation is an attribute that allows individuals to come to a mutual agreement that allows two parties to effectively communicate with each other. However, the collected data shows that the respondents have varying responses to the negotiation. For instance, one of the key respondents from NokNok explained that;

“End users are most important because we generate revenue from them then IT team. our technical teams are more important than Suppliers who provide products means provide grocery things.”

Based on the aforementioned response it can be said that the IT companies mainly generate their revenue through their negotiation with stakeholders who supply them with requisite products.

According to another NokNok respondent:

“As my experience, let's take an example of Careem and Uber, if I have good experience with Careem they will constructively see the things and their support system is nice to see this is things are working. If we provide good products but support is not good ultimately the client will not be happy. we focus on after-sale service like support system a lot.”

The response as mentioned earlier demonstrates the way different companies such as Uber, Careem, and others communicate with IT companies and utilize their services to improve their services. Negotiations allow mutual agreement between organizations and stakeholders. Likewise, office meetings allow different individuals to discuss their concerns and goals in a better way through the discussion. Another important strategy is to have more knowledge than vendors which helps in discussing the terms precisely. Similarly, market knowledge allows the organization to have a better

understanding of the vendors. Finally, having a huge loop allows the organizations to fill it via appropriate strategies and agreements with the vendors. According to the response of a key respondent, dialogue allows stakeholders to share their views and concerns directly with the organization which eventually allows them to resolve different issues. Ministry of IT, Pakistan explained that;

“One of the projects was to deliver 100-1000 equipment to end-users. but just b/c we were not timely focused on the engagement of relevant stakeholders and we didn’t address their grievances timely. Just because of that one of the equipment had some functional problem and it didn’t work properly. We faced problems after delivering that product to end-users.”

According to the respondent, the grievances of the relevant stakeholders remained unaddressed which created an issue when the product was delivered to the destination. Henceforth, it can be said that such a situation can be handled adequately by timely negotiation and dialogue.

Meetings between stakeholders and organizations allow them an opportunity to communicate with each other. Based on the theme different questions were asked by the respondents and their responses showed variation in their views based on their knowledge, expertise, and other aspects.

Arpatech (Pvt) Ltd highlighted that;“You know, selection of the right resources and keeping them engaged, making sure that people who are engaged with you within the organization, they are retained and well-groomed over some time. So they own the entire process and technology to be able to serve your customers.”

The response shows that it is important for an organization to engage the employees in different activities and provide them with the requisite information to deal with consumers in a better way that will help in the success of different goals or projects set by the company. Also, some of the respondents from Arpatech (pvt)Ltd provided their views on “who are involved in engagement planning and prioritization”?

“Engaging and for having the continuous relationship with those specific and important stakeholders like PASHA and our customers.” It shows that there is an evident relationship of the organization with consumers and stakeholders that is mainly based on meetings. The respondent explained that different meetings are held by the organization to keep the system up-to-date and address the issues faced by the consumers. Arpatech (Pvt) Ltd uniquely positioned itself;

“So we are, we are, we are very nicely positioning, so on a day-to-day basis, the managers, the team leads and myself, you know, we, we always get involved in making those day-to-day decisions.

According to the respondent, different meetings are held based on the nature of the activities. There are different types of meetings that are held based on the nature of the issue and task that allows the staff an opportunity to discuss a matter of concern. Furthermore, most of the employees attend the meeting which allows them to contribute to the decision-making process. VINNCORP has a different schedule for the meetings;

“We do have, uh, uh, meetings on daily basis. Like there's a term for the standing meetings.”

The meetings are usually held daily or weekly basis discussing the way clients respond to the services provided by the company.

On the other hand; Feedback on the services provided by the company allows an organization to make optimistic changes in the internal as well as external environment of the business. However, when interviewees were asked questions related to the feedback they responded differently further explained;

“Evaluation of the performance of vendors. Giving scores”

The response as mentioned before shows that the scores are given to the vendors based on their performance, which allows the company to assess the level of involvement and contribution to the success of the organization.

Micro Merger (Pvt) Ltd follows a system where;

“We value our stakeholders and keep their interests supreme in our business practices additionally, we get feedback from our external stakeholders and clients at the end of each project.

According to the respondent after the completion of a project clients and stakeholders provide their feedback regarding the services provided to them, which helps in improving future strategies and services. Arpatech (Pvt) Ltd explained that;

“So I think it is very important to proactively engage external stakeholders. And one example would be running an NPS program, which is a net promoter score program. A fundamental survey that my team does from a customer satisfaction perspective to get feedback from customers.”

It shows that there are different types of programs used by the companies to record feedback including the NPS program, which is a survey used for feedback of customers related to their satisfaction levels. It further helps in getting advice from consumers that helps in the improvement of the services. The response shows that some service providers feel happy when they get feedback on their performance even when it is not excellent, as it helps them in improving their skills. Also, stakeholders are kept informed regarding the performance of the company which increases the

engagement with stakeholders by improving the level of communication. Effective communication allows IT companies to communicate with potential stakeholders effectively. Respondents were asked to share their opinion about effective communication and they shared varying views: According to Micro Merger (Pvt) Ltd

“Continuous interaction and we choose a context-appropriate method of engagement. A participatory approach (communication of information, consultation, partnerships) yields better results than a one-way approach.”

According to the respondent, there are different methods of communication that are opted by the company's for instance participatory approach, consultation, and partnership that help companies in creating effective communication with stakeholders. There are different benchmarks set by the companies that allow them to design different strategies to stay in touch with the consumers and consider their demands. Vinncorp explained that;

“External stakeholders are the most important practice we follow and the services we are providing to the market. First of all, we grab a client and maintain a fine, secondly, good communication with them. On the project and the clarity on the services, we provide on it. No other than just sugarcoating, what we do, we show them that we ought to be doing better of our services and what we make as a protector, or you've been transparent and fully effective communication.”

The response shows that good communication with clients helps in clarifying the terms of services that further help in clarifying the goals set for the project. Also, effective communication helps in building a viable communication environment between stakeholders and the company that improves service delivery. According to Micro Merger Pvt Ltd;

“Our experience suggests that engagement with external stakeholders yields positive discourse for mutual benefits.”

It shows that communication with external stakeholders provides benefits to both parties as it improves the overall condition and services provided by the companies. According to the response above, it can be seen that communication plays an important role in providing good services as it allows consumers to share their views regarding the products. Also, their concerns are being handled timely.

Another important theme of the research is Social Media, as it plays a significant role in engaging stakeholders. The responses show that social media assists IT companies in various ways. It provides communication between the organization and potential clients. It can also help companies in achieving new business opportunities. However, the respondents have mentioned the role of media in various ways. NokNok uses social media platforms to reach its target audience;

“End users (international), targeted audience is end users we use social media like linked in and WhatsApp to engage with them continuously.”

Many businesses, especially in Pakistan are using social media as a powerful tool to increase their market share. Especially, they are using social media platforms like LinkedIn, Facebook, and Instagram to increase the customer base of their products or services. Ministry of IT uses social media for posting advertisements;

“Advertisement- Invitations posted on Social media- print media- LinkedIn – Facebook”

Social media platforms like Facebook, Twitter, and LinkedIn offer organizations a way to connect with external stakeholders such as customers, suppliers, and partners. They can also be used to monitor and respond to feedback about the organization. According to one of the employees from Arpatech (Pvt) Ltd. thinks;

“So in the digital era, you have to stay alive on your social media channels. It is a very important thing, um, to ensure that your stakeholders. Whether that is potential clients or industry experts or industry influencers”

The responses from interviews show that social media plays important role in building businesses in the contemporary world. The most important point is that if businesses do not have their own social media channels and they are not interacting with their clients on their terms, they will go elsewhere. If businesses are engaging with their clients on their terms and engaging in a way that is appropriate for them and the work that they do, then it is quite easy to make good impressions. Social media is powerful as it reaches everyone without any regard for their age, location, or their race. Therefore, it is considered an important element of external stakeholders.

Furthermore, Technology is needed for process efficiency, to use computers to help with important planning and decision-making, to develop information systems, and to apply scientific methods in the completion of a project. It can also facilitate a process when it is done correctly. There are various benefits such as maximizing production efficiency and minimizing the amount of human effort. Additionally, technology can help organizations to engage with external stakeholders in several ways, most notably through online platforms and social media. By using these tools, organizations can reach out to a wider audience and solicit feedback from a larger number of people.

Therefore, most companies rely on technology for completing their various tasks. One of the respondents from NokNok reflects on the use of Technology in dealing with clients,

“Basically we do not entertain the walk-in customer. Just client has to installed app.”

The company relies on technology to communicate with its stakeholders. Likewise, Arpatech (Pvt) Ltd. also considers Technology as an external stakeholder for its company;

“as I said, people, processes, and technology. These are the three core elements. That is how you are going to stay engaged with your customers, right? Company’s reputation is very much dependent upon these three things.”

Technology plays an important role in the success of IT companies. It is a key driver of innovation and helps to create new opportunities for businesses. IT companies need to keep up with the latest technology trends to stay competitive and deliver the best possible products and services to their customers. For Project success, IT companies should focus on the Technology Strategy. Moreover, technology can help to make the process of engaging with external stakeholders more efficient and streamlined. Another way NokNok relies on Technology is the right use of Online Platforms;

“Advertisements on multiple channels ... we provide offers for promo codes and discount offers. The amount can be discounted or if you refer some other clients so some amount will be added to your Wallet on your account as a source of attraction”

Technology can be a great enabler in engaging external stakeholders, whether it is through social media platforms or other online tools. By leveraging technology, organizations can reach a larger audience more effectively and efficiently. For example, online platforms can be used to track RSVPs for events, send out reminders, and provide materials and resources in advance. Social media can also be used to promote events and engage with external stakeholders on a more informal basis. Finally, technology can help organizations to collect and analyze data from engagement activities, which can be used to improve future outreach efforts.

The role of retrospectives in project success is crucial. It allows managers to take a step back and analyze what went wrong and what went right during the project. This allows for future projects to be improved and for current projects to be completed more efficiently. Additionally, retrospective gives employees the chance to voice their concerns and give feedback about the project. This allows for a more cohesive team that is better equipped to handle future projects. It can help to build relationships between different departments within the company, which can lead to a more efficient and productive workplace. One of the respondents from Arpatech (Pvt) Ltd. thinks that;

“It is the very important thing, um, to ensure that your stakeholders see you as a positive company, always staying in touch and engaging the audience and informing of the new activities.”

The companies choose to stay in touch with their audience and keep them informed. According to MicroMerger (Pvt) Ltd,

“We get the feedback from our external stakeholders and clients at the end of each project that enables us to grasp their demands.”

They appreciate the feedback they get from their users. Also, the company's software development team uses this feedback to assess and streamline its processes. Furthermore, it will help the company's marketing team to use this feedback to assess and improve its product. The ministry of IT thinks;

“Identification of stakeholders should start from the beginning of the project to address on right time and right stakeholders.”

Retrospectives are a powerful tool for engaging external stakeholders. By providing a forum for open dialogue and feedback, they can help build trust and relationships between organizations and their stakeholders. Additionally, they can help identify areas of improvement and potential areas of conflict. Ultimately, retrospectives can help create a more open and effective communication channel between organizations and their stakeholders.

In any organization, timely product delivery is essential to maintaining good relationships with external stakeholders. If a company consistently fails to deliver products on time, it will damage its reputation and may eventually lose customers. Therefore, timely delivery of the product is important to meet deadlines. Timely implementation will ensure a smooth flow of products and customer satisfaction. In addition, the time frame helps in the efficient use of resources and helps in lowering costs.

NokNok is very conscious about time delivery and it does not want to keep its customers waiting.

“Right after placing the order client will receive his/her order within 15 minutes. In case it gets delayed even a single minute then some amount will be transferred to the user's Wallet. Similarly, if the amount will be increased per minute.”

On-time product delivery is essential for project success. A project can be well planned and organized, but if the products are not delivered on time, the project will likely fail. There are many reasons why product delivery might be delayed, such as problems with manufacturing or transportation. Whatever the reason, it is important to take action to avoid delays. The Ministry of Information Technology also considers it essential;

“Just b/c we were not timely focused on engagement of relevant stakeholders and we didn't address their grievance timely. Just because of that one of the equipment had some functional problem and it didn't work properly. We faced problems after delivering that product to end-users.”

However, VinnCorp has faced issues regarding Timely Delivery,

“Yes, we did. Uh, we did not decide the architecture of the system and, uh, also, uh, while we are facing, uh, some issues when we are working with, we do face a lot of issues regarding, uh, the decision for the particular requirement of deciding on that particular requirement.”

The impact of delays in product delivery can be far-reaching and costly for businesses. In some cases, it may even result in the loss of customers. Delays can cause disruptions to production schedules, which can lead to missed deadlines and lost sales. In addition, delays can damage relationships with suppliers and other business partners. In the worst case, they can even lead to legal action. Therefore, a significant impact of delays in Timely Delivery can be felt by external stakeholders, who often rely on the products or services provided by companies. Delays can cause these stakeholders to lose faith in the company and question the ability to deliver on promises. Additionally, delays can result in financial losses for our external stakeholders if, for example, they have to purchase alternative products or services to make up for the delayed delivery. In some cases, delays can even cause safety issues for external stakeholders if, for example, they are relying on the company to provide a critical component for their operations.

Engaging external stakeholders through workshops/training programs can be an excellent way to get them involved in the company or organization. By providing these programs, companies can show their stakeholders how much they value their input and expertise. Additionally, these programs can help build trust between organizations and stakeholders. Ultimately, this trust can lead to more effective communication and collaboration between organizations and external stakeholders. Moreover, workshop/training programs can also help reduce potential conflict between organizations and stakeholders.

Workshops and training can play an important role in ESE. They can help organizations to better understand the needs and expectations of their stakeholders, and to develop more effective engagement strategies. Additionally, workshops and training can provide opportunities for stakeholders to share their own experiences and expertise, which can further improve engagement efforts.

Therefore, many of the IT companies in Pakistan are aware of it, and Arpatech (Pvt) Ltd.

“From our protective perspective, which is, uh, you know, focus more on the international market, then, um, our stakeholders, our international clients, of course, international symposium. International conferences.”

There are various ways to engage stakeholders, such as through international conferences and symposiums. However, conducting a workshop or training program specifically designed for a certain group of stakeholders can be more beneficial in building a closer relationship and fostering

communication between the company and its stakeholders. Therefore, the Ministry of IT arranges workshops;

“Ministry of IT has taken some initiative to educate stakeholders to include end users and customer as well by conducting workshops.”

Workshops and training programs provide an opportunity for the two-way exchange of information and knowledge. On one hand, attendees can learn more about the company’s latest products, services, and development plans. On the other hand, the company can obtain first-hand feedback and suggestions from stakeholders on how to improve its offerings. When designing a workshop or training program, it is important to carefully consider the target audience and objectives. The content must be relevant and useful to attendees so that they can walk away with new knowledge or skills that they can apply in their work as a stakeholder.

Workshops and training play an important role in ESE. They provide a space for dialogue and allow organizations to develop their understanding of each other's expectations, needs, and interests. Furthermore, they can help build relationships between organizations, as well as create opportunities for networking and collaboration. Consequently, the study came with the following theme listed in Table 2, which is more desirable to practice in IT industry Themes.

TABLE 2: EMERGED THEMES OF THE STUDY

Sr. no.	Themes	Description
1	Negotiation (Dialogue)	The theme will help in exploring the negotiation skills used by the stakeholders
2	Meetings	It will help in providing information related to the meetings held between different parties
3	Feedback/customer care	This will mainly address the feedback on the services
4	Effective communication	This theme will explain the way effective communication leads toward the success of the project
5	Social Media	It will provide important information about the way social media contributes to the success of a project

		The use of technology is an important part of any project.
6	Technology	This theme will help in understanding its role in the success of any project/company
7	Retrospective	This theme will provide an overview of the way a company's past progress will affect its future goals
8	Timely product delivery	It will provide information about the timely product delivery
9	Workshop/Training	This theme will provide details about the workshop and training

Word Cloud and Frequency Chart of Thematic Analysis

Prescribed themes were also analyzed with NVivo 12 to quantify the responses of the interviews. For the said purpose, interview prescriptions were added to the NVivo-12 and World cloud, and Frequency Table was generated as displayed in Figure 2 and Figure 3 respectively. Worlds' cloud indicates that most of the respondents wish for effective communication for the SESE. Similarly, community engagement via technology and social media should be given preference for SESE. Likewise, the frequency chart depicts that communication, negotiation, and community involvement carry the highest frequencies and should be considered for the SES.



Figure 2: Word Cloud of the Thematic Analysis

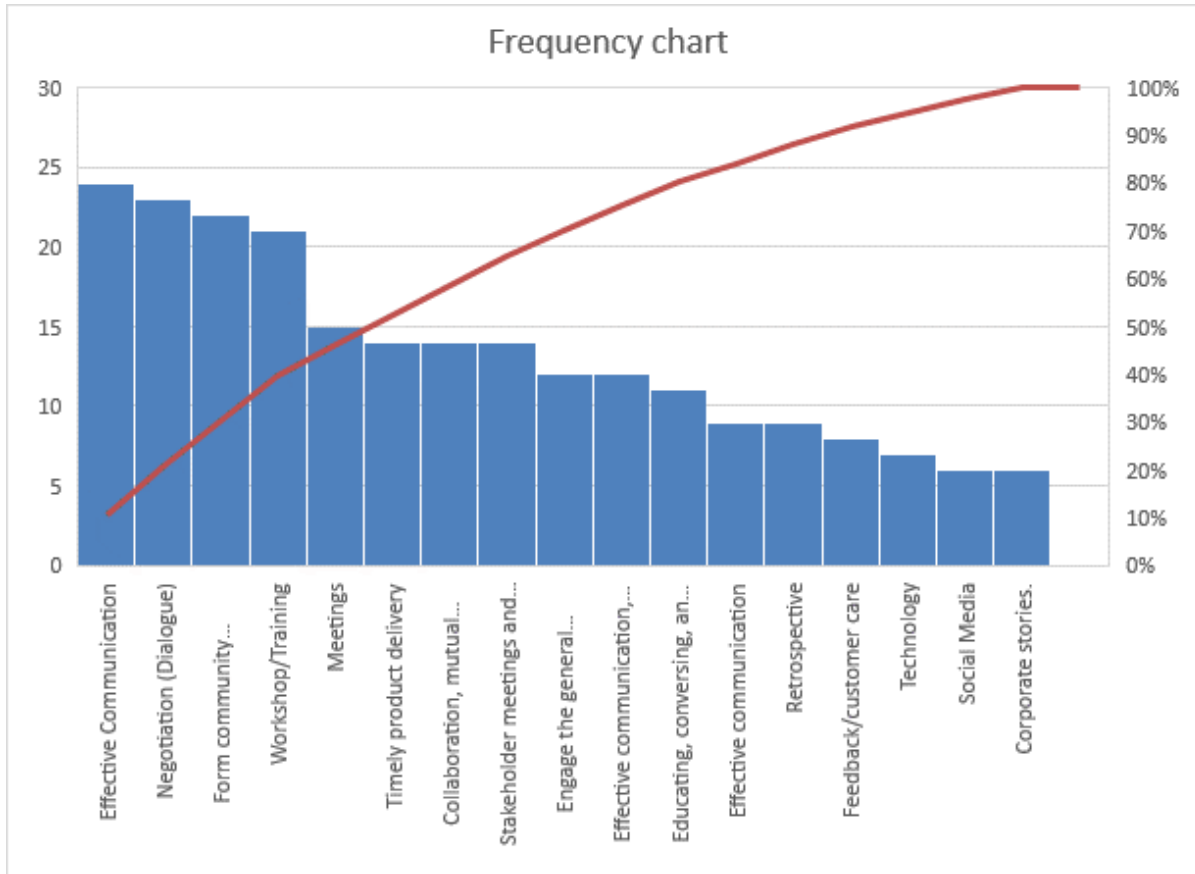


Figure 3: Frequency Chart of the Thematic Analysis

DISCUSSION

To evaluate the impact of external stakeholders’ engagement on the success of the project for the IT Industry, various sub-items of external stakeholders are chosen. The results from thematic analysis help to identify the most practiced SESE strategies for the success of the project in IT in Pakistan (Akbar & Shahid, 2022). The first important practice adopted by a few companies is effective communication for SESE. The communication method should be based on a participatory approach, consultation, and partnership. This helps companies to create effective communication and relationships with stakeholders (Castro, 2021; Huang & Chen, 2022).

In the long run, social media will continue to be an important tool of communication (Acciarini, Borelli, Capo, Cappa, & Sarrocco, 2022). Social media is accessible to everyone and organizations connect with external stakeholders such as customers, suppliers, and partners through social media platforms like Facebook, Instagram, and LinkedIn. It has made it easier for companies to communicate with their stakeholders and keep them engaged without meeting them physically (Guertler & Sick, 2021; Kirmizi & Kocaoglu, 2022).

In the same way, the use of technology is another important element in this regard. It is essential for engaging external stakeholders; social media platforms and other online tools provide the perfect

means for doing so (Khan, Waris, Panigrahi, Sajid, & Rana, 2022; Guertler & Sick, 2021). In addition, technology can help organizations keep track of their engagement with external stakeholders, something that is essential for maintaining accountability (Lalic, Lalic, Delić, Gracanin, & Stefanovic, 2022; Kirmizi & Kocaoglu, 2022).

Furthermore, negotiation with external stakeholders is important because it allows the companies to agree on what is important to each party, and how those interests can be best met (Gemino, Reich, & Serrador, 2021). It also allows the company to understand what the other party is looking for, and what they are willing to concede (Ika, Diallo, & Thuillier, 2011). They are always concerned about keeping their clients happy and one of the ways to keep the clients happy is timely product delivery. Timely product delivery is essential in engaging and maintaining the trust of external stakeholders (Ika, Diallo, & Thuillier, 2011).

At the same time, these companies also believe in engaging external stakeholders via meetings and workshops. External stakeholders can stay up-to-date with what's going on at the company by attending regular meetings, either daily or weekly (Ika, Diallo, & Thuillier, 2011). This is a great opportunity for clients to communicate their needs and give feedback on the services they are receiving. Likewise, workshops and training programs also provide an opportunity for exchanging information and knowledge between two parties (Jonas, Boha, Sörhammar, & Moeslein, 2018). Workshops and training programs provide an opportunity for exchanging information and knowledge between external stakeholders and IT companies (Khan, Waris, Panigrahi, Sajid, & Rana, 2022). These activities also create an environment that supports development of new skills and capabilities. Therefore, with mutual understanding and cooperation, external stakeholders and IT companies make projects successful.

Moreover, giving or receiving feedback from external stakeholders also keep them engaged with the project (Huang & Chen, 2022). Some IT companies like to give feedback to their vendors, whereas some welcome feedback from external stakeholders. After a project is completed, clients and stakeholders provide feedback on the services they received. This helps to improve future strategies and services (Khan, Waris, Panigrahi, Sajid, & Rana, 2022). Some companies get happy when they get negative feedback from their clients because they think it provides room for improvement. Therefore, even negative feedbacks are better than not receiving any feedback (Jonas, Boha, Sörhammar, & Moeslein, 2018). Similarly, evaluating the engagement of stakeholders is also very important, as it allows the company to gauge stakeholder involvement and contribution to organizational success (Ho et al., 2021). Likewise, retrospectives are a powerful tool for engaging external stakeholders. By looking back at what has been accomplished, external stakeholders can be involved in the decision-making process and be a part of the team's success (Huang & Chen, 2022; Gemino, Reich, & Serrador, 2021).

CONCLUSION

The impact of Islamic branding and marketing is far more reaching as Muslim consumers are not obliged to one country but exist in almost every part of the world. The study adds to the current literature by relating the marketing mix application in Muslim societies and countries. Any Islamic setting and culture can use the framework employed in this research. Significantly, the impact of Islamic branding and marketing is far more reaching as Muslim consumers are not obliged to one country but exist in almost every part of the world. This finding has opened up many possibilities for further study. As an illustration, two variables (Islamic Marketing and Islamic Branding) can be used to check the indirect effect as a mediator between Islamic Marketing Mix and Consumer Perception. Additionally, empirical research might examine how people view and behave toward female marketers in a Muslim society. Investigating the factors influencing non-Muslim consumers to choose Islamic Halal could be another line of inquiry.

Author's contribution:

Bakhtawar contributed to the main idea, data collection and first draft writing

Ansar Ali Mehdi contributed to the literature collection and methods

Maria Zalfaqr Said worked on formal analysis and English language

Moomal Asad worked on methods, reviews and corrections.

Consent to Participate

The authors declared that they have no known competing financial interests or personal relationships, which seem to affect the work reported in this article. We declare that this deals with human participants and human data or human rights issues are discussed and evaluated.

Consent for Publication

We do not have any individual person's data in any form.

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REFERENCES

- Acciarini, C., Borelli, F., Capo, F., Cappa, F., & Sarrocco, C. (2022). Can digitalization favor the emergence of innovative and sustainable business models? A qualitative exploration in the automotive sector. *Journal of Strategy and Management*, Vol. 15 No. 3, <https://doi.org/10.1108/JSMA-02-2021-0033>, 335-352.
- Acebo, E., Miguel-Dávila, J.-Á., & Nieto, M. (2021). External stakeholder engagement: Complementary and substitutive effects on firms' eco-innovation. *business strategy and the environment* Volume 30, Issue 5 , 2671-2687.

- Akbar, F., & Shahid, R. (2022). Risk management (RM) and project success (PS) of electrical power transmission and distribution systems: the moderation role of human resource management. *International Journal of Energy Sector Management*, <https://doi.org/10.1108/IJESM-03-2021-0010>, 11-23.
- Albats, E., Alexander, A., Mahdad, M., Miller, K., & Post, G. (2020). Stakeholder management in SME open innovation: interdependences and strategic actions. *Journal of Business Research* Volume 119, 291-301.
- Avotra, A. A., Chengang, Y., Marcelline, T. R., Asad, A., & Yingfei, Y. (2021). Examining the Impact of E-Government on Corporate Social Responsibility Performance: The Mediating Effect of Mandatory Corporate Social Responsibility Policy, Corruption, and Information and Communication Technologies Development During the COVID era. *Frontiers in Psychology*, 1-11.
- Ayat, M., Ullah, A., & Kang, C. (2022). The unsolicited proposal and performance of private participation infrastructure projects in developing countries. *Journal of Engineering, Design and Technology*, <https://doi.org/10.1108/JEDT-12-2021-0730>, 11-23.
- Baah, C., Acquah, I. S., & Ofori, D. (2022). Exploring the influence of supply chain collaboration on supply chain visibility, stakeholder trust, environmental and financial performances: a partial least square approach. *Benchmarking: An International Journal*, Vol. 29 No. 1, <https://doi.org/10.1108/BIJ-10-2020-0519>, 172-193.
- Baden, D. (2010). "CSR: an opportunity for SMEs", in Louche, C., Idowu, S.O. and Filho, W.L. (Eds),. *Innovative CSR: From Risk Management to Value Creation*, Greenleaf Publishing Limited, Sheffield, 84-101.
- Barendsen, W., Mu, A. C., & Silvius, G. (2021). Exploring team members' perceptions of internal sustainability communication in sustainable project management. *Project Leadership and Society* Volume 2, 1-13.
- Bhatti, S. H., Santoro, G., Sarwar, A., & Pellicelli, A. C. (2021). Internal and external antecedents of open innovation adoption in IT organisations: insights from an emerging market. *Journal of Knowledge Management*, Vol. 25 No. 7, <https://doi.org/10.1108/JKM-06-2020-0457>, 1726-1744.
- Boaz, A., Borst, R., Kok, M., & O'Shea, A. (2021). How far does an emphasis on stakeholder engagement and co-production in research present a threat to academic identity and autonomy? A prospective study across five European countries. *Research Evaluation*, Volume 30, Issue 3, 361–369.
- Burton, B. K. (1996). Feminist ethics as moral grounding for stakeholder. *Business Ethics Quarterly*, 6, 133.

- Buuse, D. v., Winden, W. v., & Schrama, W. (2021). Balancing Exploration and Exploitation in Sustainable Urban Innovation: An Ambidexterity Perspective toward Smart Cities. *Journal of Urban Technology*, 175-197 .
- Castro, G. M.-d. (2021). Exploring the market side of corporate environmentalism: Reputation, legitimacy and stakeholders' engagement. *Industrial Marketing Management* Volume 92, , 289-294.
- Derakhshan, R., Turner, R., & Mancini, M. (2019). Project governance and stakeholders: a literature review. *International Journal of Project Management* Volume 37, Issue 1, 98-116.
- Fashina, A. A., Omar, M. A., Sheikh, A. A., & Fakunled, F. F. (2021). Exploring the significant factors that influence delays in construction projects in Hargeisa. *heliyon*, Volume 7, Issue 4, e06826, 1-9.
- Gemino, A., Reich, B. H., & Serrador, P. M. (2021). Agile, Traditional, and Hybrid Approaches to Project Success: Is Hybrid a Poor Second Choice? *Project Management Journal* , Vol. 52(2) , 161–175.
- Giacomarra, M., Crescimanno, M., Sakka, G., & Galati, A. (2020). Stakeholder engagement toward value co-creation in the F&B packaging industry. *EuroMed Journal of Business*, Vol. 15 No. 3, <https://doi.org/10.1108/EMJB-06-2019-0077>, 315-331.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business ethics*, 315-327.
- Guertler, M. R., & Sick, N. (2021). Exploring the enabling effects of project management for SMEs in adopting open innovation – A framework for partner search and selection in open innovation projects. *International Journal of Project Management* Volume 39, Issue 2, 102-114.
- Huang, Y.-C., & Chen, C. T. (2022). Exploring institutional pressures, firm green slack, green product innovation and green new product success: Evidence from Taiwan's high-tech industries. *Technological Forecasting and Social Change* Volume 174, 11-22.
- Hummels, H. (1998). Organizing ethics: A stakeholder debate. *Journal of Business Ethics*,. *Journal of Business Ethics*,.
- Ika, L. A., Diallo, A., & Thuillier, D. (2011). The empirical relationship between success factors and dimensions: The perspectives of World Bank project supervisors and managers. *International Journal of Managing Projects in Business*, Vol. 4 No. 4, <https://doi.org/10.1108/17538371111164092>, 711-719.
- Jonas, J. M., Boha, J., Sörhammar, D., & Moeslein, K. M. (2018). Stakeholder engagement in intra- and inter-organizational innovation: Exploring antecedents of engagement in service ecosystems. , *Journal of Service Management*, Vol. 29 No. 3. <https://doi.org/10.1108/JOSM-09-2016-0239>, 399-421.
- Jones, P., Maas, G., Kraus, S., & Reason, L. L. (2021). An exploration of the role and contribution of entrepreneurship centres in UK higher education institutions. *Journal of Small Business and*

- Kaboré, S. E., & Sané, S. (2022). The effect of opportunism on the success of international development (ID) projects in a context dominated by a collectivist culture. *International Journal of Managing Projects in Business*, Vol. 15 No. 3, <https://doi.org/10.1108/IJMPB-09-2021-0253>, 548-568.
- Khan, A., Waris, M., Panigrahi, S., Sajid, M. R., & Rana, F. (2022). Improving the Performance of Public Sector Infrastructure Projects: Role of Project Governance and Stakeholder Management. *Journal of Management in Engineering*, 37(2): 04020112, 1-20.
- Khristiningrum, V. A., Gustomo, A., & Ginting, H. (2021). Strengthening Human Capital Department Roles through Building Collaboration with External Stakeholders. *The Asian Journal of Technology Management* Vol. 14 No. 2, 192-204.
- Kineber, A. F., Othman, I., Oke, A. E., Chileshe, N., & Zayed, T. (2021). Exploring the value management critical success factors for sustainable residential building – A structural equation modelling approach. *Journal of Cleaner Production* Volume 293, 15 , 11-23.
- Kirmizi, M., & Kocaoglu, B. (2022). The influencing factors of enterprise resource planning (ERP) readiness stage on enterprise resource planning project success: a project manager's perspective. *Kybernetes*, Vol. 51 No. 3, <https://doi.org/10.1108/K-11-2020-0812>, 1089-1113.
- Köpsel, V., Kiipper, G. d., & Peck, M. A. (2021). Stakeholder engagement vs. social distancing—how does the Covid-19 pandemic affect participatory research in EU marine science projects? *Maritime Studies* , 189–205.
- Lalic, D. C., Lalic, B., Delić, M., Gracanin, D., & Stefanovic, D. (2022). How project management approach impact project success? From traditional to agile. *International Journal of Managing Projects in Business*, Vol. 15 No. 3, <https://doi.org/10.1108/IJMPB-04-2021-0108>, 494-521.
- Lee, C. W. (2007). s there a place for private conversation in public dialogue? Comparing stakeholder assessments of informal communication in collaborative regional planning. *American Journal of Sociology*, 41-96.
- Lehtinen, J., & Aaltonen, K. (2020). Organizing external stakeholder engagement in inter-organizational projects: Opening the black box. *International Journal of Project Management* Volume 38, Issue 2, 85-98.
- Lieshou, J. W., Nijhof, A. H., Naarding, G. J., & Blomme, R. J. (2021). Connecting strategic orientation, innovation strategy, and corporate sustainability: A model for sustainable development through stakeholder engagement. *business strategy and the environment*, Volume 30, Issue 8, 4068-4080.

- Liu, C., Cao, J., Duan, K., & Wu, G. (2021). Effect of network position on inter-team conflict and project success in megaprojects. *Engineering, Construction and Architectural Management*, <https://doi.org/10.1108/ECAM-05-2022-0438>, 11-23.
- Magano, J., Silvius, G., Silva, C. S., & Leite, Â. (2021). The contribution of project management to a more sustainable society: Exploring the perception of project managers. *Project Leadership and Society* Volume 2, 1-9.
- Martinsuo, M., & Geraldi, J. (2020). Management of project portfolios: Relationships of project portfolios with their contexts. *International Journal of Project Management* Volume 38, Issue 7, 441-453.
- Mayor, B., Toxopeus, H., McQuaid, S., Croci, E., Lucchitta, B., Reddy, S. E., . . . Jens, A. (2021). State of the Art and Latest Advances in Exploring Business Models for Nature-Based Solutions. *Sustainability* , 13(13), 7413; <https://doi.org/10.3390/su13137413>, 1-21.
- Moradi, S., & Kähkönen, K. (2022). Success in collaborative construction through the lens of project delivery elements. *Built Environment Project and Asset Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BEPAM-09-2021-0118>, 11-23.
- Olander, S., & Landin, A. (2008). A comparative study of factors affecting the external stakeholder management process. *Construction Management and Economics* Volume 26, Issue 6, 553-561.
- Oppong, G. D., Chan, A. P., Ameyaw, E. E., Frimpong, S., & Dansoh, A. (2021). Fuzzy Evaluation of the Factors Contributing to the Success of External Stakeholder Management in Construction. *Journal of Construction Engineering and Management / Volume 147 Issue 11* , 11-23.
- Project Management Institute. (2017). A guide to the project management body of knowledge (PMBOK guide). Project Management Institute, publisher.
- Rasool, S. F., Chin, T., Wang, M., Asghar, A., Khan, A., & Zhou, L. (2022). Exploring the role of organizational support, and critical success factors on renewable energy projects of Pakistan. *Energy* Volume 243, 15 , <https://doi.org/10.1016/j.energy.2021.122765>, 1-12.
- Rondi, E., Massis, A. D., & Kraus, S. (2021). Servitization through open service innovation in family firms: Exploring the ability-willingness paradox. *Journal of Business Research* Volume 135, 436-444.
- Saad, A., Zahid, S. M., & Muhammad, U. B. (2022). Role of awareness in strengthening the relationship between stakeholder management and project success in the construction industry of Pakistan. *International Journal of Construction Management* Volume 22, Issue 10, 1884-1893.
- Saad, A., Zahid, S. M., & Muhammad, U. B. (2022). Role of awareness in strengthening the relationship between stakeholder management and project success in the construction

industry of Pakistan. *International Journal of Construction Management* Volume 22, Issue 10, 1884-1893.

- Sané, S., & Abo, P. (2021). Transactional leadership and success of international development projects (IDP): mediating effects of cooperative style to conflict resolution and team potency. *Management Research Review*, Vol. 44 No. 12, <https://doi.org/10.1108/MRR-09-2020-0575>, 1623-1638.
- Sawadogo, D., Sané, S., & Kaboré, S. E. (2022). Sustainability management and the success of international development projects: the role of political and social skills. *Journal of Business and Socio-economic Development*, <https://doi.org/10.1108/JBSED-02-2022-0020>, 11-23.
- Silvius, A. G., & Graaf, M. d. (2019). Exploring the project manager's intention to address sustainability in the project board. *Journal of Cleaner Production* Volume 208, 1226-1240.
- Turner, J. R. (2009). *Handbook of project-based management: Leading strategic change in organizations*. McGraw-Hill Education.
- Wang, T., Xu, J., He, Q., Chan, A. P., & Owusu, E. K. (2022). Studies on the success criteria and critical success factors for mega infrastructure construction projects: a literature review. *Engineering, Construction and Architectural Management*, <https://doi.org/10.1108/ECAM-12-2020-1042>, 11-19.
- Wang, W., Gao, S., Mi, L., Xing, J., Shang, K., Qiao, Y., . . . Xu, N. (2021). Exploring the adoption of BIM amidst the COVID-19 crisis in China. *Building Research & Information*, VOL. 49, NO. 8, <https://doi.org/10.1080/09613218.2021.1921565>, 930–947.
- Winch, C. (2017). *Teachers' know-how: A philosophical investigation*. John Wiley & Sons.
- Zaman, U., Damij, N., Khaliq, A., Nawaz, M. S., & Pradana, M. (2022). Feeling “holier than thou”: exploring the critical nexus between project governance, exploitative leadership and multi-dimensional success in ICT projects. *International Journal of Managing Projects in Business*, Vol. 15 No. 5, <https://doi.org/10.1108/IJMPB-11-2021-0294>, 816-841.
- Zenk, L., Hynek, N., Edelmann, N., Virkar, S., Parycek, P., & Steiner, G. (2022). Exploring motivation to engage in intraorganizational knowledge sharing: a mixed-methods approach. *Kybernetes*, Vol. 51 No. 13, <https://doi.org/10.1108/K-12-2020-0868>, 18-32.

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