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EQUITABLE LEARNING COMMUNITY: INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS (IPA) OF A MUSLIM IN THE B40 SEGMENT DURING COVID-19

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ABSTRACT

This paper explores the lived experiences of a female Muslim adult learner from the Bottom 40 household income segment (known as the B40 group) who completed a hybrid leadership program in the Klang Valley during the COVID-19 pandemic. Using interpretative phenomenological analysis (IPA), the paper identifies self-regulated learning skills, social presence, and the leverage of instrumental social capital as factors that contributed to the informant's achievement of a diploma despite significant challenges. Promoting an equitable learning community in higher education driven by digital technological changes among the B40 group is still inadequate, especially when the world is rapidly moving toward globalisation. The informant's experience demonstrates that with initiative, goal setting, self-regulation, and persistence, supported by a social network, it is possible to overcome economic and social barriers and achieve academic success. The achievement was significant, despite the challenges over an extended period of uncertainty through which the informant made exceptional efforts to succeed. The informant would remain in the low social class position without these determinants. The paper's findings are significant for curriculum designers, training providers and educators, emphasizing the importance of fostering these determinants. By focusing on these success factors, educators can

better support learners from the B40 group and promote a more equitable learning environment.

Keywords: B40 adult learner, self-regulated learning, social presence, social capital, leadership programmes.

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1. INTRODUCTION

The COVID-19 pandemic has accelerated the adoption of digital technology in the education sector, leading to the widespread use of online learning platforms, video conferencing tools, and other digital tools for teaching and learning (Chattaraj & Vijayaraghavan, 2021; Hayes & Graham, 2020; Cleveland-Innes et al., 2019). This shift towards digital learning has allowed for greater flexibility and accessibility, as learners can participate in courses from any location and at any time, if they have an internet connection (Ramakrishnan et al., 2021; Zhong et.al., 2022). The adoption of blended learning and other digital tools (Zhu & Bonk, 2020; Alakrash et al., 2008; MIM, 2023) has opened new opportunities for adult learners to participate in leadership courses from anywhere in the world, but efforts must also be made to ensure that all learners, including those from the vulnerable groups such as those from the Bottom 40 household income segment (B40 group) have support to fully participate in these new learning environments.

Blended learning, which combines traditional classroom instruction with online learning, has become increasingly popular during the pandemic. It allows for a more personalized learning experience, as learners can work at their own pace and review materials as needed (Loon, 2018). Blended learning also provides opportunities for learners to engage in collaborative activities and discussions, as well as receive individualized feedback and support from instructors (Al Hamdi & Edakkalayil, 2022). However, the shift towards digital learning has also highlighted the digital divide, as not all learners have access to the necessary technology and internet connectivity (Woo & Haslinda, 2021). This has led to increased efforts to bridge this

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gap, such as the provision of devices and internet connectivity to disadvantaged learners. The B40 group occupies an essential place in the Malaysian workforce (12th MP, 2023) and is a critical concern for educators to meet their training and development needs (Zakaria et al., 2022). Despite the significance, research on the B40 adult learner in Malaysia is still inadequate, and it is imperative and timely to have a deeper understanding of how B40 learners successfully engage in the learning process. The COVID-19 pandemic has brought about unprecedented changes to the practice of teaching and learning, with digital technology playing a crucial role in enabling the continuity of education during this challenging time.

The research question focuses on the lived experiences of a female B40 Muslim learner who successfully completed a leadership diploma during the pandemic. The research question addressed what was it like for her who had successfully completed her leadership diploma over the pandemic? What were the factors that enabled her to complete the programme successfully?

The study is framed within an interpretive phenomenological analysis (IPA), which aims to explore and understand the individual's experiences and the meaning she ascribe to it. IPA (Backer & Schad, 2022; Jedličková, et al., 2022; Emery & Anderman, 2020; Giorgi, 2009; Van Manen, 1990, 2017; Finlay, 2014). The IPA study draws on a blend of conceptual theories, including phenomenology, hermeneutics, and idiography (Emery & Anderman, 2020; Pietkiewicz & Smith, 2014).

The study then highlights the importance of self-regulated learning skills, strong social presence, and instrumental social capital in promoting equitable learning outcomes for an adult learner from the B40 group. The key informant's experience underscores the need for learners to set goals, persist, and leverage social networks to succeed in their educational pursuits. The findings have implications for curriculum designers, training providers and educators to focus on these success factors to promote equitable learning outcomes among B40 learners.

Firstly, the paper begins by highlighting the fact that the struggles of the B40 class (Letchumanan, 2022) in educational attainment are not solely due to the COVID-19 pandemic, but rather are rooted in broader societal structures that perpetuate inequality (Zakaria et al., 2022; Said et al., 2022; Ferrare & Phillippo, 2021). The social capital theory is then introduced to support the idea that strong social networks and support systems, not only from the family network but particularly from higher education institutions, can positively impact the adult learner's academic success (Wang et. al., 2022; Vrieling-Teunter et.al., 2022; Ferrare & Phillippo, 2021; Mahmood; 2015).

The second part of the paper discusses the association between self-regulated learning (SRL) (Zimmerman, 1990, 2000, 2008; Zimmerman & Schunk, 2001) and adult learners (Knowles, 1980, 1984; Knowles, Holton & Swanson, 2011; Merriam & Brockett, 1997). The paper emphasizes the importance of social presence in the Community of Inquiry (CoI) (Garrison (2020, 2017, 2007, 1997; Garrison, Anderson & Archer, 2010; Akyol et al., 2009; Bailey, 2022; Castellanos-Reyes, 2020; Fiock, 2020; Krzyszkowska & Mavrommati, 2020; Choo et al., 2019;

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Angelaki & Mavroidis, 2013), as well as setting scaffoldings (Salyers et.al., 2014; Feng et.al., 2017; Reingold, Rimor & Kalay, 2008) at appropriate interventions, in predicting and achieving learner engagement and persistence. The paper then notes that SRL is particularly crucial for academic achievement in blended learning programs (Zhong et al., 2022), which have blurred the lines between traditional and online learning modes.

The third part of the paper involves the analysis of interview transcripts to identify any emerging themes or experiential statements (Smith, Flowers & Larkin, 2009; Smith & Osborn, 2008; Moustakas, 1994). The IPA is used to better understand the experiences and perspectives of the B40 adult learner. Finally, the paper reflects on the limitations of the research and acknowledges that further studies are needed to better understand the challenges and needs of adult learners, particularly those from marginalized communities.

2. REVIEW OF LITERATURE

2.1 Bottom 40 (B40) Household Income Segment

The income categories in Malaysia are divided into the B40, M40, and T20 groups based on monthly income levels. The B40 group represents the lowest 40% (less than RM4,850 income category), while the M40 represents the middle 40% (RM4,850-10,959), and the T20 represents the top 20% (above RM10,959). The B40 group has the lowest income level, with less than RM4,850 per month. The pandemic has had a significant impact on household incomes in Malaysia, with more than 600,000 households in the M40 category falling into the B40 category due to job losses (Department of Statistics Malaysia, 2023).

This highlights the importance of upskilling for the B40 group, as without relevant skills, they may become even more vulnerable in the job market. the Twelfth Malaysia Plan (12MP, 2021-2025) emphasizes the importance of upskilling for this group. This indicates that there is recognition at the policy level (PENJANA, 2020) of the need to address the challenges faced by them in the job market (Ramakrishnan & Norizan, 2021; Letchumanan, 2022; Boeren, Roumell & Roessger, 2020; Sirat et al., 2020).

2.1.1 Social Capital Theory

The concept of social capital (Putnam, 1996; Coleman, 1988; Fukuyama, 1996) is seen as critical to success, particularly in knowledge sharing and creating value through reciprocal relationships, where trust and support are key factors (cited in Thomas & Gupta, 2021). Research has highlighted that effective use of social capital can contribute to individual success, and French sociologist Pierre Bourdieu, suggests that individuals build their social capital resources through participation in social life (Bourdieu, 1986; Carpiano, 2006). Other studies asserts that the success of various individuals can be credited to the effective use of social capital (Said et al., 2022; Wojciechowska, 2022; Thomas & Gupta, 2021; Mahmood, 2015; Song, 2011).

Working class B40 adult learners who go back to acquire a professional certification have the added responsibility of upholding their identity, overcome digital inequality (Ferrare & Phillippo, 2021), while striking a balance between being a good parent and a good student (Darling-Hammond & Hyler, 2020).

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For these learners, the challenge of balancing their identity and responsibilities during the pandemic are compounded by the need to maintain a strong sense of community commitment. They are also expected to be 'aligned with a strong sense of community commitment and a desire to give back' (Speirs, 2021) coupled with the added stresses, anxieties and isolation felt during this global pandemic (Li, 2022).

Over Covid-19, the two major sources of the social capital of the B40 adult learner were the family and the higher institution of learning (HIL). Social capital is regarded as the resources that the family may have (their social position, financial and physical resources) to use to their advantage (Thomas & Gupta, 2021). Social capital may also take the forms of friendships between course mates and colleagues, and groups with similar values, in bridging where each may lend an extra hand in helping the other to access resources, and especially where they might assist those not in same social group (Mahmood, 2015). Studies have shown that social capital resources, especially informal relationships, and contacts more than formal social capital like participation in organization, affect a learner's education more than their educational level, race, affluence, or completeness of the family (Crul et al., 2017).

2.1.2   Self-Regulated Learning (SRL)

Knowles (1970) developed his theory of adult learning, or andragogy, based on four assumptions: (a) adults are independent and self-directed; (b) adults bring a range of experiences to the learning process; (c) adults learn through problem solving; and (d) adults learn best when the topic is relevant to their lives. For individuals with little formal

education, it's important to recognize that they still have a wealth of prior learning from their life experiences (Stephens & Coryell, 2021; Burns, 2020; Blaszczak, 2012). This can include informal learning from family, community members, and work experiences. Incorporating these prior learning experiences into the learning process can make the learning more relevant and meaningful for them (MacMahon et al., 2022) This is particularly important because adults are more likely to engage in learning when they see its immediate applicability to their lives.

Zimmerman's self-regulation theory model (SRL) further defines self-regulated learning as one of the most fundamental and essential skill to ensure learning achievement for the adult learner (Zimmerman, 1990, 2000, 2008; Zimmerman & Schunk, 2001). The adult learner excels in a social cognitive learning environment where she can independently organize and execute strategies to deal with her challenges (Dewey, 1916; Knowles, 1980, 1984; Knowles, Holton & Swanson, 2011; Bandura, 1993, 1994; Merriam & Brockett, 1997; Burns, 2020). From this perspective, individuals with good SRL have been predicted to academic success as they are able to deploy a range of learning strategies such as self-monitoring, coping, reflective skills that benefit their academic performance (Pintrich & Groot, 1990; Zimmerman, 2000). It reflects the adult learner's initiative to plan, monitor and regulate their own learning through their maintenance of cognition, emotion, and personal behavior to achieve their goals (Pylväs, 2021; Ye et al., 2022). B40 individuals who are proficient in SRL can deploy a range of learning strategies such as self-monitoring, coping, and reflective skills that benefit their academic performance (Ye et al., 2022). Emerging studies have shown that learners with

higher SRL skills are more likely to use their ability and learning environment to control their learning to achieve good learning results (Zhong et al., 2022; Zhou, 2022).

The SRL model is highly adaptable tool (Siadaty et al., 2012) and can be applied to the specific learning needs of the B40 learner. The three interrelated stages of forethought, performance, and self-reflection can be tailored to the B40 learner's experiences and specific learning activities (Zimmerman, 2008). By promoting self-regulated learning, educators can help B40 learners develop the skills they need to succeed academically and beyond.

2.1.3 Social Presence (SP) and Scaffoldings in Learning Communities

The original social presence (SP) theory formulated by Short et. al. (1976) attempted to project the 'realness' of the other persons in the interaction namely the learner, the other learners, and the teachers in online learning. The Community of Inquiry (CoI) model, popularized by Garrison (2020, 2017, 2007, 1997; Jezegou, 2020) redefined SP as a multifaceted form that includes affective expression, open communication, and group cohesion (Akyol, Garrison & Ozden, 2009; Stenbom, 2018).

It is through these components that learners establish mutual awareness and recognition within the group, projecting themselves socially through communication whether in WhatsApp chatgroups, on Google classroom or during Zoom tutorial sessions. The affective expressions refer to sharing personal expressions and values, while open communication involves establishing mutual awareness and recognition (Vaughan & Lee, 2020). Group cohesion suggests that the

learner has developed and maintained a sense of group commitment in the course. Social presence has been found to have a positive impact on learning via peer interaction in blended learning settings.

Social presence is an important component of online and blended learning environments (Kreijns et al., 2022). Learners who can effectively express themselves, engage in open communication, and establish group cohesion are more likely to succeed in their courses. By promoting social presence, educators can help create a supportive and engaging learning environment that fosters peer interaction and collaborative learning (Vaughan & Lee, 2020). More importantly, SP showed a favorable influence on learning through peer interaction in the blended learning setting (Zhong et al., 2022; Szeto, 2015).

Additionally, internet connectivity issues and limited access to reliable technology (Puntularb, Yippikun, & Pinchusri, 2021) can also further hinder the B40 individual's ability to engage in online or blended learning (Fernandez, 2021; Chew & Jaafar, 2020). These factors can lead to a decrease in SP and a sense of disconnection (Li, 2022; Speirs, 2021; Darling-Hammond & Hyler, 2020) from the learning community, ultimately affecting their motivation and engagement in the course (Li et. al., 2022). Therefore, it is crucial for educators and institutions to consider these challenges and provide appropriate support and resources to ensure that the B40 individual can fully participate in the online or blended learning environment and establish meaningful social connections with their peers (Akyol, Garrison & Ozden, 2009; Archer-Kuhn et al., 2021, 2020; Boeren et al., 2020; Fiock, 2020; Kazanidis et al., 2018). This may include providing access to technology, internet connectivity support,

and tailored learning resources to meet the needs of the B40 individual (Nor Zuriati et al., 2022).

SP has also been found to be a significant predictor of student engagement and persistence in online learning environments especially during COVID-19 (Wang et. al., 2022; Bailey, 2022; Micsky & Foels, 2019). This is because social presence facilitates the development of a sense of community, which is important for learners to feel connected and engaged in their learning. Research has shown that learners who feel a sense of belonging in their online learning community are more likely to participate in discussions and collaborative activities, which in turn leads to increased motivation and academic success (Archer-Kuhn et al., 2020; Li, 2022). Numerous studies suggest that social presence plays a critical role in creating a sense of community in online and blended learning environments (Zhong et. al., 2022; Redstone, et al., 2018). When learners feel socially connected to their peers and instructors, they are more likely to engage with the learning material and persist in their studies (Kreijns et al., 2022). It is important for educators to prioritize social presence and design their courses to facilitate interactions and foster a sense of community among learners.

The CoI model provides a framework for designing and implementing appropriate levels of scaffolds at different phases of learning to promote effective learning (Castellanos-Reyes, 2020; Akyol, Garrison & Ozden, 2009). Scaffolding is an essential factor that enhances learners' social, teaching, and cognitive presence in online or blended learning environments (Vygotsky, 1978; Salyers et.al., 2014; Feng et.al., 2017). Scaffolding refers to the provision of support or assistance to learners at appropriate stages in their learning to enable them

to perform tasks that they would not be able to do independently. During the socialization phase, scaffolds may include icebreakers, social media tools, and discussion forums to help learners establish a sense of community and engage in social interactions. During the cognitive phase, scaffolds such as formative feedback, self-assessment, and concept mapping may be used to facilitate the development of critical thinking skills and enhance learning outcomes (Darling-Hammond & Hyler, 2020; Feng et. al., 2017; Salyers et al., 2014).

2.2 Literature Review Summary

The theoretical research reviewed in the paper drew on a blend of different theories (see Figure 2), including the social capital theory, the self-regulated learning (SRL) theory, and the social presence from the Community of Inquiry (CoI) Model. By using a range of theories, the research was able to provide a more comprehensive understanding of the factors that contribute to the successful learning outcomes of a learner. Appendix 1 provides a summary of the literature review.
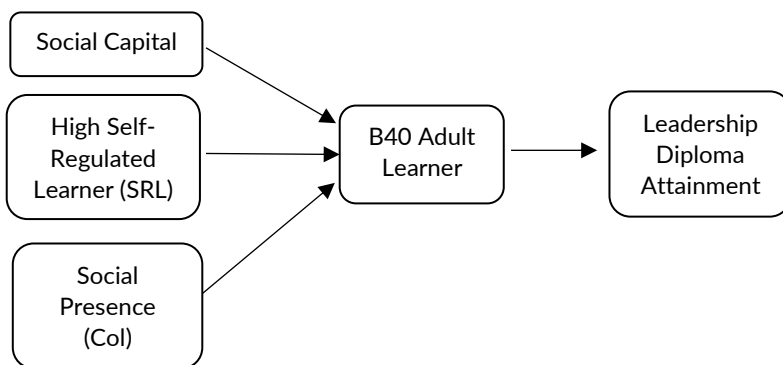
Figure 1. Theoretical Framework Summary

3. RESEARCH METHODOLOGY

In this study, the IPA was used to explore how a B40 individual made sense of her experience in the context of her learning and leadership Diploma attainment over the pandemic. A single case study (Yin, 2011, 2014; Creswell, 1997, 2007, 2009) was conducted, with the participant being one of ten B40 individuals who had successfully completed the Diploma. This approach allowed for a detailed exploration of the key informant's experience, highlighting the specific challenges and opportunities that arose from learning during the pandemic as a B40 individual.

3.1 Research Design

IPA is a useful methodology for understanding the lived experiences of individuals in a particular context, and for gaining insight into how they make sense of those experiences (Moustakas, 1994; Smith, 2004; Giorgi, 2009; Liao et.al., 2021; Philipsen et al., 2019; Noon, 2018; Van Manen, 1990, 2017). By focusing on the participant's personal experiences and perspectives, the researcher can gain a deep understanding of the meaning and significance of those experiences. This approach can also help to shed light on the complex and nuanced ways in which people navigate challenges and find meaning in their lives, which can be particularly valuable in the context of education and learning (Morelli et al., 2021).

3.2 Sampling

The use of purposive sampling allows for a more focused and targeted approach to data collection and analysis, as the

researcher can select participants who are more likely to provide rich and relevant data. The key informant was a part of a cohort of ten B40 learners who had successfully completed their diploma. The informant is a gregarious individual who was optimistic, openminded, and willing to share her experiences openly. She was cooperative and cheerful throughout the interviews. Table 1 details her profile.

Table 1. Summary of The Participant's Profile

Participant	Gender /Age	Personal Profile	Designation / Industry	Description of Duties	Work (Years)	Qualifications
Key Informant 1	Female 37 years	Muslim Married 5 Children (1-10 years)	Accounts Officer, Aviation	Administrative, accounts, inflight catering scheduling	13	Form 5, SPM (Secondary School Cert)

The IPA follows three stages: stage 1 (description), (ii) stage 2 (interpretation) and (iii) stage 3 (emergent themes – superordinate themes and subordinate themes). Each stage is meticulously discussed in the data analysis section.

3.3 Data Collection Process

Data collection consisted of a main *Zoom* interview completed on 3 February 2023 lasting for 60 minutes with a shorter follow-up interview on *WhatsApp* messaging for clarification, and verification of information. This process enhanced the rigour of the IPA data collection process and provide additional insights to the informant's experiences. Additionally, the researcher followed a specific, systematic case study approach

to collect and analyse data (Patton, 2002; Yin, 2018). The key informant's identity was protected, and all her personal identity were removed.

3.4 Validity and Reliability

The researcher verified the data with the informant for accuracy, and transcripts from the interview were shared with the participant prior to beginning the work of identifying themes. Permission was obtained from the Programme Co-ordinator before the commencement of the study.

3.5 Method of Data Analysis

IPA data analysis consists of a detailed and meticulous examination of the individual case before looking for emergent themes. Miles, Huberman, and Saldana (2014) suggested key phases of coding: a first cycle in which codes are assigned to the data themselves, and a second cycle in which new or revised codes are assigned to the existing codes to group and finally to categorize themes. In the analytical steps of the IPA, three stages were employed, namely (i) stage 1 (description), (ii) stage 2 (interpretation) and (iii) stage 3 (emergent themes – superordinate themes and subordinate themes). The details of these stages are available in the data analysis section.

4. ANALYSIS

All findings of the study are presented with a description of the emergent themes, superordinate, and subordinate themes (see Figure 2), and experiential statements (see Table 2) were presented within the IPA framework. Narrative discussion of the emerging themes supported by examples and quotations were interpreted (see Appendix 2). The insights gleaned from

the IPA can help educators, instructional designers, facilitators, and training providers understand the experiences in more depth.
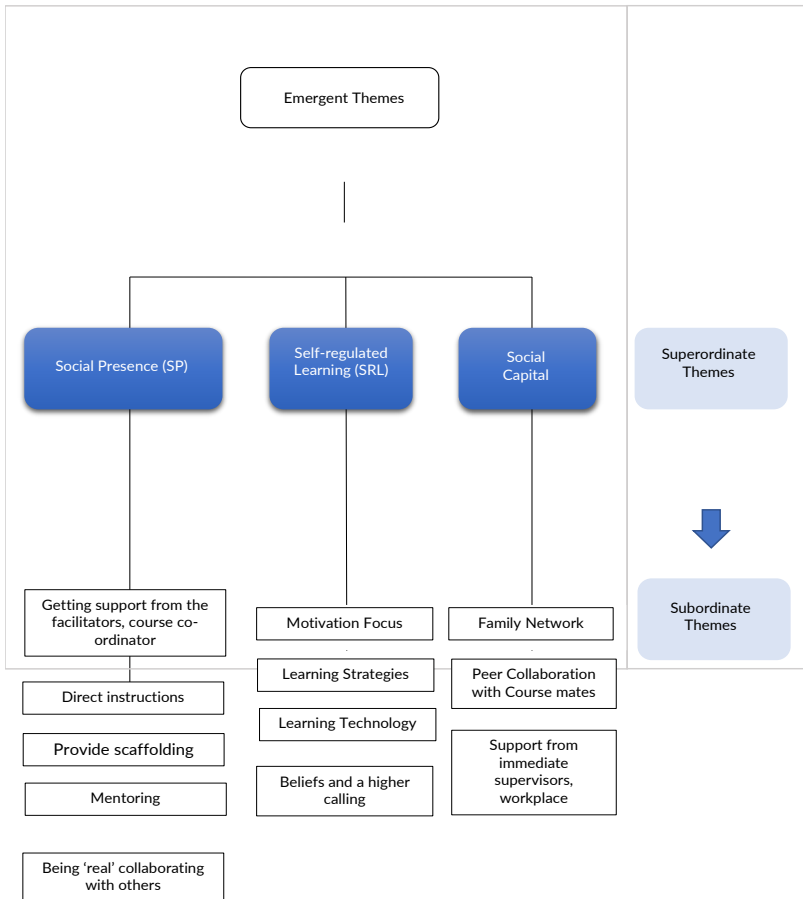
Figure 2. Emergent Themes (Superordinate and Subordinate Themes)

Table 2. Stage 3 - Emergent Themes Expanded (Superordinate and Subordinate Themes)

Superordinate Themes	Subordinate Themes	Sample of References
Social Presence (SP)	Mentoring Provided Scaffoldings	*Ketiga-tiga facilitators memang membantu pelajaran saya.* All 3 of my facilitators helped in my studies and assignments. I must give my cooperation *(Kerjasama)* to my lecturers, and colleagues *(rakan sekerja).*
Self-Regulated Learning (SRL)	Self-coping Strategies	Deadlines for assignments are demanding. I must be *OK* despite the deadlines or closer to the deadlines. I usually stay back after office hours to complete. It is quiet there without my children. Otherwise, I wake up earlier at 4am during the weekdays to complete the assignments. Weekends is for my family.
Social Capital	Family Network Peer Collaboration Support from supervisors at workplace	It was a challenge (*cabaran*) for me to focus. I had a newborn baby over Covid. My children are young - ages 8,6,4 and 1 year old. They were not always co-operative (*tak bagi kerjasama*). I had no housekeeping help. My husband assisted me in the household duties, cooking, and sending my children to school. I only asked (*akan tanya*) those who have siap. Those who know I have finished my assignments, they asked me for help (*tanya saya*). Mutual help. (*Sama2 membantu-lah*). It was essential (*penting mendapat*) to receive support from my workplace supervisors. Very important.

5. DISCUSSION

The findings suggested that during the COVID-19 pandemic, the B40 individual struggled to complete her accredited diploma despite her ultimate attainment. The pandemic was unprecedented, and the learners, facilitators, and higher institutions of learning were unprepared for the immediate transition to online learning. Even more so for this learner who had not been back to formal studies since she completed her secondary schooling. The B40 individual's experience highlights the importance of social support, social presence, and a sense of community in online learning. Despite the challenges she faced, she was able to persevere and complete her diploma with the help of her peers and facilitators.

Firstly, the key informant faced significant difficulties in balancing her responsibilities as a mother with her academic pursuits during the COVID-19 pandemic. The presence of a newborn baby, coupled with the young age of her other children, made it difficult for her to focus on her studies. Additionally, her children were not always cooperative, which could have further added to the challenges she faced in completing her diploma. This highlights the importance of understanding the various challenges faced by the B40 adult learners, particularly those with caregiving responsibilities, and the need for support systems (Ferrare & Phillippo, 2021) and resources to help them balance their responsibilities and achieve their academic goals (Darling-Hammond & Hyler 2020).

The informant did not have access to external support for housekeeping responsibilities during the COVID-19 pandemic. However, her husband played a significant role in helping her

manage the household responsibilities, including cooking and sending their children to school. This highlights the importance of having a supportive partner or family member (Ferrare & Phillippo, 2021) who can help share the caregiving responsibilities, particularly in situations where external support is not available or limited (Thomas & Gupta, 2021). It also underscores the need for policies and programs that support work-life balance and caregiving responsibilities for both men and women (Rahman et. al., 2021).

Learning motivation cannot be easily predicted during the pandemic with so many uncertainties about livelihood. In such a period, focusing on academic achievement was the furthest thing on the B40 individual's mind. Li et al. (2022) have shown that cognitive presence had the highest effect on online motivation, with goal setting and help-seeking next, followed by teaching presence last. Social presence only had a moderate effect in countries which are more goal-oriented and outcome driven (Wang et al., 2022). However, in this case, it was clear that the learner's initiative to set goals, self-regulate her learning, and persist contributed to her learning accomplishment (Pylvas et al., 2022).

Her high level of SRL resulted in her building a positive relationship with her learning, setting goals, improving her persistence through sustaining her self-efficacy (MacMohan et al., 2021). These deeper levels of SRL resulted in longer-term perspectives, more extensive individual, and work history forming a unique environment and learning context (Zhong et al., 2022; Pylvas et al., 2022; Zhou et al., 2020). The informant's SRL skills played a significant role in her academic achievement. By taking control of her learning process, setting goals, and

monitoring her progress, the informant was able to build a positive relationship with her learning experience (Vrieling-Teunter et.al., 2022; Siadaty et al., 2012).

This positive relationship, in turn, helped her to stay motivated and persistent in the face of challenges, ultimately leading to the successful completion of her diploma (Morelli et.al., 2021). The informant's ability to sustain her self-efficacy (Bandura, 1993, 1994), or belief in her ability to succeed, was also an important factor in her success (Loon, 2018). By adjusting her learning strategies to effectively cope (Othman et al., 2021) with meeting deadlines i.e., such as waking up earlier, the informant was able to create more time and space for completing their assignments on time (Morelli et.al. (2021).

This level of dedication and sacrifice may have been necessary for the informant to achieve her academic goals while also juggling her other responsibilities, such as caring for her family. It also underscores the importance of time management and prioritization in achieving success, particularly in contexts where individuals may have multiple demands on their time and attention. This highlights the importance of SRL as a key factor in academic success (Saks & Leijen, 2014; Seufert, 2018; Ye et. al., 2022) particularly for B40 adult learners who may face various challenges in their academic pursuits.

Secondly, the informant experienced a sense of community and mutual support among her peers in the leadership program (macmohan et al., 2021). This is a form of social capital. She only sought help from those who had completed their assignments, indicating a willingness to reciprocate the help she received. As she completed her assignments, others began to seek her help,

demonstrating a mutual exchange of support and a collaborative learning environment with active peer feedback and interaction (vrieling-teunter et al., 2022; micsky & foels (2019). This highlights the importance of fostering a sense of community and collaboration in educational settings, particularly among adult learners who may face various challenges and require support to achieve their academic goals (vaughan & lee, 2020). Social networks and reciprocity have an optimistic influence on work sustainability (thomas & gupta, 2021).

Conversely, her assertiveness and willingness to contribute to class discussions and tutorials not only helped her but also motivated her course mates (Bailey, 2022; Hayes & Graham, 2020; Micsky & Foels, 2019). This suggests that fostering a healthy collaborative and supportive learning environment is crucial for success in online learning, especially for individuals who may face additional challenges due to socio-economic factors (Darling-Hammond & Hyler, 2020). Social presence plays a vital role in promoting learner engagement, persistence, and success in online and blended learning environments (Wang et. al., 2022; Vrieling-Teunter et.al., 2022). The key informant had a strong self-aware presence which was one of the determinants of her success. She was also satisfied and grateful that her facilitators exhibited a strong social presence. Educators and higher institutions of learning should prioritize strategies that enhance social presence, such as encouraging learner-instructor and learner-learner interactions and fostering a sense of community among learners (Park & Kim, 2020). The findings also suggest that being well-versed in technology may

not necessarily be the only factor for success in online learning, as social and emotional support also play a significant role.

The informant engaged in a form of collaborative learning where she only sought help from those who had completed their assignments. In turn, the informant was also able to help others who sought assistance from her. This mutual help and support may have created a positive learning environment where individuals were able to rely on each other for assistance and share their knowledge and skills. This highlights the importance of collaboration and mutual support in learning, particularly in contexts where individuals may face additional challenges or responsibilities, such as adult learners who may have family or work obligations (Morelli et al., 2021).

Consequently, the B40 learner demonstrated these traits, and the support from her learning community, work supervisors, and mentors played a significant role (Thomas & Gupta, 2021) in her successful completion of the leadership diploma. She admitted that without this assistance her completion would be delayed. This suggested that the informant recognized the importance of external support in achieving her academic success. The learning coordinator, who provided personal mentoring and scaffolding (Salyers et.al., 2014; Feng et.al., 2017) played a crucial role in helping the informant overcome challenges and complete her program on time. Without this support, the informant acknowledges that she may have struggled to stay on track or even failed to complete the program. This highlights the importance of providing support and guidance to B40 adult learners, particularly those who may face additional challenges or obstacles, to help them achieve their academic goals. It emphasizes the importance of providing

adequate support and resources to learners from disadvantaged backgrounds to enable them to overcome the challenges they face and achieve their learning goals.

Finally, the key informant's faith played a significant role in her motivation and determination to complete the diploma despite the challenges she faced. She attributed her success to the guidance and blessings from Allah and saw the opportunity as a gift, and sustenance from God. Her faith gave her an intrinsic motivation to pursue her goals and kept her focused on her studies. She believed that other Muslim learners could benefit from her experience and encouraged them to prioritize their family matters while also pursuing their professional learning skills with single-minded determination. Overall, the findings suggest that personal factors, such as faith and intrinsic motivation, can play a critical role in shaping an individual's experience and success in learning.

6. CONCLUSION, IMPLICATIONS & LIMITATIONS OF RESEARCH

A review of the exiting literature indicates that facilitators and program coordinators can contribute to a sense of community and minimize the B40 learner's anxiety and isolation by being present to assist them along the way. The findings highlight three major themes: the importance of fostering the B40 individual's self-regulated learning skills, promoting an active social presence, and addressing the socio-economic factors education leveraging on social capital to support academic success.

Firstly, SRL skills played a significant role in the informant's academic achievement. By taking control of her learning

process, setting goals, and monitoring her progress, the informant was able to build a positive relationship with her learning experience (Vrieling-Teunter et.al., 2022; Siadaty et al., 2012). Secondly, the significant role of social presence and interaction in blended language learning during the COVID-19 pandemic cannot be under scored. A positive collaborative attitude along with interaction and peer collaboration towards a sense of community was found to be crucial determinant for successful learning outcomes as exemplified by the key informant.

Thirdly, there is considerable interest among educators, and training providers for identifying how social capital can be instrumental in impacting the learner's ability to excel in higher education. The learner relies on an intricate network of family, friends, colleagues, and their workplace for academic success. Researchers have shown how social support can mitigate stress, help cope, motivate to learn, foster engagement and retention where friendships help learner cope (Morelli et al., 2021).

Facilitators can also act as mentors to establish strong relationships with their mentees and assist them to focus on their effective use of time (Feng et.al., 2017). These findings can inform the development of effective strategies and interventions to support learners, particularly those from disadvantaged backgrounds, in achieving their educational goals.

Based on the findings of this IPA study, it is suggested that to promote learning achievement, there is a need to consider current practices. At the micro level, a strong social presence as 'being there' in terms of frequency of communication and

interaction between the learner and facilitator; promoting social interactions in a blended learning environment, is a successful determinant in building learning communities, and should not be underestimated. Facilitators and trainers can be better mentors by keeping in close contact with B40 learners and providing scaffoldings at intervals throughout the program. A higher and more conscious level of social presence from learners and facilitators that includes affective expression, open communication style, and response to group cohesion supports individual achievement and results in successful outcomes (Akyol, Garrison & Ozden, 2009). The learners' ability to self-regulate relate positively to academic achievement; and in the planning phase, the support and expression of SP with peers, offer possibilities for feedback and collaboration and an equitable learning community (Siadaty et al., 2012). Learners need to be aware of self-regulation strategies and social presence to prevent tension and increase trust.

At the macro level, it can be stated that the lower strata group struggle over educational resources, rights, and existing practices illuminates competing educational goals and priorities which defines a conflict over education (Ferrare & Phillippo, 2021). Policymakers and policy scholars cannot overlook inter sectional identities that stand to shape student learning, economic opportunity, physical safety, and legal status. Policymakers and educators can invest in high-quality educator prep in these high-need communities. Strong mentoring roles together with interventive scaffoldings (Salyers, 2014) are necessary to ensure that the B40 learner is adequately supported. In conclusion, it is important for facilitators, program coordinators, curriculum designers, and training providers to be

aware of these determinants and focus on these factors to improve learning, create better value for all stakeholders, and ultimately build an equitable learning community for those in the vulnerable group post pandemic and beyond.

Drawing from the findings of this study, a more comprehensive study can be designed with a larger sample. These studies may also be conducted on M40 adult learners to get a broader representation of working adult learners in the Klang Valley. This study can also be expanded by examining cognitive load in the diploma content. Conversely, studies can be conducted on factors that contribute to high attrition rates in certification programs.

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Appendix 1: Literature Review Summary

Title/Sources	Author/authors (Year)	Purpose	Results
SOCIAL CAPITAL 1. Social Capital Theory, Social Exchange, Social Cognitive Theory Models	Thomas & Gupta (2021)	To conduct a bibliometric review of 692 Financial Well-Being (FWB) articles.	1.Social networks and reciprocity (i.e., training) can arouse modern "organization–employee" associations & have an optimistic influence on vocation sustainability.
2. Conflict Theory, Extended: A Framework for Understanding Contemporary Struggles Over Education Policy	Ferrare & Phillippo (2021)	To bring an analytic perspective to conflict over education. To contribute theory that facilitates inquiry about conflict over education.	1.The lower strata group struggle over educational resources, rights, and practices illuminates competing educational goals and priorities - conflict over education. 2. Policymakers and policy scholars cannot overlook inter sectional identities that stand to shape student learning, economic opportunity, physical safety, and legal status.

SELF-REGULATED LEARNING (SRL) 1. Self-regulated Workplace Learning: A Pedagogical Framework Semantic Web-based Environment	Siadaty et al., (2012)	How learners perceive functionalities in SRL practices: Planning, Monitoring, Reflection, at the workplace. To enable participants to consciously embed their learning needs within clearly defined organizational goals.	1. Communicating organizational goals to workers proposed as a motivator for revising, reflecting, & sharing knowledge/competences at workplace. 2. Planning one's learning goals intentionally as part of the projects or tasks - associated organizational and group goals. 3.Co-workers are proactive as learners in the workplace add the motivational component for learning. 3.Users did not heavily draw on the social context (e.g., other users' comments when making learning plans. 5.Information needs to be integrated and accessible
2. SRL learning: self-efficacy, motivation, and intention to drop out.	Morelli et.al. (2021).	To investigate the moderating effects of friendships, learning efficacies, kinds of motivation,	1.Social support can mitigate stress, help cope, motivate to learn, within self-determination.

		and the intention to drop out.	2.SRL fosters engagement & retention where friendships help learner cope.
			3.Teachers encourage study groups to reinforce academic success, develop realistic expectations, and prevent isolation.
			4.Intervention progs focus on performance and positive peer relationships.
3.Vocational student' perceptions of SRL in work-based VET.	Pylvas et al. (2022)	To examine student perceptions in SRL work-based settings.	1.SRL benefits learners resulting in positive relationships with learning, goal level, persistence effort, and self-efficacy.
			2. Deeper levels of SRL resulted in longer-term perspectives, more extensive individual, and work history forming a unique environment and learning context.
4.Learning to learn - implementing SRL into Higher Education.	MacMohan et. al. (2021)	To better understand the barriers and enablers experienced by academics to better inform teaching	1.In CoP, participation and deep engagement results in collective achievements. 2. Students part of CoP learn effectively and

		practices in SRL and Community of Practice (CoP)	ensure current and future success. 3. Identifying barriers help address and overcome issues for better implementation
SOCIAL PRESENCE (CoI) 1. 20 Years of the Community of Inquiry Framework	Castellanos-Reyes (2020)	The Community of Inquiry (CoI) framework Garrison et al. (2000) is a collaborative-constructivist process model.	Critiques, re-examines the three main aspects of CoI (CP, SP, TP) highlights the specificity and complexity of SP in online discussion forums-combine instruction, knowledge construction, and social interaction
2. Social Work Distance Educators Community of Inquiry (CoI)	Micsky & Foels (2019)	CoI Framework on a collaborative constructivist approach in the creation of a community of inquiry is discussed.	1. Recommend future research address the use of social presence to inform the development of practice skills, peer collaboration, and decision-making. 2.The role of SP essential in creating a community of inquiry and in designing, facilitating, and directing higher-order learning.

3. Social Presence: Conceptualization and Measurement	Kreijns et. al. (2022)	To reformulating the definition of social presence and by linking it to social space and sociability.	1. Contribute to a more coherent line of social presence research and

understand interpersonal communication, group learning, and group dynamics - learning and working together in an online setting. |
| 4. Exploring cohesion, social presence & social capital. | Wang et. al. (2022) | To investigate relationships among social presence, social capital, and classroom community. | 1.Social presence (SP) is the most important factor behind cohesion of community.

2.SP indirectly influenced community - structural and relational capital.

3.SP increased emotional engagement strengthened social ties, trust

4. Social capital reinforces trust and shared vision which affects users' intention to share knowledge |
| 5. Interactivity during COVID- Social presence and expected outcomes. | Bailey (2022) | To determine SP influences learning outcomes.

To determine learner interactions mediating SP | 1.Students' high SP positively influenced rates of interaction with classmates, instructors, and curse content.

2. The relationship between SP and learning highly |

			mediated by learner-instructor (teaching/social presences), and learner content (cognitive presence)
6. Facilitating peer interaction: Role of Social Presence, Social Space, Sociability	Vrieling-Teunter et.al. (2022)	To explore the Role of Social Presence, Social Space, Sociability in SRL phase 1,2,3 for peer interaction regulation.	1.Students ability to self-regulate relate positively to academic achievement 2.In the planning phase - support the expression of SP with peers, offer possibilities 3.Introduce opportunities for peer feedback for learning outcomes 4.Make students aware of SP: prevent tension, increase trust
6. Preparing Educators for the time of Covid and beyond.	Darling-Hammond & Hyler (2020)	To explore socio-emotional issues that emerge and integrate for deeper learning	Policymakers and educators can invest in high-quality educator prep in high-need communities. Provide support mentoring and teacher roles and create collaboration time.

Appendix 2: Stage 1-3 - Key Informant's Responses

Informant Questions	Responses/ Key Phrases (Stage 1)	Early Codes	Interpretation (Stage 2)	Emerging Themes (Stage 3)
Key Informant 1 What was it like for you when you first enrolled into this leadership programme?	I was excited. This course is a leadership in Management from Australia to obtain this certificate. This is my first diploma.	Adapt able Resilie nt	She felt privileged that she was selected to be enrolled in a very prestigious Australian Diploma. She mentioned this several times throughout the interview. She acknowledged that this was her first diploma as she did not have the opportunity to complete her studies after her Form 5 (SPM). Although she was a bit apprehensive about returning to studies, she was willing to put in the effort and the hours.	Self-Regulated Learner
What were the challenge s you experienc ed as an online learner?	We had to join online. The problem was assessing the internet, data not strong cannot join online class. I do have internet access, but it was slow. I do have a PC and laptop at	Learni ng to use techno logy	She acknowledged that having internet access was essential over COVID-19 not only for the tutorial sessions and to upload her assignments but also for her work. Interestingly, there were no difficulties accessing the internet. Her only complaint was that the speed was slower when she was in her	Self-Regulated Lerner

	home unless return to kampung I use mobile data. The line there is slow. I only use mobile data then. I try to find the spot that has the best line (access).		hometown, and then she depended on her mobile data which was good enough. She also had a PC at home, and a company laptop she could use. So contrary to common belief, most B40 individuals already have access to and own laptops. To avoid a weaker connection, she was able to find the best spot for the strongest Wi-Fi signal.	
	I had good experience with 3 Learning facilitators i.e., Ms. A, B and Dr C. They were all very supportive. I had a lot of encouragement (Dorongan) from Ms S. She reminded me to 'Join the class don't miss the class'.	Mentoring Easy access to facilitators who were supportive and prompt with scaffolds feedback.	She immediately credited her success to the 3 facilitators, and the learning coordinator. The other facilitators agreed that she had a strong social presence and was one of the regular few who were active on WhatsApp chat, and during online tutorials. She was a highly motivated lady and determined to complete her studies. She was also consistent in submitting her assignments on deadlines, and often worked closely with the facilitators to ask for feedback on her work. She became close to	Social Presence Teaching Presence Social Capital

		two of the facilitators. She especially credited the learning coordinator as the key person who mentored her throughout the course. The facilitators were also credited with her not losing interest despite the extended pandemic. She agreed that her lecturers help provide focus, and direction to the students. They provided her with the attention through their mentoring sessions, and 1:1 motivation.	
	I have 4 children, a large family. Environment not conducive for studying. It was a *cabaran* (challenge) for me to focus. Had a newborn baby over covid. Small children ages 8,6,4 and 1 year old. They were not always co-operative (tak bagi Kerjasama).	Social Ties Family Netwo rk	Her family was always prioritized. Her husband was very supportive and assisted with the housework, cooking, and sending/picking up the children from school. She had no housekeeping help and credited her husband as instrumental in her success. She jokingly mentioned that her children were not always cooperative when she needed to study. As a matter of fact, she gave birth to her youngest daughter over covid, and was	Social Capital

	No housekeeping helps. My husband assisted me. Parents support but not strong.		often teased about having double-luck or blessings 'rezeki'. It was commendable how she managed to work at her livelihood, have a baby, manage her household chores and her children's studies, and attained the diploma. Her parents were supportive too, but their hometown was in another state, and she could not visit them over the pandemic. Her parents were not educated, and they did not fully understand why she had decided to sign up for this program. However, they encouraged her to do so.	
How did you manage your time?	Target to get the diploma so I target to find time. Spend time. Wake up at 4am on weekdays. Research. The weekend is with my family. 3 Units of Competencies : Manage People,	Learning strategy Mentor/ Scaffold-ings	Her self-regulation learning strategies were consistent and appropriate to the demands of the diploma. She was resilient and adaptable. To cope with nearing deadlines, she woke up earlier during the weekdays i.e., at 4am to complete her assignments. She constantly attributed her success to the learning	Self-regulated learning/ strategies Social Presences Social Capital

Manage Time, Manage Business.

Ms S helped (membantu) with the arrangement of time management. Capai goal. One by one. Honestly (Sejujurnya) without Ms S, I will lack motivation, and will lose (hilang) direction & without support from the lecturers it would have (mengganggu) interrupted/interfered with the completion (perjalanan) of my studies.

coordinator who had personally mentored her by providing scaffolding. She admitted that without this assistance she might have interfered with her completion on time.

Social capital was accessible not only from her family, but more importantly, her facilitators and her mentor were willing to assist her. Her immediate supervisor and her course maté and colleagues were also supportive and cheered her on.

| What was your experience like working with your course mates? | My course mates were helpful.

I only asked *(akan tanya)* those who have completed *(siap)*. Those who know I have finished they asked me for help *(tanya saya)*. Those who haven't asked me.

Respect all in group so she responds. Support them. I won't judge them they might be busy, but I will do my best for my community too.

Cik N. She is my coursemate and has asked me for help before. We mutually help each other. *(Sama2 membantu-lah)* | Peer collaboration support

Strong network ties | Her strong social presence during the Zoom tutorial sessions, on Google classroom, and in the WhatsApp, group presented her as an active learner who was encouraging, positive-minded, and like a big sister to the others.

She was consistent with her comments to questions posed by the facilitators, and willing to share her thoughts and knowledge.

Her other course mates sought her help in their assignments, and she was willing to collaborate for the good of the 'community.'

She expressed her appreciation to her colleagues at work for their support throughout her studies, and acknowledged how essential it was for them to stand alongside her. | Social Presence

Social Capital |

	It was essential *(penting dapat)* to receive support from my workplace supervisors. Very important.			
As a Muslim, how did you view this opportunity to study?	This is an opportunity *(rezeki daripada Allah peluang kejayaan yg bagus. Pembelajaran dan ilmu penting utk meningkatkan taraf hidup)* and a blessing from God Himself. It's an excellent life opportunity to accumulate learning and knowledge to improve our status in life. I immediately grabbed this opportunity.	Intrinsic Motivati-on Religious Motivati-on	As a Muslim, the informant immediately gave thanks to Allah. She described the learning opportunity as *rezeki* (gift, sustenance from God) and she must 'grab' this it to improve herself so she may have a better quality and status of life. She did not hesitate to accept and never doubted her abilities despite not having completed a diploma before. As a Muslim, she had an intrinsic motivation that kept her consistent to achieve her final purpose. This could be said that she looked beyond the mundane struggles of this life to a higher	Self-Regulated Lerner Social Presence Social Capital

(Kita belajar dengan keadaan ada keluarga dan anak2 kecil so kita lebih matang dengan apa yang kita target).

(Kita berusaha walaupun apapun cara kita selesaikan mission)

Advice to other Muslims: *Kita boleh dapatkan yang terbaik dari pembelajaran di mana level-level company so kita kena ... struggle to meningkat education level*

calling which kept her focused and grounded.

Her simple advice to adult learner was to always be mindful to focus on the target to complete to obtain (dapat) the certificate. We should be lifelong learners but not forgetting that most of us have our family and young children to manage so we ought to be mature and diligent in setting goals.

She encouraged other Muslim learners to do the same. Firstly, and most importantly, to prioritize family matters, and then give one's best in the single-minded matured pursuit of one's professional accredited certification no matter the present challenges so that the life 'mission' is achieved.

CONTINUANCE INTENTION TO PURCHASE ONLINE: COMPARISON BETWEEN MUSLIM AND NON-MUSLIM BUYERS IN MALAYSIA

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ABSTRACT

Online shopping has become one of the most important activities in the netizen's daily life. This study aimed to investigate the differences in psychographics and their effects on online customer satisfaction between Muslim and non-Muslim buyers. A survey was conducted among 230 online buyers (99 Muslims and 131 non-Muslims) in Malaysia. The results showed that Muslim buyers had higher levels of information quality, system quality, perceived usefulness, social influence, and satisfaction compared to non-Muslim buyers. Moreover, the study found that psychographics had a significant effect on online customer satisfaction for both Muslim and non-Muslim buyers. The findings suggest that online businesses should consider the differences in psychographics between Muslim and non-Muslim buyers to improve their online customer satisfaction. However, the study has some limitations, such as the use of a non-probability sampling method and a small sample size. Future research could address these limitations and further explore the impact of psychographics on online customer behavior.

Keywords: Information Quality, System Quality, Perceived Usefulness, Social Influence, Satisfaction.

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1. INTRODUCTION

Online shopping has become an increasingly popular activity in the era of digital technology, and it has transformed the way consumers purchase goods and services. With the development of e-commerce platforms, consumers can easily access online stores, compare prices, and purchase products from anywhere and anytime. Malaysia is not an exception to this trend, where online shopping is becoming more prevalent among the Malaysian population. According to Statista (2021), the value of e-commerce sales in Malaysia is projected to reach US$4.4 billion by 2024. Previous research has suggested that the quality of website information, system quality, perceived usefulness, and social influence are among the critical factors that influence consumers' satisfaction and their intention to continue purchasing online (Bigne et al., 2005; Cheung & Lee, 2010; Huang et al., 2017; Lee & Lin, 2005).

The quality of website information, such as product descriptions, images, and reviews, can significantly affect consumers' perceptions of the usefulness and reliability of an online store (Chen & Wells, 1999; Lee & Kozar, 2012). System quality, which refers to the technical functionality and reliability of the online platform, is also critical in ensuring consumers' trust and confidence in the platform (Pavlou, 2003). Perceived usefulness, which refers to the perceived benefit of using an online platform, has been found to be a significant predictor of consumers' intention to continue using online shopping (Davis, 1989). Additionally, social influence, which encompasses the impact of family, friends, and social media on consumers' purchasing decisions, can significantly affect their intention to continue purchasing online (Kaplan & Haenlein, 2010).

While previous studies have investigated the determinants of consumers' intention to continue purchasing online, there is limited research that compares the differences between Muslim and non-Muslim buyers in Malaysia. As a predominantly Muslim country, Malaysia's religious and cultural values may influence consumers' attitudes and behaviors toward online shopping. Therefore, this study aims to examine the factors that determine Muslim and non-Muslim buyers' continuance intention to purchase online in Malaysia, with a focus on Information Quality (IQ), System Quality (SQ), Perceived Usefulness (PU), Social Influence (SI), and Satisfaction (ST).

The study aims to provide insights that can help online retailers and service providers enhance their website quality and usefulness, which may encourage consumers to continue purchasing online. Malaysia is a multi-religious country, with Islam being the official religion. Previous research has highlighted the role of religion in shaping consumer behavior. In particular, intrinsically religious consumers tend to exhibit higher levels of loyalty and lower switching behavior than extrinsically religious consumers (Essoo & Dibb, 2004; Sood & Nasu, 1995). Moreover, consumers' purchasing decisions have been found to be influenced by their religious teachings (Delener, 1990).

In Malaysia, the majority of the population is Muslim, and Muslim buyers have been found to exhibit more ethnic, conservative, and family-oriented values (Mokhlis, 2009). These values may impact their purchasing behavior and influence their preferences for locally-made products (Fam, Waller & Erdogan, 2004). Therefore, understanding the impact of religion on consumer behavior could be important for online retailers in

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Malaysia who seek to cater to the diverse needs of their customers.

This study aims to compare the factors that influence the intention to continue purchasing online among Muslim and non-Muslim buyers in Malaysia. The study aims to measure the level of customer satisfaction with online purchasing platforms and website services, as satisfaction is a key driver of repeat purchases (Chen, 2012). In particular, the study will focus on identifying the factors that influence customer satisfaction among Muslim and non-Muslim buyers in Malaysia, given the importance of religion in shaping consumer behavior (Essoo & Dibb, 2004; Sood & Nasu, 1995). Additionally, the study seeks to explore the gap between customers' expectations and perceptions, as this discrepancy is a widely studied aspect of customer satisfaction in the marketing literature (Zhang et al., 2017). The findings of this study will build on previous research and help web service providers and internet retailers better understand the factors that influence Muslim and non-Muslim consumers to continue making online purchases in Malaysia.

2. LITERATURE REVIEW

The popularity of online shopping has witnessed significant growth in recent years, particularly in Malaysia, where consumers have increasingly embraced digital channels for their purchase transactions (Chen & Chang, 2013). A specific area of research interest revolves around comprehending the factors that shape the intention of Muslim consumers to engage in online purchases of Islamic fashion products. Scholarly investigations have revealed that both internal and external factors exert considerable influence on consumer behavior

within the online shopping context, including website attributes and privacy concerns. The design and functionality of websites play a pivotal role in attracting and retaining customers, with factors such as ease of use, security, and convenience emerging as critical determinants of purchase intention (Wang et al., 2015). Moreover, apprehensions related to privacy, encompassing the collection and utilization of personal information, can significantly impact consumers' trust in online shopping, thereby affecting their overall purchase intention (Bai et al., 2018).

The significance of this study lies in its contribution to the understanding of online consumer behavior in a multi-religious country like Malaysia. By comparing the satisfaction determinants and intention to continue purchasing online between Muslim and non-Muslim buyers, this study provides insights into how religion and culture influence online consumer behavior. The findings of this study could benefit e-commerce businesses in Malaysia by providing a better understanding of their customers and their satisfaction determinants. It could also help policymakers in formulating policies and regulations that promote a better e-commerce ecosystem. The scope of this study is limited to Malaysian residents who frequently make online purchases, and it covers all Malaysians living in the country. The study focuses on the influence of religion on online consumer behavior, and it involves people from diverse backgrounds. The data were collected through primary and secondary research methods, which provided a comprehensive understanding of the satisfaction determinants of online purchases. The findings of this study could be useful for e-

commerce businesses, policymakers, and researchers interested in online consumer behavior in Malaysia.

Purchase intention plays a pivotal role in shaping a consumer's attitude, beliefs, norms, culture, and lifestyle in relation to a particular product (Ramkissoon & Mavondo, 2016). The level of customer satisfaction holds great significance within the realm of online shopping and is influenced by factors such as the quality of service received and the overall system quality encompassing technical performance and functionality (Baltas & Saridakis, 2013). Moreover, the provision of accurate and pertinent information, known as information quality, assumes a critical role in satisfying consumers' information needs, subsequently leading to heightened purchase intention (Kurniawan & Lazuardi, 2019). Of particular interest to Muslim consumers are Islamic fashion products, thus necessitating the focused attention of companies, retailers, fashion designers, and industries toward understanding the factors that shape their online purchase intention.

Han et al. (2015) study found that Muslim consumers' intention to purchase Islamic fashion products online is influenced by various factors, including perceived usefulness, trust, and perceived ease of use. Additionally, perceived risk was found to exert a negative influence on purchase intention. In conclusion, online shopping is becoming increasingly popular in Malaysia, and understanding the factors that influence Muslim consumers' intention to purchase Islamic fashion products online is crucial for businesses in this market. Website attributes, privacy issues, purchase intention, customer satisfaction, and information quality are some of the key factors that influence consumer behavior in online shopping.

Companies need to focus on these factors and provide a positive online shopping experience to attract and retain customers.

2.1 Social Influence

Internal influences such as the attitude and perception of consumers towards online shopping are seen among the factors that influence the intention of online shopping by buyers. Apart from internal factors, external influences such as website attributes and privacy issues are also seen to affect consumers because online shopping is different from in-store shopping. Significantly, the lifestyle of Muslim consumers differs from that of non-Muslims. Muslim users are bound by Syariah's Law. Therefore, companies, retailers, fashion designers, and industries need to focus on the online purchase intention of Muslim consumers and the influencing factors toward Islamic fashion products. Significantly, internal influence also has an important role in the purchase of products by consumers. According to Hamid et al. (2008), consumer behavior is influenced by several factors such as technological literacy, level of purchase or use experience, demographics, and so on. By understanding a clear picture of the online purchasing behavior of consumers, marketers can greatly assist marketing managers in predicting the rate of online shopping and the future as well as the growth of e-commerce (Suki & Suki, 2013).

2.2 Purchasing Intention

Mostly, product purchase intention occurs when a consumer buys a certain product for his needs, which is the result of a person's perception and attitude towards the product. Chen, Hsu and Lin (2010) found that purchase intention is very

important for each individual, which reflects a consumer's attitude, beliefs, norms, culture, and lifestyle. According to Chen et al. (2010) who cited that "purchase intention is the main consequence of pre-purchase satisfaction in the context of e-commerce". Therefore, purchase intention plays an important role in determining the purchase of a product. The most significant issue in every sales industry is to focus on consumer purchase intentions. Therefore, the marketer formulates the right strategy in the market that is relevant to the market demand to stimulate the consumer's buying intention (Anwar et al., 2016). Lynch and Beck (2001) mention that there are variations in the level of trust, perception, and behavior of online purchases in different regions and internet usage. The study revealed that online business should be conducted by studying the ever-changing consumer behavior of online shoppers. Therefore, consumer behavior and intention are the two most important factors that help marketers to study their regular and loyal consumers.

2.3 Satisfaction

The satisfaction of the online buying consumer is determined by the service quality. According to the study by Anwar et al. (2016), The level of customer satisfaction is determined by the quality of service received. according to them, if customers experience good service and hospitality, they are more inclined to repeat the purchase of the product. Mouakket and Samar (2015), found that the user experience while using applications was satisfying, experience, the decision to use, and performance are the four indicators of consumer satisfaction. A study conducted by Ramayah and Suki (2006) found that online buyers in Malaysia are composed of the young, affluent, highly

educated, and wealthy. However, from the aspect of gender, the findings are diverse across years, where male respondents are found to be fonder of making purchases (Li, Kuo and Russell, 1999; Stafford, Turan and Raisinghani, 2004) and spend more money online than women (Susskind, 2004).

2.4 System Quality

McKinney, Yoon and Zahedi (2002), defined quality in the system as the performance of the website perceived by users through the reception and transmission of information. While Kim, Shin and Kwon (2012), assume that the quality of the system is the level of user satisfaction with the technical performance and functionality of the website. When buyers make online purchases, they always rely on the descriptions and photos provided by websites in digital form. Therefore, customers will emphasize system properties such as ease of use of the website, ease of navigation, response time, and download time (Dickinger & Stangl, 2013). A shopping website can provide a clear layout, systematically categorize items, and a variety of options will help the users find deals with fewer searches and physical costs (Overby & Lee, 2006). Parasuraman et al. (1985), service quality generally refers to firms' ability to deliver service by the following level of expectation.

2.5 Information Quality

According to Lin and Lee (2006), found for Information quality can be generally illustrated by the output of a system, such as the information quality from a system for financial statements. According to Gao, Waechter and Bai (2015), *information quality*, privacy, and security concerns are the main factors affecting trust. Trust affects flow, which in turn affects satisfaction.

These three factors together affect continued intention towards online purchases. Tam and Oliveira (2017) researched the quality of information using usability measurements, understanding measurement reliability, and completeness. Wu et al. (2016), studied customer satisfaction by using three dimensions for overall satisfaction. Satisfaction with the use of an application is an output response from the information quality, experience quality, and customer perceived value. According to Susanto et al. (2016), the user perception of the different organizations and e-commerce websites was made based on how users felt about the information quality, service quality, ease of use, and security provisions.

This study aimed to examine buyer satisfaction determinants determined by online selling websites' Information Quality (IQ), System Quality (SQ), Perceived Usefulness (PU), and Social Influence (SI).

The following is the question developed for this study: What is the influence of IQ, SQ, PU, and SI on online shopping sites on consumer satisfaction?

2.6 Research Framework

The research framework for this study encompasses four independent variables: Information Quality of the website, Website System Quality, Perceived Usefulness of the website, and Social Influence. These variables are examined in relation to their impact on the dependent variable, which is user Satisfaction. Information Quality refers to the accuracy, relevance, and completeness of the information provided on the website. It encompasses factors such as the clarity of product descriptions, availability of product specifications, and

the presence of reliable customer reviews. A high level of Information Quality is expected to positively influence user Satisfaction, as it enhances the trustworthiness and credibility of the website. Website System Quality refers to the technical performance and functionality of the website. It includes aspects such as page loading speed, ease of navigation, and the absence of technical glitches. A well-designed and smoothly functioning website is expected to contribute to user Satisfaction, as it enhances the overall user experience and reduces frustration.

Perceived Usefulness of the website refers to the extent to which users perceive that the website enables them to accomplish their goals and tasks effectively and efficiently. It encompasses factors such as the availability of useful features, personalized recommendations, and convenient payment options. A high level of Perceived Usefulness is expected to positively impact user Satisfaction, as it meets users' needs and enhances their online shopping experience. Social Influence refers to the influence of other people's opinions, recommendations, and experiences on user behavior and decision-making. It encompasses factors such as the influence of friends, family, and online reviews on users' perceptions and purchase decisions. Positive social influence is expected to contribute to user Satisfaction, as it validates users' choices and builds trust in the website.

Overall, this research framework aims to explore how the independent variables of Information Quality, Website System Quality, Perceived Usefulness, and Social Influence collectively influence user Satisfaction in the context of online shopping. By investigating these factors, the study seeks to provide insights

into the key determinants of user satisfaction and inform strategies for improving the online shopping experience.
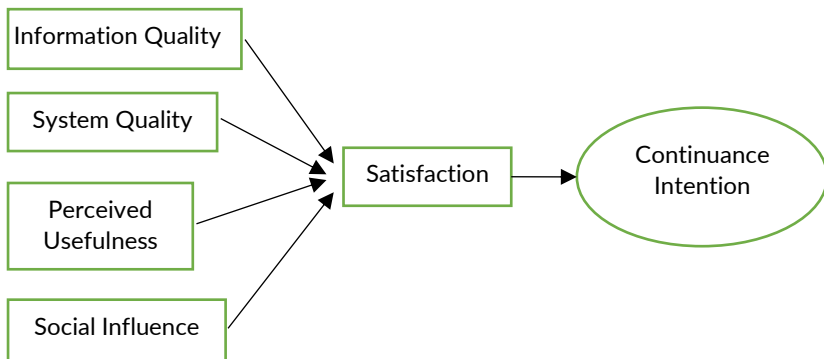
Source: Adapted from Kadir, Bahadir & Hamit (2021)

The following are the hypothesis developed for this study.

H1: There is no significant difference between Muslim buyers' and non-Muslim buyers' intention to continue purchasing online.

3. METHODOLOGY

Research, in simple terms, refers to the process of seeking knowledge or understanding through various means, such as experience and learning. In a more formal sense, research is a systematic and scientific endeavor aimed at gathering relevant information about a specific topic (Mimansha & Nitin, 2019). It is considered a unique form of scientific investigation. According to Mimansha and Nitin (2019), the methodology is the systematic theoretical analysis of the methods employed in a particular field of study. It involves the examination of various

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methods and principles related to a specific branch of knowledge. For this study, data collection involved surveying a population consisting of individuals from different age groups, educational backgrounds, races, and lifestyles. A questionnaire survey was conducted to gather data for analysis purposes. The research design aimed to identify the factors influencing satisfaction in the use of online shopping websites among Muslims and non-Muslims in Malaysia. The primary focus was on influential factors such as information quality, system quality, perceived usefulness, and social influence on online shopping websites.

The purpose of this research was to develop an enhanced strategic marketing plan that caters to and exceeds the needs of consumers in terms of repeat online purchases. Regarding the sampling process, the samples comprised subsets of the target population, which consisted of Muslim and non-Muslim online buyers in Malaysia. The sampling design included determining the target population, sampling frame, sampling elements, sampling technique, and sample size. The target population was limited to Malaysians only, and the sampling frame encompassed various locations across Malaysia, including central, northern, southern, eastern, and eastern Malaysian regions.

The sampling units were individuals who engage in online purchases in Malaysia. The sampling elements were selected based on the research requirements, particularly focusing on individuals with online shopping experience. Convenience sampling was employed, which is a non-probability sampling method that involves selecting participants who are easily accessible or reachable. Primary data collection was conducted

using a Google survey form, which is an electronic form that participants can access and respond to through internet browsing on computers or smartphones.

4. DATA ANALYSIS

Data analysis is a fundamental process in research that involves examining, cleansing, transforming, and modeling data to extract valuable information, derive meaningful conclusions, and support decision-making. In this study, the statistical package for social statistics (SPSS Version 20.0) was employed to perform various statistical tests, including descriptive statistics analysis, Cronbach's alpha, correlation analysis, and regression analysis (Aditami, 2016; Alam & Sayuti, 2011).

Descriptive statistics analysis was utilized to gain insights into the characteristics of the respondents and their responses to each question, as well as to provide an overview of the overall responses. Cronbach's alpha, a measure of internal consistency, was employed to evaluate the reliability of the test items in the present study (Bonett & Wright, 2015). Correlation analysis was conducted to examine the strength of the relationship between two numerically measured continuous variables (Leech et al., 2005). Lastly, multiple linear regression analysis was employed to assess the influence of independent variables on the dependent variable. It is important to note that the aforementioned references (Aditami, 2016; Alam & Sayuti, 2011; Bonett & Wright, 2015; Leech et al., 2005) are provided as examples and should be replaced with relevant and appropriate references from your specific research.

The description of the research results is presented in detail. A total of 230 respondents responded to this research question

via a Google survey form. The analysis found a total of 99 respondents which is 43% are from the Muslim religious group. Of this 43%, 43.4% (43 respondents) are Muslim females and the remaining 56.6% (56 respondents) are Muslim males. A total of 131 respondents (57%) are non-Muslims respondents. 49 respondents (37.4%) are females while 82 respondents (62.6%) are males). Refer to Table 1 below.

Table 1. Frequency of respondents' religion (Muslim & non-Muslim)

Variable	Frequency	Percent	Cumulative Percent	
Muslim	99	43.0	43.0	43.0%
Non-Muslim	131	57.0	57.0	57.0%
Total	**230**	**100%**	**100.0**	

Table 2 below shows the finding of the result for reliability data analysis of the instrument of independent variables (IQ, SQ, PU, and SI). The results show the instruments used were considered acceptable since they are all above > 0.6 (Nunnally & Bernstein, 1994)

Table 2. Reliability Coefficients of the Independent Variables (IV)

Independent Variables (IV)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Information Quality (IQ)	14.9999	3.457	.698	.510	.829
System Quality (SQ)	14.6958	3.351	.678	.534	.831
Perceived Usefulness (PU)	14.9139	3.239	.736	.649	.817
Social Influence (SI)	15.0759	3.114	.548	.342	.878

Table 3 below shows the finding of the demographic of Muslim and non-Muslim respondents for this research. In testing the first hypothesis, the chi-square test was undertaken. The chi-square test results show the difference between Muslims and non-Muslims according to demographic variables.

The variables that show significant differences were gender at p < 0.1, Sopping Experience, and Payment Method at p < 0.05, and Marital Status, Age Group, Education Level, Monthly Income, Shopping Experience, and Shopping Product at p < 0.01.

Table 3. Demographic of Muslims and non-Muslims in Malaysia

Variable		% Muslim	Non-Muslim	N	$X2$
Gender	Male	56.6	62.6	138	0.854*
	Female	43.4	37.4	92	
Marital Status	Married	48.5	75.6	147	17.938***
	Single	51.5	24.4	83	
	18 – 24 years old	16.2	6.1	24	23.014***
	25 – 34 years old	43.4	23.7	74	
Age Group	35 – 44 years old	21.2	32.8	64	
	45 – 54 years old	14.1	32.8	57	
	55 Above	5.1	4.6	11	
	Certificate	8.1	6.9	17	12.611***
Education Level	Diploma	27.3	24.4	59	
	Batch. Degree	53.5	38.9	104	
	Master / PhD	11.1	27.3	47	
	Professional	0.0	2.3	3	
	Below RM2000	27.3	10.7	41	20.330***
	RM2001 – RM3999	31.3	19.8	57	

Monthly Income	RM4000 – RM5999	22.2	37.4	71	
	RM6000 – RM7999	7.1	9.9	20	
	RM8000 – RM9999	6.1	14.5	25	
	RM10000 and above	6.1	7.6	16	
Shopping Experience	Less than 1 year	47.6	52.4	21	5.143**
	Between 1 - 3 years	44.7	55.3	123	
	Between 3 – 5 years	25.0	75.0	32	
	More than 5 years	48.1	51.9	54	
	Amazon	0.0	0.8	1	20.369***
	eBay	6.1	2.3	9	
	Lazada	29.3	52.7	98	
Shopping Platform	Mudah.com	2.0	0.0	2	
	Shopee	60.6	40.5	113	
	Zalora	1.0	0.0	1	
	Others	1.0	3.8	6	
	Everyday	100.0	0.0	6	17.581***

	Only when need	32.7	67.3	52	
Shopping Frequency	Several times a week	56.8	43.2	37	
	Several times a month	45.6	54.5	103	
	Several times a year	25.0	75.0	32	
	Cash on Deliver	55.3	44.7	38	7.530**
	Credit or Debit card	41.1	58.9	107	
Payment Method	e-Wallet	34.9	65.1	43	
	Fbx	1.0	0	1	
	Online Banking	45.0	55.0	40	
	Others	0.0	0.8	1	
	Books	0.0	100	1	17.838***
	Electrical Application	0.0	100	1	
Shopping Products	Electronic & Physical Media	31.2	68.8	77	
	Fashion & Beauty	46.4	53.3	69	
	Food & Personal care	61.9	38.1	42	

Furniture & Home Care	34.6	65.4	26
General Products	1.0	0.0	1
Mixed all above	0.0	100	2
Toys, DIY, and Hobbies	63.6	36.4	11

Note: *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.1$

Table 4 below shows the finding of the mean score of Independent Variables (IQ, SQ, PU, and SI) for Muslims and non-Muslims differed according to their psychographics. The T-test results show significant levels by providing ($p < 0.01$) evidence to support H1, Thus H1 was fully supported.

Table 4. T-test results for Psychographic differences between Muslim and non-Muslim buyers

Independent Variables (IV)	Religion	N	Mean	Std. Deviation	Std. Error Mean
Information Quality (IQ)	Muslim	99	3.7547	.43198	.04342
	Non-Muslim	131	3.5878	.48450	.04233
System Quality (SQ)	Muslim	99	4.0539	.52318	.05258
	Non-Muslim	131	3.8957	.49972	.04366
	Muslim	99	3.8081	.50472	.05073

Perceived Usefulness (PU)	Non-Muslim	131	3.6985	.53113	.04641
Social Influence (SI)	Muslim	99	3.7348	.61737	.06205
	Non-Muslim	131	3.4695	.70576	.06166

Note: ** $p < 0.01$

Table 5 shows the finding of the mean score of Dependent Variables (Satisfaction) for Muslims and non-Muslims differed according to their psychographics. The T-test results for DV (Satisfaction) on IV (IQ, SQ, PU, and SI) among Muslims and non-Muslim buyers were significant ($p < 0.05$) and this result provided support for H1.

Table 5. Group Statistics (Muslim and Non-Muslim)

Dependent Variables (DV)	Religion	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction (ST)	Muslim	99	3.8066	.47831	.04807
	Non-Muslim	131	3.6314	.59484	.05197

Note: ** $p < 0.01$

5. DISCUSSION ON FINDINGS

The discussion of the study on Muslims' and non-Muslims' online purchasing behavior reveals several key findings and implications. Firstly, the study examined the mean scores of independent variables (IQ, SQ, PU, SI) for Muslims and non-Muslims based on their psychographics. The T-test results

showed significant differences between the two groups, providing evidence to support H1, which suggests that the psychographic factors influence online purchasing behavior differently for Muslims and non-Muslims. Furthermore, the study explored the mean scores of the dependent variable (ST) for Muslims and non-Muslims in relation to their psychographics.

The T-test results indicated significant differences between the two groups, supporting the hypothesis that psychographic factors have a significant impact on satisfaction levels among both Muslims and non-Muslims. These findings highlight the importance of considering the unique characteristics and preferences of Muslim and non-Muslim consumers when examining online purchasing behavior. Factors such as IQ, SQ, PU, and SI play a crucial role in shaping satisfaction levels for both groups. Understanding these factors can help businesses tailor their online shopping platforms and strategies to cater to the specific needs and preferences of Muslim and non-Muslim consumers. Businesses operating in Malaysia should consider the specific needs and preferences of Muslim and non-Muslim consumers to effectively tailor their online shopping platforms and strategies. By enhancing the identified psychographic factors, businesses can provide a more satisfying online shopping experience for both groups.

These findings highlight the importance of acknowledging and understanding the unique characteristics and preferences of Muslim and non-Muslim consumers when studying their online purchasing behavior. By recognizing that psychographic factors play a crucial role in shaping satisfaction levels for both groups, businesses can better tailor their online shopping platforms and

strategies to cater to the specific needs and preferences of these consumers. Factors such as IQ, SQ, PU, and SI are identified as significant determinants of satisfaction for both Muslim and non-Muslim buyers. This implies that businesses should focus on enhancing these aspects of their online platforms to provide a positive online shopping experience for both groups.

6. CONCLUSION

In conclusion, the findings of this study underscore the importance of considering the diverse needs and preferences of Muslim and non-Muslim consumers in Malaysia. By understanding how psychographic factors influence their online purchasing behavior and satisfaction levels, businesses can effectively cater to these consumers and create an inclusive and satisfying online shopping experience. This knowledge can inform the development of targeted marketing strategies and the design of user-friendly online platforms that meet the specific requirements of Muslim and non-Muslim buyers in Malaysia. The study on Muslim and non-Muslim online purchasing behavior, while insightful, has certain limitations that should be acknowledged. These limitations may affect the generalizability and interpretation of the findings. Firstly, the study's sample characteristics may limit the extent to which the findings can be applied to the broader population. The sample size and composition may not fully represent the diversity of Muslims and non-Muslims in Malaysia or other relevant contexts. Therefore, caution should be exercised when drawing conclusions that apply universally. Another limitation is the geographical focus of the study. By concentrating on a specific location, the findings may not be applicable to other regions or

countries where cultural and contextual factors differ. It is crucial to consider the influence of local dynamics and variations in consumer behavior across different regions. The reliance on self-reported data is another potential limitation. Self-reporting introduces the possibility of response biases and inaccuracies. Respondents may provide socially desirable responses or struggle to recall their online purchasing experiences accurately. The presence of such biases should be acknowledged when interpreting the findings.

Based on the findings and limitations of the current study on Muslims' and non-Muslims' online purchasing behavior, several recommendations can be made for future research. These recommendations aim to address the gaps and further enhance our understanding of this topic. Replication in diverse cultural and religious contexts: Conducting similar studies in different cultural and religious contexts would allow for the generalizability of the findings. It is important to recognize the potential variations in online purchasing behavior across different cultures and religions, and how these factors interact with individual psychographics. Examination of additional influencing factors: While the current study focused on Information Quality, System Quality, Perceived Usefulness, and Social Influence, future research should explore other potential factors that may impact online purchasing behavior. Variables such as trust, perceived risk, convenience, and personalization could be considered to provide a more comprehensive understanding of consumer behavior. Utilization of mixed methods approach: In addition to quantitative surveys, future studies could incorporate qualitative methods such as interviews or focus groups. This would enable researchers to

gather more in-depth insights into consumers' experiences, motivations, and perceptions, complementing the quantitative findings and enriching the overall understanding of online purchasing behavior.

To delve deeper into the influence of online shopping platforms, future research could focus on specific types of online stores, such as halal online stores or non-halal online stores. By examining how these specialized platforms cater to the needs and preferences of Muslim and non-Muslim consumers, researchers can gain insights into the role of religious or cultural considerations in online purchasing decisions. Understanding how demographic factors such as age, gender, and education level influence online purchasing behavior among Muslims and non-Muslims would be valuable. Research could investigate how these variables interact with psychographics and cultural factors, providing a more nuanced understanding of consumer behavior in diverse populations. Future studies could employ more sophisticated statistical techniques, such as structural equation modeling or latent class analysis, to uncover complex relationships between variables. These techniques can provide insights into the causal relationships and mediating factors that drive online purchasing behavior. While the current study focused on user satisfaction, future research could expand the scope by incorporating other outcome variables such as customer loyalty, repeat purchase intention, or post-purchase behavior. This would contribute to a more comprehensive understanding of the long-term implications of online purchasing behavior among Muslims and non-Muslims in Malaysia.

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EFFECT OF IMAGE & TRUST IN CUSTOMERS' LOYALTY TO MOBILE FOOD DELIVERY APPS (MFDAS): MEDIATING ROLE OF CUSTOMER SATISFACTION

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ABSTRACT

The purpose of this study is to examine the effect of image and trust in customers' loyalty to Mobile Food Delivery Apps (MFDAs). In order to carry out the research, both primary and secondary data were used. In this study, an empirical investigation was conducted using an online questionnaire survey method. A total of 375 responses were collected from users i.e., who have earlier experience with mobile food delivery apps by using purposive sampling technique and analyzed through the PLS-SEM technique. The study found that both trust and image positively contributed to customers' satisfaction with mobile food delivery apps as well as driving a significant relationship with loyalty. Besides, there is a direct significant relationship between trust and image with loyalty. Furthermore, this study identified the partial mediation role of customer satisfaction on the relationship between both trust and image on customers' loyalty to mobile food delivery apps. This study helps policymakers and practitioners to understand the behavioral patterns of MFDAs users that will lead to building inclusive and sustainable strategies to retain customers.

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1. INTRODUCTION

Nowadays, the behavior of consumers and businesses has changed due to the advancements in internet technology which also make e-commerce operations easier (Chang, Chou, & Lo, 2014). In the context of the restaurant business, technology makes it possible for customers to order food from restaurants through their websites or through online food delivery services or mobile food delivery apps (MFDAs) (Kimes, 2011). Mobile food delivery apps (MFDAs) are smartphone-based apps used to communicate with restaurants, search for meals, order meals for delivery, and make payments without physically interacting with the restaurant staff (Alalwan, 2020; Okumus & Bilgihan, 2014; Wang et al., 2019).

The global mobile food delivery apps market has experienced substantial growth over the past few years. According to a report by Research and Markets, the global mobile food delivery apps market was valued at USD 18.7 billion in 2020 and is expected to reach USD 28.4 billion by 2026, growing at a CAGR of 6.8% during the forecast period. The market is dominated by a few key players, including Uber Eats, Grubhub, Door Dash, Just Eat, and Deliveroo (Research and Markets, 2021). According to a report by App Annie, these five players accounted for 75% of the global food delivery app downloads in 2020 (App Annie, 2021).

The Asia-Pacific region is expected to witness the highest growth in the market, owing to the large population and increasing adoption of smartphones in the region. According to the same report by Research and Markets, the Asia-Pacific region is expected to grow at a CAGR of 7.5% during the

forecast period. Furthermore, a report by Statista shows that the number of mobile food delivery app users worldwide is projected to reach 1.6 billion in 2023, up from 967 million in (2020 Statista, 2021). On the other side, the current data revealed that this industry is becoming more popular in Bangladesh. In the year 2019, the average market size was 10 million dollars and the projected online food delivery market worth would be 5 billion dollars by 2025 (Kader, 2020). However, the growth of mobile food delivery apps has been phenomenal in recent years, and Bangladesh is no exception. The convenience and accessibility offered by these apps have revolutionized the food industry, making it easier for consumers to access food options and enjoy food delivery services at their doorstep (Hossain, et al., 2020). In Bangladesh, the rise of mobile food delivery apps has been driven by the increasing availability of smartphones and internet access. The most popular apps in Bangladesh are – Food Panda, Pathao Food, Shohoz Food, Uber Eats, Hungry Naki, etc. A growing number of consumers are choosing to use these apps to order food, due to the convenience and ease of use they offer (Islam, et al., 2019), as well as the increasing demand for healthy and nutritious food options (Ahmed et al., 2020).

Consequently, due to the intense competition, growth brings opportunities as well as challenges for the restaurant industry. Similarly, the growth of the mobile food delivery market in Bangladesh is not without its challenges. One of the main challenges facing the industry is the lack of trust in the quality and safety of food delivered through the apps (Hossain, et al., 2019). To overcome this challenge, companies must focus on building trust with their customers (Al-Ansi & Han, 2019) which

will lead to customer relationship and satisfaction (Kimes, 2011), finally helps to create loyal customers (Pee, Jiang, & Klein, 2018) since customer loyalty is the most vital point for doing online business.

Moreover, the significance of customer loyalty, the building blocks of loyalty, as well as its diversity, is well explored in the literature (Wirtz & Lovelock, 2016). However, despite the fact that several studies on loyalty have been undertaken in various industries, academicians believe that the drivers by which consumer loyalty develops are still not fully understood (Abou-Shouk & Khalifa, 2017; Caruana & Ewing, 2010).

Furthermore, it will be challenging to generalize the findings from studies in one industry to others because each industry has its own unique individualities. For this reason, researchers suggested to investigate the influential factors of loyalty building in other industries (Gursoy et al., 2014) as well as adding new constructs such as image, trust, and involvement recommended by (Suhartanto et al., 2018). Yet again, studies from the restaurant perspective (Kim et al., 2020; Choi and Kwon, 2020) stated that customer loyalty is significantly influenced by image and trust. In spite of the significance of both factors, literature appears to be comparatively absent in focusing on the combined effect of those factors on customer loyalty, particularly in the mobile food delivery apps (MFDAs) context. This research gap motivates us to examine the direct effect of image and trust on customer satisfaction as well as loyalty to mobile food delivery apps and the indirect effect via customer satisfaction mediation role. Conducting such a study will provide valuable insights for restaurant businesses to develop more effective strategies in order to expand potential

markets and build customers' loyalty and retention from the perspective of MFDA services.

The following portion of this study covers the literature review, theoretical foundation, and hypotheses development. After that, it contains the methodology, followed by the data analysis & results presentation and discussion section. In the final section, the research paper concludes with theoretical contribution, limitations, and further research directions.

2. LITERATURE REVIEW

2.1 Theoretical Foundation

In an empirical study, a hypothesized relationship must be consistent with previous theories or well-known models (Colquit and Zapata-Phelan, 2007). The existing study predicts the effects of image and trust on customer satisfaction which in turn positively i.e., customer loyalty through the S-O-R theory (Mehrabian and Russell, 1974). The S-O-R framework provides an explanation of how organisms facilitate the relationship between stimulation and response through various means that stimulate individuals' cognitive and emotional states, subsequently influencing their behavioral responses, as outlined by Islam and Rahman (2017). In recent years, the SOR model has been used more regularly in the study of consumer behavior. At first, the S-O-R theory is implemented in the context of consumer behavior by Donovan and Rossiter in 1982. In the social commerce industry, Wu and Li (2018) discovered that the marketing mix (as a stimulus) has a noteworthy impact on the perceived value of consumers (as an organism), which leads to a favorable effect on customer loyalty (response). Kim and Lennon (2013) expanded the S-O-R theory

to incorporate both internal sources of information (such as website quality) and external sources of information (such as reputation) as stimuli that impact purchase intention (response) by shaping the cognitive and emotional states of consumers (organisms). The current study planned that image and trust (as a stimuli) in mobile food delivery apps have a significant effect on customer satisfaction (as an organism), which in turn positively influences loyalty (responses).

2.2 Image, Trust and Loyalty

In the earlier study, researchers found that image had a significant positive impact on customer loyalty (Xu and Wang, 2019). Consumers are more likely to remain loyal to a food delivery app if they perceive it to have a strong and positive brand image. In addition, a study by Li et al., (2020) found that when customers' expectations were met through prompt delivery, then customers demonstrated a greater propensity to reuse the app. The literature suggests that image, trust, and customer satisfaction are important factors in determining consumer loyalty to mobile food delivery apps. Companies in this space should focus on building strong and positive brand images, providing high-quality and satisfying user experiences, and ensuring timely and efficient service delivery in order to build customer loyalty and customer retention (Kim et al., 2020; Chen et al., 2019; Alsos et al., 2018). Kim and Lee (2019) found that those who trust a delivery app were more likely to use the app again in the future and recommended it to others (Kim et al., 2018). Deng et al. (2019) found that trust was positively related to customer loyalty. Hence, the following two hypotheses were developed:

H1: Image positively influences the loyalty of MFDAs.

H2: Trust positively influences the loyalty of MFDAs.

2.3 Image, Trust and Customers' Satisfaction

Image refers to the overall perception of a company and its offerings, including its brand, products, and services. In the context of mobile food delivery apps, image refers to the perception of the app and the quality of food and delivery services it provides (Akbari & Amiri, 2020). Customers were more satisfied with the food delivery service when the images of the dishes and the restaurant on the app were visually appealing and accurately represented the dishes and restaurant (Kim et al., 2020; Ye et al., 2018). Customers were more likely to trust and use an app that had a consistent image across all platforms (e.g., website, social media, and app) and had a good reputation (Chen and Hsu, 2019). Sun and Kim (2020) identified that customers are more satisfied with apps that had a professional and attractive image, including a logo and user-friendly interface. Another research by Li et al. (2018) found that images of food items on mobile food delivery apps play a significant role in customer satisfaction. Customers were more likely to be satisfied with their food order if the images of the food items on the app matched the actual food they received (Li et al. 2019). Hsu and Liu (2020) stated that customers are to be satisfied with a restaurant if it had a high rating, good reviews, and high-quality images of the food.

Trust is defined as the belief in the reliability, integrity, and ability of an organization or brand (Mayer et al., 1995). It also refers to the belief in the quality and safety of the food delivered through the app and the reliability of the delivery

services (Hossain et al., 2019). Trust is a key factor in determining customer satisfaction with mobile food delivery services. Previous studies recommended that apps' perceived reliability, safety, privacy protection, integrity, and expertise all positively impacted customer trust and satisfaction (Kim et al., 2019; Wang et al., 2019). Alqahtani et al. (2019) viewed trust and customer satisfaction in the context of Saudi Arabia and explored that trust in the app and the delivery driver was positively related to customer satisfaction, but trust in the food itself was not a significant factor. Deng et al. (2019) identified that trust had a significant positive impact on customer satisfaction with mobile food delivery apps. This study also found that the design of the app, the quality of the food, and the speed of delivery were important factors in building trust and satisfaction. Trust may be built through a user-friendly interface, clear policies and procedures, and a secure payment system (Alqahtani, Alqahtani, & Alqahtani, 2020). Trust also plays a vital role in the consumers' decision-making to use mobile food delivery apps. Research has shown that trust is a key factor in consumer decisions to use online platforms for food delivery (Lee et al., 2016). Wang et al. (2019) found that trust in the food delivery platform was positively related to consumer satisfaction with the overall delivery experience. Previous studies have identified various factors that affect consumer trust and satisfaction, including the quality of the food, the accuracy of delivery estimates, and the overall convenience of the app (Zhou et al., 2020). Additionally, trust and satisfaction can be improved by implementing features like real-time tracking of orders, rating and reviews of the delivery service, and food quality in the mobile food delivery apps (Alam et al., 2018). Therefore, the image and trust of a mobile food

delivery app play an important role in establishing satisfaction among customers. A positive image can lead to increased trust, which in turn can lead to greater satisfaction with the service. Hence, the following two hypotheses were developed:

H3: Image positively influences customer satisfaction of MFDAs.

H4: Trust positively influences customer satisfaction of MFDAs.

2.4 Customer Satisfaction and Loyalty

Kim and Lee (2018) found that convenience, speed, and food quality are the most important factors in determining customer satisfaction with mobile food delivery apps which leads to increased loyalty. Li, Chen, and Wang (2020) explained that personalized recommendations and rewards systems can further increase customer satisfaction and loyalty. Integration of online payment methods and the use of coupons and discounts can also positively impact customer satisfaction and loyalty (Zou, Li and Yang, 2021). The uses of social media platforms and online reviews have a positive impact on customer satisfaction and loyalty in mobile food delivery apps (El-Baz et al., 2022). The previous studies explore that those who reported higher levels of satisfaction with the app were more likely to be loyal users. This suggests that providing a high-quality and satisfying user experience is crucial for building and maintaining customer loyalty in the mobile food delivery app market (Jiang et al., 2018). Hence, the following hypothesis was developed:

H5: Customer satisfaction positively influences the loyalty of MFDAs.

2.5 Mediating Role of Customer Satisfaction

Choi and Kwon (2020) explained that image and trust have a positive influence on customer loyalty in the context of MFDAs, but did not examine the potential mediating role of customer satisfaction. Another study by Zhou, Chen, & Li (2020) described that customer satisfaction mediates the relationship between trust and loyalty in the context of MFDAs, but did not investigate the role of image. However, image and trust alone may not be sufficient to fully explain customers' loyalty. The moderating role of customers' satisfaction is also important in understanding customers' loyalty. Satisfaction, which refers to the extent to which customers are pleased with their experience with an organization or brand, can moderate the relationship between image and trust and customers' loyalty (Oliver, 1997).

Furthermore, it is not clear whether the relationship between image and trust and customers' loyalty is moderated by customers' satisfaction with the MFDAs. Earlier researchers have suggested that satisfaction may moderate the relationship between image and trust and customers' loyalty (Wang, et al., 2019), while others have found no such relationship (Gao, et al., 2018). Additionally, research has suggested that customer satisfaction may play a moderating role in the relationship between image and trust and customer loyalty (Kim et al., 2018; Kim & Lee, 2020). Therefore, this study also investigates the moderating role of customer satisfaction in the relationship between image and trust and customers' loyalty. Hence, the following two hypotheses were developed:

H6: Customer satisfaction mediates the relationship between image and loyalty

H7: Customer satisfaction mediates the relationship between trust and loyalty

2.6 Research Framework
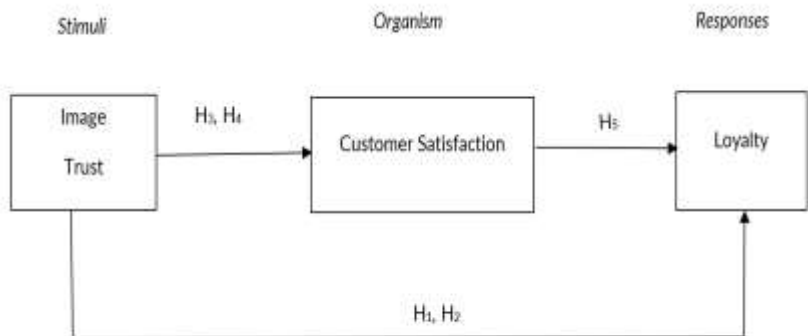
Figure 1. Theoretical Framework

3. METHODOLOGY
3.1 Research Design

This research is carried out in Bangladesh and uses a cross-sectional design and a quantitative technique followed by a Structural Equation Modeling (SEM) method to measure the effect of image and trust on customer loyalty to mobile food delivery apps (MFDAs). According to Sekaran and Bougie (2016), the research which gathered data for a certain objective and within a specific time has to be explained as a cross-sectional analysis. Based on the concept of Sekaran and Bougie (2016), this research is also a cross-sectional study. In this cross-

sectional study, the researcher used a survey questionnaire to obtain quantitative data from the mobile food delivery apps users or customers.

3.2 Research Instrument

The items representing image, trust, customer satisfaction, and loyalty were adapted (see Appendix - A). Constructs image, trust, customer satisfaction, and loyalty have respectively 3 indicators, 5 indicators, 5 indicators, and 6 indicators. Appendix-A shows all the items used in this study.

3.3 Questionnaire Design

In order to meet the research objectives, both types of data i.e., primary and secondary data were used. Primary data was collected through an online questionnaire survey which is consisting of a set of close-ended questions. There were 26 questions in the questionnaire which is divided into 2 sections. Part – 1, consists of the personal profile of the respondents such as – gender, age, education level, occupation, income and the respondents' experience with the use of mobile food delivery apps. Part 2 – comprises of the questions related to constructs. The items of the questionnaire were assessed through 5-point Likert scale where 1 indicates – strongly disagree and 5 – denotes strongly agree.

3.4 Sample Size

Loehlin and Beaujean (2016) stated that a minimum sample size should be used to lessen the bias in SEM estimates and that a desirable sample size should reflect the entire population. Hair et al., (2010) suggested that when the population is unknown, the minimum sample is determined – the number of items

multiplied by 10 times; in this study, the total items is 19, so, the total minimum required sample 190. Also, the sample size is calculated by using G*power 3.1.9.7 (Faul et al., 2007) and recommended setting by Gefen et al., (2011) [f2 = 0.15, power = 0.80, alpha = 0.05 and predictors = 3] the minimum sample size is 77 recommended by G* power to test the model. Thus, we collected 375 responses from the users of MFDAs in this study which is a satisfactory sample for generalizing the population.

3.5 Sampling and Data Collection

A purposive sampling technique was used to collect data from the users of mobile food delivery apps. The purposive sampling technique is a type of non-probability sampling method. In this respect, Malhotra and Dash (2016) recommended that in the case of unlisted populations 'a non-probability' sampling technique can be utilized. A questionnaire was prepared using Google forms and the link was shared through email, Facebook groups, WhatsApp groups and author other networks. Data were collected from a total of 392 users; of which 375 responses were able to fill-up the questionnaire correctly. The remaining 17 were not included in the analysis due to the invalid answer and the non-completion of the questionnaire. Finally, after preliminary screening 375 is the final sample size to carry out the research. Data was collected from January 5 to January 20, 2023, among Bangladeshi MFDAs users.

3.6 Participants and more Demographic Data

The analysis in this study is based on 375 completed questionnaires. The demographic breakdown of respondents is illustrated in Table 1. Most of the respondents i.e., 60.53% are

male (n = 227) while 39.47% were females (n = 148). 74.67% of respondents were aged from 23 to 37. Among them, most of the users (43.73%) used food panda (n=164). The users of MFDAs are from different levels of income groups and they are from different professions. The respondents (175) used MFDAs on an average 6-10 times in monthly.

Table 1. Respondent's profile (N=375)

Variables	Groups	Frequency	Percentages (%)
Gender	Male	227	60.53%
	Female	148	39.47%
Respondents Age	18 – 22	50	13.33%
	23 – 27	120	32.00%
	28 – 32	98	26.13%
	33 – 37	62	16.54%
	38 – 42	25	6.67%
	More than 42	20	5.33%
Education	SSC	22	5.87%
	HSC	55	14.67%
	Under Graduation	168	44.80%

	Graduation	122	32.53%
	PhD	8	2.13%
	Students	69	18.40%
Occupation	Private Job	108	28.80%
	Government Job	53	14.13%
	Businessmen	88	23.47%
	Housewife	45	12.00%
	Others	12	3.20%
Income	Less than BDT.10000	50	13.33%
	10,000 – 25,000	75	20.00%
	25000 – 50000	120	32.00%
	50000 – 75,000	88	23.47%
	More than BDT. 75000	42	11.20%

Which Food Delivery Apps have you used?	Food Panda	164	43.73%
	Pathao Food	62	16.53%
	Uber Eats	15	4.00%
	Hungrinaki	91	24.27%
	Shohoz Food	35	9.33%
	Others	8	2.13%
On average, how often have you used food delivery apps in every month?	1– 5 times	97	25.87%
	6 – 10 times	170	45.33%
	11 – 15	68	18.13%
	More than 15 times	40	10.67%

Source: Authors' own calculation based on the survey

3.7 Data Analysis

For data analysis, two types of software methods have been applied. For coding and compiling the data, and for descriptive statistics, SPSS version 20 was utilized. On the other hand, based on the recommendation of Hair et al. (2014) partial least square, i.e., SMART–PLS is used to investigate the confirmatory factor analysis (CFA), composite reliability, validity of items,

discriminant validity for the constructs, and also the hypothesis test to get the result.

4. DATA ANALYSIS & RESULTS

4.1 Assessment of Measurement Model

To assess the research model, the structural equation modeling technique was applied, and the measurement and structural models were examined by the partial least squares (PLS) technique. The measurement model was evaluated by examining the convergent validity and discriminant validity of four constructs. The convergent validity is measured by considering the factor loading, average variances extract (AVE), and composite reliability (CR), recommended by Hair et al. (2017).

Table 2. Assessment of measurement model

Constructs	Initial Node	Factor Loading	Cronbachs' alpha	Composite Reliability	AVE
Trust	TRU_1:	0.807			
	TRU_2:	0.843	0.738	0.741	0.656
	TRU_3:	0.780			
Image	IMG_1:	0.733			
	IMG_2:	0.799			
	IMG_3:	0.837	0.775	0.811	0.589
	IMG_4:	0.693			
	IMG_5:	0.543			

Customer Satisfaction	SAT_1:	0.564			
	SAT_2:	0.664			
	SAT_3:	0.792			
	SAT_4:	0.787	0.760	0.786	0.510
	SAT_5	0.739			
Loyalty	LOY_1:	0.777			
	LOY_2:	0.835	0.713	0.741	0.542
	LOY_3:	0.568			
	LOY_4:	0.729			
	LOY_5:	0.580			
	LOY_6:	0.510			

Table 2 illustrated the results of confirmatory factor analysis (CFA), showing that all benchmarks were satisfactory. After running the PLS algorithm in the SMART PLS 4.0 software, it is necessary to check whether the outer loadings of the constructs are above 0.708; conversely, values between 0.40–0.70 should be considered for detection from the scale when removing items or indicators increases the composite reliability and AVE by more than the suggested cut-off value (Hair et al. 2011). As per the initial measurement model results, three (3) items (IMG_5, LOY_3 & LOY_6) were detected due to weak factor loading, a remaining total of 16 items for the final analysis (Table 2). The author retains a few items although weaker factor loading due to their contribution. However, all the remaining

items exceeded the benchmark value of 0.7. The latent constructs' CR values were more than 0.7 (Hair et al., 2017). Also, the AVE values of all constructs were above the suggested (Hair et al., 2019) cut-off point of 0.5. Therefore, all the assessment criteria of convergent validity are established.
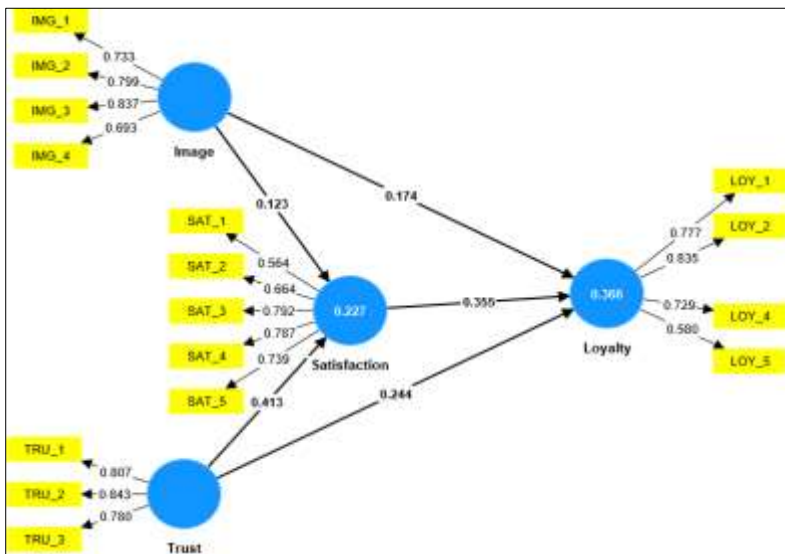

Figure 1. Measurement model (after trimming)

After the check of the discriminant validity, it was evaluated by using Fornell and Larcker criterion and Heterotrait-Monotrait (HTMT) ratio. According to the Fornell and Larcker criterion (1981), "the square root of the AVE for each construct must be greater than the relevant correlation coefficients".

Table 3. Fornell-Larcker Criterion

	Image	Loyalty	Satisfaction	Trust
Image	0.768			
Loyalty	0.375	0.737		
Satisfaction	0.290	0.518	0.714	
Trust	0.403	0.478	0.463	0.810

Under certain situations, the Fornell-Larcker approach is not suitable to check the discriminant validity. Recently, the HTMT ratio is used for measuring the discriminant validity suggested by Henseler et al. (2015) the values of the HTMT ratio for each latent construct should be below 0.85 to establish discriminant validity. Hence, Tables 3 and 4 showed the results of discriminant validity which have been established.

Table 4. Heterotrait-Monotrait Ratio (HTMT)

	Image	Loyalty	Satisfaction	Trust
Image				
Loyalty	0.470			
Satisfaction	0.337	0.667		
Trust	0.530	0.650	0.614	

4.2 Structural Model Assessment

The proposed relationships between the constructs have been evaluated using the structural model. The author assessed the

[112]

structural model, by examining the VIF, R2 value, standard beta, and t-values through a bootstrapping process with a resample of 5,000, and the effect sizes (f2) recommended Hair et al., (2017). Table 5 illustrated the outputs of the structural model. This research has proposed five (5) hypotheses.

Table 5. Results of the Structural Model

H	Path Relationships	Std.Beta	Std.Error	t-values	P-values	BCI-LL	BCI UL	f²	VIF	Decision
H₁	Image -> Loyalty	0.174	0.058	2.997	0.003	0.06	0.287	0.039	1.214	Accepted
H₂	Trust -> Loyalty	0.244	0.065	3.727	0	0.109	0.368	0.66	1.414	Accepted
H₃	Image -> Satisfaction	0.123	0.052	2.38	0.017	0.018	0.222	0.222	1.194	Accepted
H₄	Trust -> Satisfaction	0.355	0.056	6.332	0	0.242	0.462	0.185	1.194	Accepted
H₅	Satisfaction -> Loyalty	0.413	0.056	7.355	0	0.298	0.516	0.154	1.129	Accepted
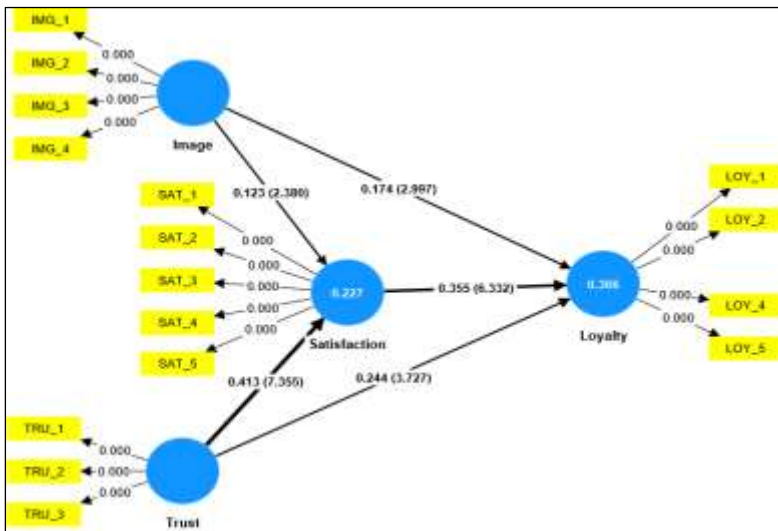
Figure 2. Structural Model Assessment

At first check, the multicollinearity issues by using the variance inflation factor (VIF) and identified that all the VIF values for paths were below 3.30, recommended by Petter et al., (2007). The result signifies that there are no multi-collinearity problems. The authors found that the R^2 value for endogenous variables such as loyalty is 0.366 which demonstrates a satisfactory level of in-sample explanatory power (Hair et al., 2017; Rasoolimanesh et al., 2019). The effect sizes of 0.02, 0.15, and 0.35, respectively, denote small, medium, and large effects according to Cohen's (1988) guidelines. The f^2 results show that the accepted hypotheses have permissible effect sizes (see Table 5).

The result of the statistical analysis shows that all hypotheses were accepted. The standardized path co-efficient of image is β

= 0.174, t = 2.997, and with a p < 0.003, the standardized path co-efficient of trust is β = 0.244, t = 3.727 and with a p < 0.000, has a significant positive relationship with loyalty and the standardized path co-efficient of satisfaction is β = 0.355, t = 6.332 and with a p < 0.00, has significant positive relationship with loyalty. However, the standardized path co-efficient of image is β = 0.123, t = 2.380 and with a p < 0.017, the standardized path co-efficient of trust is β = 0.413, t = 7.355 and with a p < 0.000, both have significant positive relationship with satisfaction. Thus, all the five hypotheses (H1, H2, H3, H4, and H5) were accepted in this study. From the value of the coefficients, it can be presumed that trust is the factor that mostly influences customer satisfaction. Also, from the value of the coefficients, it can be apparent that satisfaction is the factor that mostly influences customer loyalty, followed by trust and image. The structural model has moderate explanatory power for the variance of loyalty i.e., 36.6%.

4.3 Mediating Effect Analysis

Mediation analysis was performed to assess the mediating role of customer satisfaction between image and loyalty. The results (see Table 6) revealed a significant indirect effect of image on loyalty through customer satisfaction (H6: β = 0.044, t = 2.112, p < 0.035). The total effect of image on loyalty was significant (β = 0.219, t = 3.383, p < 0.001), with the inclusion of the mediator the effect of image on loyalty was still significant (β = 0.173, t = 3.079, p < 0.000). This shows a complementary partial mediating role of customer satisfaction in the relationship between image and loyalty. Hence, H6 was supported.

Table 6. Results of Mediation Analysis

Mediated Path	Path co-efficient	Standard error	T - statistics	P - values	Type of mediation path
Image -> Satisfaction -> Loyalty (H_6)	0.044	0.021	2.112	0.035	Partial mediation
Trust -> Satisfaction -> Loyalty (H_7)	0.147	0.034	4.292	0.000	Partial mediation

Table 7. Results of Mediating Effects

Hypotheses	Path	Direct Effect	Indirect effect	Total effect
H_1	Image -> Loyalty	0.174	0.044	0.218
H_2	Trust -> Loyalty	0.244	0.147	0.391
H_3	Image -> Satisfaction	0.123	-	0.123
H_4	Trust -> Satisfaction	0.355	-	0.355
H_5	Satisfaction -> Loyalty	0.413	-	0.413
H_6	Image -> Satisfaction -> Loyalty	-	0.044	0.044
H_7	Trust -> Satisfaction -> Loyalty	-	0.147	0.147

Furthermore, the results (see Table 6) revealed a significant indirect effect of trust on loyalty through customer satisfaction

(H7: β = 0.147, t = 4.292, p < 0.000). The total effect of trust on loyalty was significant (β = 0.392, t = 6.031, p < 0.000), with the inclusion of the mediator the effect of trust on loyalty was still significant (β = 0.245, t = 3.796, p < 0.000). This shows a complementary partial mediating role of customer satisfaction in the relationship between trust and loyalty. Hence, H7 was supported.

4.4 Results of Importance-Performance Matrix Analysis (IPMA)

These quadrants are defined with the average of performance and the average of importance that are stated in the table of IPMA results. It was first proposed and introduced by Martilla and James (1977). Furthermore, According to Ringle and Sarstedt (2016), Importance-Performance Map Analysis (IPMA) can be used to facilitate the interpretation of PLS-SEM results by generating a visual representation, as depicted in Figure 4.

In the Importance-Performance Map Analysis (IPMA) shown in the figure, the degree of performance of each element is indicated on the vertical axis, ranging from poor performance to good performance, while the perceived importance of the attributes is depicted on the horizontal axis, varying from not very important to very important. In this study, IPMA was used to detect the importance and performance of image, trust, and customer satisfaction. Accordingly, trust is the most important and performing construct for building and maintaining loyalty among mobile food delivery apps' users. This represents high performance, secured & maintains privacy, and service qualities are the important issues for loyalty. It is also a best-performing

construct means that strong trust may be possible to form loyalty.
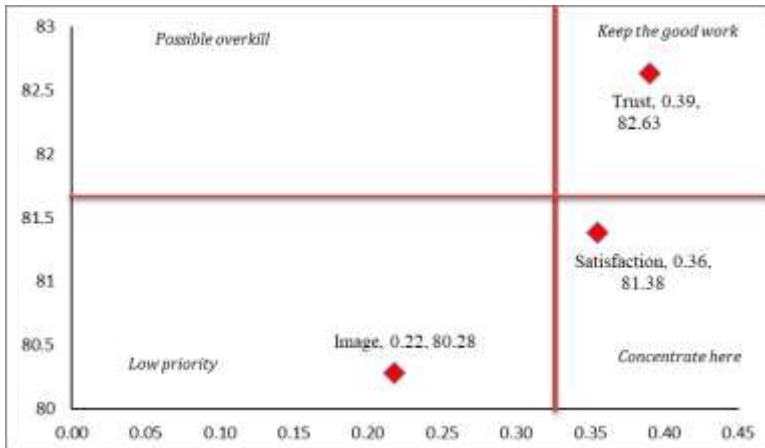
Figure 3. Important Performance Matrix Analysis

Table 8. Categorization of Loyalty factors in IPA quadrant

IFEFM factor	IPA quadrant
Image	Low priority
Satisfaction	Concentrate here
Trust	Keep the good work

Therefore, trust regarding the loyalty of MFDAs is a good construct. Management and policymakers should keep up the good work by implementing effective strategies. However, in our study, the low priority of the constructs indicates that the variables are important but they are currently performing low. In this study, the image of MFDAs is an important construct but currently, it performing below average. It indicates that image

is a significant issue for customer satisfaction as well as loyalty but recently users may require more features in MFDAs including the quality of the app's interface and design, customer service, and advertising, which can create a positive attitude towards the service provider. On the other side, customer satisfaction is another important and well-performing construct. Therefore, management and policymakers should concentrate on how customer satisfaction will increase for building loyalty among the MFDAs users.

5. DISCUSSION

The aim of the study is to explore the effect of image and trust on customers' loyalty to mobile food delivery apps (MFDAs) and also find the mediating role of customer satisfaction. This study's findings confirmed that both image and trust have positive and significant effect of customer loyalty (H1 & H2). This finding verifies with the findings of Teng et al. (2019) & Kim et al., (2018). The result indicates that users are more likely to exhibit loyalty towards an app if they perceive it as trustworthy and having a positive image and high levels of trust. Customer satisfaction has a positive and significant relationship with loyalty (H5), indicating that when customers are satisfied with their experience using MFDAs, they are more likely to use the app again and recommend it to others, leading to higher levels of loyalty. Otherwise, customers may even switch to a competitor, resulting in decreased loyalty. So, the management of MFDAs can prioritize customer satisfaction by offering personalized recommendations and providing feedback mechanisms to improve the service quality. Through these efforts, MFDAs can increase customer satisfaction, which can further enhance customers' loyalty to the brand. The result

shows that image is also found to have a positive and significant influence on customer satisfaction, indicating that hypothesis (H3) is also accepted, since the presence of high-quality images on food items on the menu, by providing customers with a clear understanding of the food they are ordering, by improving customers' perception of the food being delivered, significantly increased customers' motivation to order food through MFDAs. However, trust also exhibits a positive and significant effect on the satisfaction of mobile food delivery apps users, indicating that hypothesis (H4) is also accepted, which means that trust is the belief that the service provider will deliver on its promises, and it plays a crucial role in building long-term relationships with customers.

Therefore, the growth of mobile food delivery apps in Bangladesh has had a significant impact on the food industry, offering consumers greater convenience and accessibility to food options. However, the industry faces challenges such as a lack of trust in the quality and safety of food delivered through these apps, and the need for regulation and standardization. To overcome these challenges, companies operating in this market must focus on building trust with their customers and ensuring the quality and safety of their offerings. Furthermore, image and trust are important factors in building customer loyalty for MFDAs. Companies that can create a positive image and establish trust with customers are more likely to retain their business and gain new customers through word-of-mouth recommendations. In this regard, need investment in design, branding, and customer service, a food delivery app can create a positive user experience and establish a strong relationship with its customers.

6. CONTRIBUTIONS

The study pointed out that there is a dearth of studies that examined the relationship between image, trust and customer satisfaction with loyalty in the mobile food delivery apps particularly from a lesser digitally literate populated country like Bangladesh. The study has two theoretical contributions: firstly, the author proves that the new constructs (image, trust) are a determinant of loyalty in the context of mobile food delivery apps. Secondly, the study confirmed that customers' satisfaction (organism) plays a mediating role that significantly affects the relationship between image, trust (stimuli), and loyalty (responses). The study also investigates customer satisfaction as the mediating role between image, trust and loyalty.

7. CONCLUSION, LIMITATIONS & FUTURE RESEARCH DIRECTIONS

In conclusion, the study has shown that the image and trust of mobile food delivery apps (MFDAs) significantly impact loyalty. A positive and reputable image increases customer trust and satisfaction, leading to higher levels of loyalty. Conversely, a negative image can erode trust and loyalty. Trust, on its own, is also a crucial determinant of loyalty, as customers who perceive an app as reliable and secure are more likely to exhibit higher levels of loyalty. Importantly, customer satisfaction plays a mediating role in the relationship between image, trust, and loyalty. When customers are satisfied with the overall service experience, their loyalty to the app increases. To foster loyalty, MFDAs should focus on building a positive brand image, establishing trust through transparent and reliable operations,

and consistently delivering high-quality service. Overall, the insights gained from this study can assist MFDAs in developing effective strategies to enhance customer loyalty and gain a competitive advantage in the market. Yet, the study has few limitations, like all participants of this study reside in Dhaka city. Also, data were collected online. Therefore, future studies may include additional constructs like customer involvement, and commitment to the existing model to enrich its predictive power. Future studies also might investigate the nonlinear effect for detecting the robustness of PLS-SEM results.

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Appendix A

Constructs	Initial Node	Statements	Adapted from
Trust	TRU_1:	I think using MFD apps is safe	Hung et al., (2006)
	TRU_2:	I think using MFD apps is reliable	
	TRU_3:	I trust the mobile food delivery app	
Image	IMG_1:	The MFD apps image is trendy	Konuk (2018), Naehyun et ai., (2012)
	IMG_2:	This MFD apps provides attractive ordering experience	
	IMG_3:	This MFD apps provides good overall services	
	IMG_4:	I can easily recall the MFD apps	
	IMG_5:	Overall, I have a favorable view of the MFD apps	
Customer Satisfaction	SAT_1:	This MFD apps has high performance	Anderson and Srinivasan (2003); Wang, Tseng et al., (2019); Lee and Chung (2009),
	SAT_2:	I believe I have made a right decision to choose MFD apps	
	SAT_3:	I am satisfied with the way that MFD apps have carried out the transactions	
	SAT_4:	I am happy with mobile food order apps	

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	SAT_5	Overall, I was satisfied with the MFD apps services	Alalwan (2020)
Loyalty	LOY_1:	I always subscribe to MFD app promotion	Suhartanto et al., (2018), Liu et al., (2017), Nguyen-Phuoc et al., (2020). Zhao, Y.; Bacao, F. (2020)
	LOY_2:	I will use the MFD app again in future	
	LOY_3:	I will recommend the MFD app to other people	
	LOY_4:	I will say or share the positive things to other people about using MFD app	
	LOY_5:	The user friendliness of the MFD app makes me feel good	
	LOY_6:	I consider this MFD app to be my first choice when I order food	

GEOPOLITICS OF THE PANDEMIC: THE CASE OF CORONAVIRUS, THE VIRUS THAT DEFEATED STATES

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ABSTRACT

This paper examines the geopolitical implications of the coronavirus pandemic, exploring how a viral outbreak can impact the power dynamics among states and challenge traditional notions of state sovereignty. By analyzing the global response to the COVID-19 pandemic, this paper investigates how the virus has exposed vulnerabilities in state governance, disrupted international relations, and reshaped the geopolitical landscape. The subject of the study is conducted using a qualitative approach. The paper argues that the pandemic has revealed the limitations of state-centric approaches and highlights the need for international cooperation and multilateralism to effectively address global health crises.

Keywords: Geopolitics of the pandemic, geopolitical challenges, population vulnerabilities, global health crisis, vaccine diplomacy, international cooperation.

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1. INTRODUCTION

The outbreak of the coronavirus pandemic, caused by the novel coronavirus SARS-CoV-2, has had an unprecedented impact on a global scale. The virus, which originated in Wuhan, China, quickly spread across borders, infecting millions of people and causing significant loss of life. Beyond the health consequences, the pandemic has had profound geopolitical implications, challenging the traditional power dynamics among states and revealing vulnerabilities in governance systems worldwide.

The coronavirus pandemic emerged in late 2019 and rapidly escalated into a global health crisis. The highly contagious nature of the virus, combined with its severe respiratory effects, posed a significant challenge to public health systems and led to overwhelming healthcare infrastructures in various countries. Governments implemented strict measures such as lockdowns, travel restrictions, and social distancing to contain the spread, causing profound economic disruptions and social upheaval.

Understanding the geopolitical dimensions of the pandemic is crucial for comprehending the broader implications of global politics, international relations, and state sovereignty. The crisis has shown how a microscopic pathogen can disrupt established power structures, reshape alliances, and influence the behavior of nations. By exploring the geopolitical aspects, we can acquire insights into how states respond, collaborate, or compete during times of crisis and how the pandemic might reshape the global order.

This paper aims to analyze the geopolitical dimensions of the coronavirus pandemic and its impact on the global stage. It also

aims to examine how the virus has challenged conventional notions of state sovereignty, altered power dynamics, and affected international relations.

2. LITERATURE REVIEWS

Literature reviews on the geopolitics of the COVID-19 pandemic provide a comprehensive analysis of the global political and international relations implications of the pandemic. These reviews examine the pandemic's impact on global power dynamics, international cooperation, and underlying vulnerabilities and tensions in the international system. They help to advance our understanding of the topic and provide a foundation for further research and analysis.

Davies and Hobson (2023) argue that the pandemic has exposed the fragility of the global system and highlighted the need for a more coordinated and cooperative approach to international relations. They note the pandemic has led to significant changes in the global order, with countries turning inward and prioritizing their interests over global cooperation (Davies & Hobson, 2023). However, they also suggest that this crisis presents an opportunity for countries to work together to address global challenges and build a more resilient and fairer world. The authors provide a thought-provoking analysis of the impact of the pandemic on international relations and the potential for positive change in the future.

Simon Dalby (2022) argues that the COVID-19 pandemic has exposed the fragility of global systems and highlighted the need for a new approach to global governance. He suggests that the current geopolitical landscape, characterized by competition and conflict, is ill-equipped to address global challenges like

pandemics and climate change. Instead, he advocates for a "planetary politics" approach that emphasizes cooperation and collective action, and that recognizes the interconnectedness of all life on Earth (Dalby, 2022). This literature review examines the way the COVID-19 pandemic has affected global geopolitics, including issues related to national security, economic globalization, and international cooperation.

Fidler (2020) discusses the impact of the Covid-19 pandemic on geopolitics and international law. The author argues that the pandemic has exposed the weaknesses in the global governance system and highlighted the need for greater cooperation and coordination among nations. The article also examines the role of international law in addressing the pandemic, including the use of emergency powers and the potential for legal liability for states that fail to adequately respond to the crisis (Fidler, 2020). The article provides a thoughtful analysis of the complex challenges posed by the pandemic and its broader implications for global governance and international law.

Agartan, Cook and Lin (2020) explore the role of the World Health Organization (WHO) in the context of the COVID-19 pandemic and the changing dynamics of global institutions. The authors argue that the pandemic has highlighted the importance of multilateral cooperation and the need for global institutions like the WHO to play a leading role in responding to global health crises (Agartan, Cook, & Lin, 2020). However, they also note that the pandemic has exposed weaknesses in the current global governance system and raised questions about the effectiveness of multilateral institutions in the face of shifting regional dynamics.

Ndlovu-Gatsheni (2020) explores the geopolitical implications of the COVID-19 pandemic, arguing that it has exposed and exacerbated existing power imbalances between the Global North and South. Drawing on decolonial theory, the author highlights how Western knowledge systems have been prioritized and imposed on the rest of the world, leading to a lack of recognition and validation of alternative knowledge systems and approaches to addressing the pandemic (Ndlovu-Gatsheni, 2020).

Francois Heisbourg (2020) discusses the impact of COVID-19 on the global political landscape. He argues that the pandemic has exposed weaknesses in the international system, particularly in terms of global cooperation and leadership. Heisbourg suggests that the pandemic has accelerated existing trends, such as the rise of China and the decline of the United States, and has led to an increase in nationalism and protectionism (Heisbourg, 2020). He concludes that the pandemic will have long-lasting effects on the global order and that countries must work together to address the challenges posed by the virus.

Cole and Dodds (2021) argue that the COVID-19 pandemic has highlighted the need for global cooperation in addressing crises, including climate change. They suggest that the lessons learned from the pandemic response, such as the importance of scientific expertise and the need for coordinated action, can be applied to climate change policy (Cole & Dodds, 2021). However, they also caution that geopolitical tensions and economic pressures may hinder progress toward a more sustainable future.

Grinin and Korotayev (2020) discuss the impact of the COVID-19 pandemic on geopolitics and the global economy. The authors argue that the pandemic has accelerated existing trends towards deglobalization and increased geopolitical tensions, particularly between the US and China. They also suggest that the pandemic has exacerbated existing economic inequalities and could lead to a global recession (Grinin & Korotayev, 2020).

Ilyas (2020) discusses the impact of the COVID-19 pandemic on global geopolitics. The author argues that the pandemic has shifted the balance of power among nations, with some countries managing the crisis better than others. The article also highlights the role of technology in responding to the pandemic and the potential for a digital divide to emerge. Additionally, the author discusses the impact of the pandemic on global trade and the potential for countries to become more self-sufficient in the future (Ilyas, 2020).

Bahi (2021) discusses the geopolitical implications of the COVID-19 pandemic, particularly the ongoing rivalry between the US and China. The author argues that this rivalry has the potential to lead to a Kindleberger trap, where the dominant power (in this case, the US) fails to provide sufficient global leadership and cooperation, leading to instability and conflict. The article also explores the role of international organizations and the need for a coordinated global response to the pandemic (Bahi, 2021).

This study aims to contribute to the literature on the geopolitics of the COVID-19 pandemic by providing a more nuanced understanding of the impact of the pandemic on states' sovereignty, global power dynamics, and international

cooperation. It seeks to bridge the gap in existing literature reviews and offer a comprehensive analysis of the geopolitical implications of the pandemic, to advance our understanding of the topic and provide a foundation for further research and analysis. The existing literature on the COVID-19 pandemic's geopolitical implications lacks a comprehensive analysis, which presents an opportunity to contribute to the current body of knowledge.

3. METHODOLOGY

The paper is based on a qualitative approach, conducting a systematic literature review drawing on a range of sources including journal articles, organization documents, and academic literature. Aiming at analyzing and synthesizing the information to identify how the pandemic has impacted global geopolitics, with a focus on issues related to national sovereignty security, economic globalization, and international cooperation.

4. ANALYSIS

The analysis explores the geopolitical implications of the COVID-19 pandemic, including its impact on international relations, global governance, and regional power dynamics. It examines how countries have responded to the crisis and the effect this has had on their relationships with other nations. The goal is to gain a better understanding and a comprehensive vision of how the pandemic has reshaped the geopolitical landscape and what this means for the future.

4.1 The State and Sovereignty in Crisis

The outbreak of COVID-19 has brought up important inquiries about the extent and reasoning behind the authority of governments, as they employ significant levels of control over their citizens in their efforts to combat the virus (Lehtinen & Brunila, 2021). The first search result is an article from the University of Helsinki that discusses the questions surrounding the limits and justifications of sovereign power during the COVID-19 pandemic (Lehtinen & Brunila, 2021). The article highlights how nation-states have used high degrees of power over populations in their strategies to counter the virus. This raises important questions about the boundaries of state power and the ethical justifications for implementing certain measures. The analysis presented in the article focuses on a particular facet of the strategy employed during the pandemic.

The second search result appears to be unrelated to the topic, as it discusses sovereignty from a broader perspective rather than specifically addressing the crisis. It discusses the meaning of sovereignty, emphasizing that states are the sole subjects of international law and possess the right to self-determination and independence (Volk, 2022). While the information provided in this search result does not directly address the crisis, it contributes to the understanding of the general concept of state sovereignty.

4.1.1 Traditional Notions of State Sovereignty and their Implications

Traditional notions of state sovereignty have long played a crucial role in shaping international relations and political theory. The emergence of state sovereignty introduced new

legal and moral principles that guided the interactions between states. One of the notable philosophers who delved into the concept of state sovereignty was Thomas Hobbes, whose influential work, Leviathan, explored the nature and functioning of sovereignty (Ramos, 2013). The notion of traditional sovereignty, often regarded as foundational and timeless, has faced criticism. Scholars argue that this traditional understanding is not as universally accepted as previously assumed. Alternative ideas, such as conditional and responsible sovereignty, have acquired traction (Glanville, 2013; Ramos, 2013).

Traditional notions of state sovereignty refer to the authority and control that a state exercises within its territory, including the ability to govern, decide, and enforce laws without external interference. This concept has been the foundation of the modern international system, with states being the primary actors in global affairs. State sovereignty implies exclusive control over borders, the ability to assert authority over citizens, and the power to engage in diplomatic relations with other states. The concept of state sovereignty also presents challenges and limitations. In an interconnected world, states must navigate the complexities of globalization, international law, and the expectations of the international community. Traditional notions of sovereignty have faced criticism in recent years, leading to discussions about conditional and responsible sovereignty (Besson, April 2011).

The implications of state sovereignty include the preservation of national identity, protection of territorial integrity, and the promotion of national interests. States have historically been responsible for ensuring the security, welfare, and well-being of

their citizens. However, the coronavirus pandemic has posed significant challenges to these traditional notions of state sovereignty.

4.1.2 Challenges Posed by the Pandemic to State Governance and Control

The pandemic has presented unprecedented challenges to state governance and control. The highly contagious nature of the virus, combined with its rapid spread across borders, has exposed the limitations of state capacities in effectively managing a global health crisis. Some of the challenges are as follows:

a) **Healthcare Infrastructure:** The sudden surge in COVID-19 cases has overwhelmed healthcare systems, highlighting deficiencies in infrastructure, resources, and preparedness. States have struggled to provide adequate healthcare services, leading to a strain on medical facilities, shortages of essential supplies, and difficulties in managing the crisis (Kaye et al., 2021).

The stream of COVID-19 cases has overpowered healthcare systems worldwide. The sudden increase in patients requiring medical attention has placed immense pressure on hospitals, clinics, and other healthcare facilities. Insufficient resources, including beds, medical equipment, and essential supplies, have been a common challenge. The shortage of critical items like personal protective equipment (PPE), ventilators, and testing kits has exacerbated the difficulties faced by healthcare providers and authorities in delivering adequate care (OECD, 2021).

b) Economic Impact: The pandemic has resulted in severe economic disruptions, including lockdowns, business closures, and supply chain disruptions. States have faced challenges in ensuring economic stability, managing unemployment, and addressing the needs of businesses and vulnerable populations (Davila et al., 2021). Generally, the pandemic has caused unprecedented economic disruption in many countries (Drosos, Theodoroulakis, Antoniou & Rajter, 2021).

c) Information Management: Rapid and accurate dissemination of information is crucial during a health crisis. However, misinformation, disinformation, and lack of coordination have posed challenges to state efforts in managing public health communication and ensuring compliance with preventive measures (Czerniak et al., 2023). Misinformation and disinformation: The proliferation of inaccurate, misleading, or false information during a health crisis can have detrimental effects on public health. Misinformation and disinformation can spread rapidly through various channels, including social media platforms. These sources of misinformation undermine public trust, contribute to confusion, and may lead to non-compliance with preventive measures. Governments and health authorities face the challenge of combating misinformation while ensuring accurate information reaches the public (Borges do Nascimento et al., 2022; Czerniak et al., 2023; Johnson, Wallace, & Lee, 2022).

d) Coordination and Collaboration: The global nature of the pandemic has highlighted the need for international cooperation and coordination. However, states have faced challenges in effectively collaborating, sharing information, and coordinating response efforts due to political tensions, national interests, and divergent approaches (Haruna, Ngwafu, &

Muzata, 2023). The COVID-19 pandemic has underscored the need for international cooperation and coordination in managing global health crises.

The interconnectedness of our world has made it evident that a collective and collaborative approach is essential to effectively address and mitigate the impact of such a widespread and transnational crisis. However, several challenges have hindered the coordination and collaboration efforts among states (Haruna et al., 2023). These challenges include political tensions, national interests, and divergent approaches to handling the pandemic. One of the primary obstacles to international cooperation and coordination has been political tensions. The pandemic has unfolded against a backdrop of geopolitical rivalries and strained international relations. In some cases, political disagreements and conflicts have hindered the smooth exchange of information, hindered joint response efforts, and impeded the sharing of resources and expertise.

Moreover, national interests have also played a role in complicating collaboration. Countries have had to prioritize their populations and allocate resources accordingly, which has at times led to competition for essential supplies, such as personal protective equipment and vaccines.

4.1.3 Erosion of State Authority and the Emergence of non-state Actors

The COVID-19 pandemic has indeed had significant implications for crisis management and governance, including the erosion of state authority and the emergence of non-state actors in the crisis management process.

The pandemic has challenged the authority of states in various ways. One key aspect is the strain it has put on healthcare systems and their capacity to effectively respond to the crisis. Many governments have struggled to manage the overwhelming demands for healthcare services, leading to a loss of public confidence in state institutions (OECD, 2020). This erosion of trust and confidence in state authority has opened opportunities for non-state actors to play a role in crisis management. Some notable aspects include:

a) **Supranational Organizations:** Global health organizations, such as the World Health Organization (WHO), have played a prominent role in coordinating the international response to the pandemic (Jones & Hameiri, 2022). Their involvement has challenged the exclusivity of state authority, as they have assumed a central role in guiding global health policies and providing technical guidance.

b) **Regional Cooperation:** Regional organizations and alliances have also played a significant role in the pandemic response, often bypassing traditional state-centric approaches. Examples include the European Union's coordination efforts and joint initiatives among neighboring countries to address common challenges.

c) Non-governmental organizations (NGOs) and civil society organizations have indeed played an active role in the response to the COVID-19 pandemic, challenging the monopoly of state authority and contributing to crisis management efforts, they have assisted, mobilized resources, and advocating for the rights and needs of vulnerable populations. They have amplified the voices of marginalized communities, including women, children, the elderly, refugees,

and other displaced individuals. By highlighting their specific challenges and vulnerabilities during the pandemic, NGOs have pushed for policy changes and ensured that their rights and well-being are not overlooked (Duclos & Palmer, 2020; Maple, Walker, & Vearey, 2022). While the provided search result highlights the contrasting narratives surrounding non-state actors, it emphasizes the role of NGOs as vanguards of a global civil society (Carayannis & Weiss, 2021). The active participation of NGOs has helped address gaps in the crisis response and provided support where state institutions have faced challenges.

d) Public-Private Partnerships: Collaborations between governments and private sector entities have been instrumental in addressing various aspects of the pandemic, including vaccine development, production, and distribution. These partnerships have blurred the lines between state and non-state actors, creating new dynamics in crisis management.

The erosion of state authority and the emergence of non-state actors in the pandemic response have raised questions about the future of state sovereignty and the need for a more collaborative and multilateral approach to address global challenges.

4.2 Global Health Governance and Pandemic Response

Global health governance refers to the system of institutions, policies, and processes that are in place to address global health issues and coordinate responses to health emergencies, such as pandemics. It involves international cooperation and collaboration among governments, international organizations, non-governmental organizations (NGOs), and other

stakeholders to promote and protect public health on a global scale.

The pandemic response is a critical component of global health governance. When a pandemic occurs, such as the COVID-19 pandemic, it requires a coordinated and collaborative effort at the global level to effectively respond and mitigate its impact. Here are some aspects of the global pandemic response:

4.2.1 Role of International Organizations (WHO, UN) in Global Health Governance

International organizations, such as the World Health Organization (WHO) and the United Nations (UN), have a big part to play in global health governance. The WHO is the leading specialized agency responsible for coordinating international health efforts, providing technical guidance, and promoting global health security (Lee & Piper, 2020). Its functions include monitoring global health trends, responding to health emergencies, and supporting countries in strengthening their healthcare systems. The UN, through its various bodies and agencies, also be a major factor in global health governance (Lee & Piper, 2020). It facilitates cooperation among member states, coordinates efforts to address health challenges, and advocates for health as a fundamental human right.

These international organizations provide a platform for countries to collaborate, exchange information, and harmonize policies in response to the pandemic. They serve as repositories of expertise, disseminate best practices, and coordinate international efforts to ensure a coherent global response.

4.2.2 Critiques of the Global Health Architecture and its Effectiveness

The global health architecture has faced significant criticism regarding its effectiveness in responding to the pandemic. Some critiques contain:

a) Resource Constraints: International organizations, including the WHO, have faced financial and resource constraints, limiting their capacity to respond effectively. Insufficient funding and over-reliance on voluntary contributions have hampered their ability to perform critical functions (Gwenzi & Rzymski, 2021).

b) Political Interference: Global health governance has been subjected to political pressures and influences, which can undermine the impartiality and independence of the decision-making processes (Fuleihan, 2022). Criticisms have been raised about the politicization of health emergencies, resulting in delays or inadequate responses.

c) Coordination and Preparedness: The pandemic has highlighted the need for improved coordination and preparedness at the global level. Some argue that the global health architecture lacks a robust mechanism for timely information sharing, coordinated response planning, and resource allocation (Saxena et al., 2023).

d) Representation and Equity: The representation of countries and their voices in global health governance has been a matter of contention. The power imbalances and unequal access to decision-making processes perpetuate inequities in resource allocation and pandemic response.

These critiques have prompted calls for reforming the global health architecture to enhance its effectiveness, strengthen its funding mechanisms, improve coordination, and ensure fair representation.

4.2.3 National Responses and their Implications for International Relations

National responses to the pandemic have varied significantly, leading to implications for international relations. Some countries have adopted a cooperative approach, actively sharing information, resources, and expertise to support global efforts. This cooperative response has fostered solidarity, strengthened diplomatic ties, and facilitated collaborations in areas such as research, vaccine development, and humanitarian aid.

However, there have also been instances of nationalistic responses, where countries prioritize their interests over international cooperation. This approach has led to tensions, strained relations, and competition for resources. Vaccine nationalism, for example, has raised concerns about equity in vaccine distribution and has highlighted the potential for vaccine-related diplomatic tensions (Kelly & McGlasson, 2022; Kickbusch & Liu, 2022). National responses to the pandemic have also influenced perceptions of leadership and governance. Countries that have effectively managed the crisis and demonstrated strong leadership have gained recognition and influence on the global stage. Conversely, inadequate or ineffective responses have raised questions about governance capabilities and may impact a country's standing in international relations (Kelly & McGlasson, 2022). Besides the question of

Solidarity has been overshadowed by nationalism, leading to avoidable fatalities and unequal distribution of vaccines and treatments. The current systems of intellectual property, trade secrets, and data rights that govern pharmaceutical companies have further hindered the expansion of production capabilities and the provision of affordable and fair access to COVID-19 vaccines and other medical supplies in low- and middle-income nations (Saxena et al., 2023).

International organizations such as the WHO and the UN have a bearing on global health governance and pandemic response. However, resource constraints, political interference, coordination, and equity have prompted calls for reform. National responses to the pandemic have varied, impacting international relations either through cooperative efforts or nationalistic approaches. Enhancing global health governance and fostering international cooperation is essential for addressing current and future health crises effectively.

4.3 Impact on International Relations

The COVID-19 pandemic has had a profound impact on international relations in various ways. Here are some of the key impacts:

4.3.1 Shifts in Power Dynamics and Influence Among States

The pandemic has potentially reshaped the global power dynamics. Some countries, like China, used the crisis as an opportunity to expand their influence through medical diplomacy, providing aid and resources to other nations. The handling of the pandemic by certain countries has led to

questions about their leadership and credibility on the international stage (Bahi, 2021; Gauttam, Singh, & Kaur, 2020).

The coronavirus pandemic has led to significant shifts in power dynamics and influence among states as follows:

a) Emerging Powers: The crisis has provided an opportunity for emerging powers to showcase their capabilities and influence on the global stage. Countries like China and Russia have engaged in vaccine diplomacy, providing COVID-19 vaccines to other nations and positioning themselves as global players in the pandemic response (Kelly & McGlasson, 2022; Kickbusch & Liu, 2022; Manfredi-Sánchez, 2022). This has challenged the traditional dominance of Western powers and reshaped perceptions of influence.

b) Diminished Influence of Global Powers: The pandemic has revealed vulnerabilities and weaknesses in some of the traditionally powerful countries. Inadequate pandemic response, strained healthcare systems, and economic challenges have led to a loss of influence for certain global powers (Suzuki & Yang, 2022). This has created space for other actors to assert themselves and influence global narratives.

c) Shift in Regional Influence: The crisis has also witnessed shifts in regional influence. Countries that have effectively managed the pandemic and showed leadership have gained influence and enhanced their regional standing (Bailey et al., 2020). Regional powers with strong healthcare systems and robust response mechanisms have become key players in shaping regional dynamics.

4.3.2 *Geopolitical Implications of Vaccine Diplomacy and Global Health Aid*

Vaccine diplomacy and global health aid have significant geopolitical implications:

a) Soft Power Projection: Countries that have successfully developed and distributed vaccines have used them as tools of soft power projection. By providing vaccines to other nations, they aim to enhance their image, strengthen diplomatic ties, and gain influence (Manfredi-Sánchez, 2022). This vaccine diplomacy has the potential to reshape alliances, forge new partnerships, and impact geopolitical dynamics.

b) Influence in Developing Countries: Vaccine access and distribution have become critical factors in influencing relationships with developing countries. Providing vaccines and health aid allows countries to gain goodwill, influence policy decisions, and secure economic and strategic partnerships. This competition for influence in developing countries has geopolitical ramifications in terms of economic cooperation, access to resources, and political alignment.

c) Equity Concerns: Vaccine diplomacy and global health aid have also raised concerns about equity and fairness (Manfredi-Sánchez, 2022). Unequal access to vaccines can exacerbate existing geopolitical divisions and contribute to global inequality (Bahi, 2021). The perception of certain countries using vaccines as tools of influence can strain international relations and impact trust among nations.

4.3.3 Regional and Global Cooperation or Competition in Pandemic Response

The pandemic has witnessed both regional and global cooperation as well as competition in response efforts.

a) **Regional Cooperation:** Regional organizations and alliances have played a crucial role in coordinating pandemic response within their respective regions. Examples include the European Union's joint procurement of vaccines and coordination of travel restrictions, and the African Union's collective efforts in mobilizing resources and sharing information. Regional cooperation has facilitated the pooling of resources, sharing of best practices, and joint decision-making, fostering solidarity and regional resilience.

b) **Global Cooperation:** Global initiatives, such as COVAX, have aimed to ensure fair access to vaccines worldwide. These collaborative efforts to bring together governments, international organizations, and vaccine manufacturers to support fair distribution (Bahi, 2021; Suzuki & Yang, 2022). Multilateral platforms have provided opportunities for dialogue, resource sharing, and coordination of response efforts.

c) **Competition for Resources:** The pandemic has also fueled competition for resources, including medical supplies (Suzuki & Yang, 2022), personal protective equipment (PPE), and vaccines. This competition can strain international relations, create tensions, and lead to accusations of hoarding or unfair distribution practices. Vaccine nationalism and protectionist measures can hinder global cooperation and exacerbate geopolitical divisions.

The coronavirus pandemic has resulted in shifts in power dynamics among states, with emerging powers acquiring influence and some global powers experiencing diminished influence. Vaccine diplomacy and global health aid have significant geopolitical implications, including soft power projection and competition for influence in developing countries. Regional and global cooperation has been observed, but competition for resources.

4.4 Economic and Trade Disruptions

4.4.1 Effects of the Pandemic on Global Supply Chains and Trade Flows

The coronavirus pandemic has had significant effects on global supply chains and trade flows:

a) Disruptions to Supply Chains: The pandemic has led to disruptions in global supply chains because of lockdowns, restrictions on movement, and closures of businesses. Manufacturing activities, transportation, and logistics have been severely affected, resulting in delays, shortages, and increased costs (Suzuki & Yang, 2022). Dependence on single-source suppliers and just-in-time production models has been exposed as a vulnerability.

b) Shifts in Trade Patterns: The pandemic has caused shifts in trade patterns as countries have implemented measures to protect domestic industries and secure essential supplies. Export restrictions, tariffs, and trade barriers have been imposed, impacting global trade flows (Bahi, 2021). Essential goods, such as medical supplies and food, have faced increased demand, while sectors such as tourism and aviation have suffered from reduced trade volumes.

c) Regionalization of Supply Chains: The disruptions have prompted discussions on the regionalization of supply chains as countries seek to reduce dependence on distant suppliers and ensure greater resilience. This may lead to the reconfiguration of supply chains, diversification of sourcing, and the relocation of manufacturing activities to achieve greater self-sufficiency and reduce vulnerabilities.

4.4.2 Shifts in Economic Power and Implications for Global Economic Order

The pandemic has led to shifts in economic power, with implications for the global economic order:

a) Impact on Major Economies: Major economies have experienced significant economic contractions and disruptions. Traditional economic powerhouses, such as the United States, China, and European Union countries, have faced challenges in maintaining economic stability and growth. This has resulted in a potential reordering of economic power and influence (Bahi, 2021).

b) Rise of New Economic Players: Emerging economies, particularly in Asia, have demonstrated resilience and recovery in the face of the pandemic. Countries like China, South Korea, and Vietnam have managed to control the virus and sustain economic activity (Liu, Lee, & Lee, 2020), potentially enhancing their economic power and influence on the global stage.

c) Implications for Global Economic Governance: The shifts in economic power can have implications for global economic governance (Kaye et al., 2021). Traditional institutions and frameworks may need to adapt to accommodate the changing dynamics. The role of existing

global economic organizations, such as the International Monetary Fund (IMF) and World Trade Organization (WTO), may be challenged, while new mechanisms and alliances may emerge to reflect the evolving economic order.

4.4.3 Geoeconomic Considerations in Vaccine Distribution and Economic Recovery

Geoeconomic considerations have played a significant role in vaccine distribution and economic recovery efforts:

a) **Vaccine Diplomacy and Economic Leverage:** Countries with the capacity to produce or procure vaccines have used them as tools of economic leverage (Manfredi-Sánchez, 2022). Providing vaccines to other nations can enhance diplomatic relationships, foster economic ties, and position countries as reliable partners. Vaccine distribution has become intertwined with economic and geopolitical interests, impacting international relations and alliances.

b) **Disparities in Vaccine Access and Economic Recovery:** Disparities in vaccine access and the pace of economic recovery can widen existing economic inequalities between countries. Unequal access to vaccines can hinder the recovery of certain economies, impacting trade, investment, and tourism (Suzuki & Yang, 2022). Countries with successful vaccination campaigns may experience a faster economic rebound, potentially leading to shifts in economic power and global economic order.

c) **Economic Interdependence and Cooperation:** The pandemic has highlighted the importance of economic interdependence and cooperation. Collaborative efforts to ensure fair vaccine distribution, support economic recovery, and coordinate fiscal and monetary policies are crucial for global

stability and sustainable growth (Suzuki & Yang, 2022). Geoeconomic considerations must be balanced with the need for international cooperation to address shared challenges.

4.5 Technological Dimensions and Digital Geopolitics

Technological dimensions and digital geopolitics are interconnected concepts that have become increasingly relevant in the 21st century. Digital geopolitics refers to the use of technology and information to advance a country's strategic interests in the international arena. This struggle encompasses a wide range of technologies, from artificial intelligence and machine learning to blockchain and quantum computing. As countries seek to gain an edge in this new digital landscape, technology will play a critical role in shaping the future of international relations.

4.5.1 Acceleration of Digital Transformation and Surveillance Technologies

The coronavirus pandemic has sped up the process of digital transformation and the adoption of surveillance technologies.

a) **Remote Work and Digitalization:** The pandemic has caused remote work arrangements, leading to the rapid adoption of digital technologies for communication, collaboration, and productivity (Allam & Jones, 2021). Organizations and individuals have increasingly relied on digital platforms, cloud computing, and online services to maintain operations and facilitate remote interactions.

b) **Surveillance Technologies and Contact Tracing:** To contain the spread of the virus, many countries have deployed surveillance technologies, such as contact tracing apps, facial

recognition systems, and location tracking measures. These technologies enable authorities to monitor population movements, identify potential infection clusters, and enforce quarantine measures (Allam & Jones, 2021). The pandemic has sparked debates about the balance between public health imperatives and privacy rights.

c) Artificial Intelligence and Healthcare: Artificial intelligence (AI) has played a crucial role in analyzing vast amounts of data, modeling virus transmission, and accelerating drug discovery. Machine learning algorithms have been employed for diagnosing, monitoring patient conditions, and predicting healthcare resource needs (Adly, Adly, & Adly, 2020). The pandemic has highlighted the potential of AI in healthcare but has also raised ethical considerations and concerns about algorithmic bias.

4.5.2 Privacy and Security Concerns in Pandemic Response

The increased reliance on digital technologies and surveillance measures in the pandemic response has raised privacy and security concerns and includes:

a) Data Privacy and Surveillance: Contact tracing apps and surveillance technologies involve the collection and processing of personal data. Ensuring the privacy and security of this data, including its storage, access, and usage, has become a critical concern (Kitchin, 2020). Balancing public health objectives with individual privacy rights requires robust data protection frameworks, transparency, and accountability.

b) Cybersecurity Risks: The rapid digital transformation and increased online activities have heightened cybersecurity risks. Cybercriminals take advantage of social flaws, and they

have exploited vulnerabilities. in remote work environments, healthcare systems, and critical infrastructure. Protecting sensitive health data, securing digital communication channels (Alawida, Omolara, Abiodun, & Al-Rajab, 2022; Kitchin, 2020), and enhancing cybersecurity measures have become imperative to mitigate risks and maintain trust in digital technologies.

c) Surveillance and Authoritarianism: The pandemic has provided opportunities for governments to expand surveillance capabilities and control over populations. Sometimes, emergency measures introduced during the crisis have been sustained, raising concerns about the erosion of civil liberties, democratic norms, and the potential for authoritarianism. Balancing public health imperatives with individual rights and freedoms is crucial in ensuring the responsible use of surveillance technologies.

4.5.3 *Digital Divides and Implications for Global Technological Competition*

The pandemic has exacerbated existing digital divides and has implications for global technological competition. Key considerations include:

a) Access to Digital Technologies: Disparities in access to digital technologies, such as internet connectivity, devices, and digital skills, have become more pronounced during the pandemic. Limited access to technology and connectivity exacerbates inequalities in education, healthcare, and economic opportunities. Bridging the digital divide is essential for ensuring inclusive and sustainable development.

b) Technological Competitiveness: The pandemic has underscored the importance of technological competitiveness for countries and regions. The ability to develop, adopt, and harness digital technologies has become a crucial factor in economic resilience and recovery (Thite, 2022). Countries with advanced technological capabilities are better positioned to adapt to remote work, digital business models, and emerging technologies.

c) Geopolitical Implications: The digital divide and global technological competition have geopolitical implications. Access to digital technologies and control over critical technological infrastructure can shape influence and power dynamics. The race for 5G networks, the development of advanced AI capabilities, and digital trade agreements are examples of areas where technological competition intersects with geopolitics (Khan, Su, Umar & Zhang, 2022).

The pandemic has accelerated digital transformation, leading to increased adoption of surveillance technologies, remote work arrangements, and AI in healthcare.

4.6 Social and Humanitarian Consequences

The COVID-19 pandemic has had significant social and humanitarian consequences around the world. The virus has caused widespread illness, death, and economic disruption. Many countries have implemented strict measures such as lockdowns and social distancing to slow the spread of the virus, which has had significant impacts on people's mental health and social well-being. The pandemic has also highlighted existing inequalities and disparities in access to healthcare, education, and other essential services. The long-term consequences of

the pandemic are still uncertain, but it will have a lasting impact on society and the global economy.

4.6.1 Impact on Social Cohesion and Domestic Stability

The coronavirus pandemic has had significant impacts on social cohesion and domestic stability. Key considerations include:

a)   **Social Fragmentation:** The pandemic has exacerbated existing social divisions and inequalities. Disparities in access to healthcare, economic opportunities, and education have widened, leading to social fragmentation. The crisis has highlighted societal vulnerabilities, such as income inequality, racial and ethnic disparities, and the digital divide, which can strain social cohesion.

b)   **Mental Health and Well-being**: The prolonged nature of the pandemic, with its associated lockdowns, restrictions, and fear of infection, has had adverse effects on mental health and well-being. Social isolation, anxiety, depression, and increased stress levels have become widespread (Wright, Williams & Veldhuijzen van Zanten, 2021). The impact on mental health can have long-term consequences for social cohesion and domestic stability.

c)   **Political and Social Unrest:** The socio-economic disruptions caused by the pandemic have the potential to fuel political and social unrest. Unemployment, economic downturns, and grievances related to government responses can lead to protests, demonstrations, and social upheaval. The strain on social services, healthcare systems, and public infrastructure can contribute to public dissatisfaction and social unrest.

4.6.2 Migration, Refugees and Humanitarian Crises

The pandemic has had implications for migration, refugees, and humanitarian crises.

a) **Displacement and Vulnerable Populations:** The pandemic has affected migrants, refugees, and internally displaced persons (IDPs) who face additional challenges and vulnerabilities. Border closures, travel restrictions, and reduced humanitarian aid have limited access to protection, healthcare, and livelihood opportunities (Duclos & Palmer, 2020; González Arias & Araluce, 2021). Displaced populations are often at greater risk of infection, with limited access to healthcare and inadequate living conditions.

b) **Humanitarian Response and Help:** The pandemic has strained humanitarian response efforts. Humanitarian organizations face challenges in delivering aid, ensuring the safety of their staff, and accessing affected populations. Funding shortfalls, travel restrictions, and limitations on movement have hampered the provision of life-saving help, exacerbating existing humanitarian crises.

c) **Border Controls and Migration Policies:** The pandemic has led to the tightening of border controls and immigration policies in many countries (González Arias & Araluce, 2021). Travel restrictions, border closures, and stringent quarantine measures have limited mobility and access to asylum procedures. This has raised concerns about the protection of refugees and the right to seek asylum, particularly in regions with ongoing conflicts and humanitarian emergencies.

4.6.3 Geopolitical Implications of Disparities in Access to Healthcare and Resources

Disparities in access to healthcare and resources during the pandemic have had geopolitical implications. This includes:

a) Health Diplomacy and International Cooperation: The pandemic has highlighted the importance of international cooperation in addressing global health challenges. Disparities in access to healthcare resources, including vaccines, can strain international relations and create geopolitical tensions (Manfredi-Sánchez, 2022). Collaboration and solidarity in sharing resources, expertise, and best practices are crucial for effective pandemic response and global health security.

b) Inequalities and Global Governance: The pandemic has revealed and amplified existing inequalities in access to healthcare, essential supplies, and resources (Bapuji, Patel, Ertug, & Allen, 2020). These inequalities have implications for global governance and the perception of fairness in international relations. Addressing disparities in access requires multilateral cooperation, fair distribution mechanisms, and a focus on strengthening health systems in vulnerable regions.

c) Impact on Global Influence and Soft Power: The ability of countries to effectively manage the pandemic and help others has implications for their global influence and soft power. Countries that have shown effective pandemic response, supported international collaborations and provided humanitarian aid can enhance their geopolitical influence and reputation. The pandemic has reshaped perceptions of leadership and influence in global affairs. The pandemic has had significant social and humanitarian consequences, including impacts on social cohesion, mental health, and political stability.

4.7 Lessons Learned and the Way Forward

Various lessons are learned from the main topic of the geopolitics of the pandemic.

4.7.1 Reflection on the Geopolitical Challenges Revealed by the Pandemic

The pandemic has revealed several geopolitical challenges that require reflection and consideration, including:

a) Interconnectedness and Interdependence: The crisis has highlighted the interconnectedness and interdependence of nations. Global challenges, such as pandemics, climate change, and economic crises, require collaborative solutions that transcend national boundaries. Geopolitical rivalries and isolationist approaches can hinder effective responses and exacerbate the impacts of such crises.

b) Fragility of Global Systems: The pandemic has exposed the fragility of global systems, including healthcare, supply chains, and governance structures. Weaknesses and vulnerabilities in these systems can have far-reaching consequences during a crisis. Building resilience, preparedness, and adaptability in global systems is crucial for managing future challenges.

c) Disparities and Inequalities: The pandemic has accentuated existing disparities and inequalities within and between countries. Access to healthcare, digital technologies, education, and resources has played a significant role in determining outcomes. Addressing these disparities is essential for sustainable and inclusive global development.

4.7.2 *Importance of International Cooperation and Multilateralism*

The pandemic has underscored the importance of international cooperation and multilateralism in addressing global challenges:

a) Global Health Security Pandemics are global health security threats that require a collective response. Strengthening international cooperation mechanisms, such as the World Health Organization (WHO) and other regional organizations, is crucial for effective preparedness, surveillance, and response to future outbreaks.

b) Collaborative Research and Knowledge Sharing: The pandemic has highlighted the significance of collaborative research, data sharing, and knowledge exchange. Sharing scientific information, best practices and lessons learned can accelerate the development of diagnostics, treatments, and vaccines. Openness and cooperation among scientists, researchers, and institutions are vital for advancing global health and mitigating future crises.

c) Multilateral Approaches to Global Challenges: The pandemic has shown that addressing global challenges requires multilateral approaches. Collaborative efforts in areas such as climate change, economic recovery, and digital governance are necessary to build a more resilient and sustainable world. Multilateral institutions and frameworks need to be strengthened and reformed to effectively tackle future crises.

4.7.3 Recommendations for Strengthening Global Health Governance

Strengthening global health governance is essential for better pandemic preparedness and response. Key recommendations include:

a) Enhanced Funding and Support for Global Health Institutions: Adequate and sustained funding for global health institutions, such as the WHO, is crucial for their effective functioning. Ensuring that these institutions have the resources, expertise, and authority to lead and coordinate global health efforts is vital.

b) Strengthened Surveillance and Early Warning Systems: Investing in robust global surveillance and early warning systems can facilitate early detection and response to outbreaks. Improving data sharing, transparency, and collaboration among countries can help identify and contain emerging health threats promptly.

c) Fair Access to Healthcare and Essential Supplies: Promoting fair access to healthcare, vaccines, and essential supplies is vital for global health security. International cooperation is necessary to ensure fair distribution mechanisms, strengthen health systems, and support countries with limited resources. This includes technology transfer, capacity building, and financial support for developing nations.

d) Coordination of Research and Development Efforts: Strengthening coordination and collaboration in research and development can accelerate the development of diagnostics, treatments, and vaccines. Sharing scientific knowledge, harmonizing regulatory processes, and facilitating technology

transfer can support global efforts to combat future health crises.

e) Integration of Health into Foreign Policy and Geopolitical Considerations: Health considerations should be integrated into foreign policy and geopolitical decision-making. Recognizing the geopolitical implications of health crises and the importance of international cooperation.

4.8 Findings and Discussion

The discussion has revealed several key findings and arguments regarding the impact of the COVID-19 pandemic on geopolitics. The pandemic has resulted in significant shifts in power dynamics and international relations, it has affected the balance of power and global governance. The outbreak of the virus has affected the relationship between major powers, such as the United States and China, and has prompted a reevaluation of global power dynamics. Understanding the geopolitical aspects of the pandemic is crucial for comprehending the current global situation and for developing effective strategies to address future challenges.

It has prompted countries to reevaluate their strategic priorities, cooperation frameworks, and national security strategies considering the challenges posed by the virus. trade disruptions, and technology. It has also highlighted the importance of international cooperation, multilateralism, and global health governance in effectively responding to global challenges. The pandemic has accentuated geopolitical challenges, such as disparities in access to healthcare and resources, social cohesion, and domestic stability, necessitating reflection and action. The pandemic has significant implications for the future

of geopolitics, including potential geopolitical realignments and reconfigurations, the increasing importance of technology, digital governance, and cybersecurity in shaping the global geopolitical landscape, and the need to address disparities in access to healthcare, resources, and technology. The pandemic has demonstrated that an infectious disease can transcend borders and impact societies, economies, and political systems worldwide, thus necessitating a multilateral approach to effectively address global health crises, because the world is left in geopolitical uncertainty.

To address these challenges and build a more sustainable and inclusive world, it is essential to prioritize resilience, preparedness, and collaboration in managing future crises. This requires strengthening global health governance, supporting multilateral institutions and frameworks, investing in healthcare systems, research and development, and sustainable infrastructure, and addressing inequalities within and between countries. The post-pandemic world presents an opportunity to reshape global governance, strengthen cooperation, and address the challenges that have emerged from the crisis through international collaboration and resilience.

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A CRITICAL INTERROGATION OF EYTAN GILBOA'S FRAMEWORK OF ANALYSIS FOR MEDIA AND ARMED CONFLICT REPORTING

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ABSTRACT

Based on the criticisms of the peace journalism theory, Eytan Gilboa developed a framework of analysis for media and conflict. In analyzing media engagement in the prevention as well as in the management of conflicts, Gilboa proposed the framework to improve the proposition of the peace journalism theory for the sake of ultimately reporting conflicts effectively. The focus of this research was, therefore, to interrogate Eytan Gilboa's framework of analysis for media and conflict. After a critical interrogation of the framework by the researcher in line with relevant cases of conflicts in different parts of the world, it was found that Gilboa's contribution is a more comprehensive framework for research and practice in media and conflict than the one stipulated by peace journalism theorists and other previous scholars and researchers in media and conflict such as Hally, 2017, Bill 2016 and Nang 2014. His is a multidimensional as well as multidisciplinary framework for research and practice of reporting conflict. He proposes "a three-dimensional framework for analyzing and practicing media when reporting conflict that combines and integrates the various components adopted from different yet relevant fields of science: international relations, conflict studies, communication and

journalism. The framework specifically and systematically demonstrates how research and practice can be organized to explore positive and negative contributions of the media through the two types and four phases of conflict; two types and five levels of media; and the five media functions and dysfunctions.

Keywords: Interrogation, Framework, Analysis, Media, Conflict, Gilboa.

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1. INTRODUCTION

Over the years, one of the theories deployed by scholars in explaining media reportage, prevention and management of conflict, is the peace journalism theory. Peace journalism theory is widely acknowledged as one major conceptual and theoretical contribution to the field of media and conflict. it has been an important research tool for analyzing news texts on war coverage (see Ottosen's *the War in Afghanistan and Peace Journalism in Practice*). As observed by Gilboa (2009, p.599), "Peace journalism has offered interesting insights into the deficiencies of media attitudes toward international conflict." However, apart from being a normative theory that "mostly emphasizes potential positive contributions" (Gilboa, 2009, p.617) of media particularly during periods of conflict, peace journalism has been criticized for overlooking a number of critical issues that eventually expose its weaknesses.

First, peace journalism theory is epistemologically faulty because it contradicts the mass communication theory. As raised by one of its staunch critics, peace journalism theory is "at odds with mass communication theory" (Hanitzsch, 2004 as quoted by Gilboa, 2009). On the other hand, Gilboa (2009) has clarified that peace journalism theory is "based on assumptions that communication theory does not necessarily support conflict resolution." He further argues that peace journalism is based on the assumption of powerful, casual and linear media effects. Communication theory, however, has produced very little empirical support for this approach. Peace journalism looks at the audience as a single aggregate of dispersed individuals, but communication theory has identified pluralistic audiences with different characteristics. Peace journalism assumes that publishers and journalists, especially at the local media level, can disregard the interests of their specific audiences, but

communication theory suggests that this assumption is unnatural and economically impossible. Peace journalism places responsibility on the media to prevent, manage, resolve and transform conflicts, but communication theory does not recognize this role, and sociological system theory places responsibility for these functions on political institutions and leaders (Gilboa, 2009).

The weaknesses of the peace journalism model have also been noted in Cottle's (2006, p.103) *Mediated Conflict*, as having "an overly media centric and insufficiently grounded view." Secondly and according to Gilboa (2009), the perception of conflict by peace journalism theory is in three simple and linear phases namely pre-conflict, conflict and post-conflict. And according to him, this analysis of conflict is "inadequate". Therefore, he suggests "meaningful concepts and not just time frames to describe the pre- and post-conflict phases" (Cottle, 2006).

There have been criticisms of the peace journalism approach to the resolution / management of conflicts and calls for more comprehensive approach have been advanced. The essence of this review therefore, is to ascertain whether or not the Eytan Gilboa framework of analysis for media and conflict is a more comprehensive framework for research and practice in media and conflict than the one stipulated by peace journalism theorists and other previous scholars and researchers in media and conflict such as Hally, 2017, Bill 2016 and Nang 2014.

2. LITERATURE REVIEW

Peace journalism theorists such as Hally, 2017, Bill 2016 and Nang 2014 have proposed a peaceful and conciliatory approach to media coverage of conflicts particularly armed conflicts. They contend that the media should be seen as contributing to the

resolution of conflicts instead of the traditional responsibility of reporting events as they occur. This no doubt, comes with some fundamental weaknesses such as the safety of journalists, compliance with the principle of objectivity, as well as fairness. These weaknesses were significantly addressed by Gilboa in his proposal of a more comprehensive framework for research and practice in media and conflict (Melvin, 2021).

In response to peace journalism theory's weaknesses and shortcomings, Yusuf (2020) notes that Gilboa suggested a different integrative approach that may yield better normative and empirical results by developing a much more systematic and cumulative theory that combines and integrates communication and conflict theories: the functional theory of communication and the life-cycle theory of conflicts (Yusuf, 2020).

First, unlike the peace journalism framework, Gilboa's framework of conflict communication borrows the five media functions from the functional theory of communication, namely: surveillance of environment (news coverage), correlation of the parts of society (interpretation of news and information, commentary and editorial opinion) and transmission of culture (history, values, religion, language, etc.) (Snag, 2021). These aspects are lacking in the peace journalism approach which makes Gilboa's framework more comprehensive than the peace journalism framework (Edgar, 2022). Other aspects covered by Gilboa's framework which were not properly taken into consideration are entertainment and mobilization (the campaigning for societal objectives in the sphere of politics, war, economic development, work and sometimes religion) (McQuail, 1987; Wright, 1960; cited in Yonga, 2022).

The functional theory looks at the functions and dysfunctions. Some scholars such as Graig, (2021) and Brita (2022) have explored the two but the most important is Wright's (1960) distinction between functions and dysfunctions which Gilboa (2000) also borrowed from the functional theory of communication. In Wright's distinction, he states that much as the media have useful intentions when used in conflict interventions, we should not ignore also its unintended consequences. This implies that even if the media are sincerely interested in a positive contribution to prevent, manage, resolve, or reconcile international conflict, the results may backfire (Gilboa, 2009). This consideration of Gilboa's framework which did not receive such required attention by the peace journalism framework/approach further points to the fact that Gilboa's framework standards as a more comprehensive framework for media and coverage of conflicts (Dotun, 2021).

Secondly, in the quest to affirm that Gilboa's framework is more comprehensive in media coverage of conflict, Lang (2020) asserts that Gilboa adopts the life-cycle theory. In applying this theory of conflict, Gilboa perceives conflict as a process that undergoes four stages instead of the former linear, "chronological and highly simplistic" three phases of pre-conflict, conflict and post-conflict, which had been described by previous scholars and researchers. According to Gilboa (2009) as cited by Lang (2020), a conflict "is a dynamic process that begins and ends at a particular period of time and that it is not always easy to pinpoint the exact beginning and ending of conflict (Lang 2020).

In further showing why Gilboa's framework is more comprehensive than peace journalism approach and others, Aygre (2021) observed that Gilboa's framework suggested

distinguishing four phases or stages of conflicts "based on a critical condition and a principal intervention goal where each phase has distinctive characteristics and ends in specific outcomes which are: the onset phase, the escalation phase, the de-escalation phase and the termination phase (Aygre, 2021).

3. METHODOLOGY

Based on the fact that the study entails the review of documents, the document review method was used for the study. Sources such as journal articles, books, etc. were reviewed in accordance with the broad objective of the paper which has to do with interrogating Eytan Gilboa's framework of analysis for media and conflict with the aim of ascertaining whether or not the Eytan Gilboa framework of analysis for media and conflict is a more comprehensive framework for research and practice in media and conflict than the one stipulated by peace journalism theorists and other previous scholars and researchers in media and conflict such as Hally, 2017, Bill 2016 and Nang 2014.

4. DISCUSSION

Below is a critical interrogation of Eytan Gilboa's framework of analysis for media and conflict.

4.1 Onset-prevention Phase

The onset phase is the initial stage of any conflict which is simply characterized by the "surfacing" or the "beginning" of the misunderstanding between parties. It is usually evident or visible or experienced through gradual increments of both verbal and behavioral hostile exchange (Gilboa, 2009). Bright (2021), notes that two things may happen at this stage of a conflict. If effective and constructive measures are taken, a

hostile situation and a tense atmosphere will be prevented from escalating into a violent one. Conversely, if effective and constructive measures are not taken, the situation will deteriorate into violence including a war of physical confrontation of a similar kind. This is why it is as well referred to as the 'onset-prevention phase'.

One of the effective measures expected or commonly used and preferred at this stage is media coverage of the conflict. According to Gilboa's framework, the media can affect the conflict at its initial stage in two ways, through structural factors and/or through editorial content. The former refers to non-editorial factors at the societal, organizational, and institutional levels or context which however influence the processing and production of news, especially the coverage of the conflict. They include media variety and plurality, media accessibility, the degree of journalists' isolation from their domestic and international colleagues, and the legal environment for the media (Kassan, 2019). This is very fundamental in conflict coverage because the way conflict is handled at the onset will greatly determine how soon it will end and this is well taken into consideration by Gilboa's framework with very clear specifications on how the media could handle conflict at the very beginning to ultimately prevent escalation of such conflict as opposed to the negligence of peace journalism framework with no clear specifications or direction of how to tackle conflict at the onset phase (Edward, 2021)

Furthermore, Edward (2021) in interrogating the framework asserted that it considered the editorial factors at the professional and individual levels, especially how journalists and editors choose to represent or portray the conflict in their reportage which were not well taken into account by some other frameworks such as the peace journalism approach. For

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example, a journalist or editor, through the selection of news angle and choice of words or sentence structures, may end up creating fear of an imminent attack by the other side based on past conflicts; "manipulation of myths, stereotypes, and identities; and overemphasizing grievances, inequalities or atrocities...also...creating the inevitability and resignation through the portrayal of the conflict as an eternal process and discrediting of alternatives to the conflict" (Edward, 2021, p.11).

More so, Frank (2018) in a critical analysis of Gilboa's framework asserts that the editorial factors may contribute positively (by preventing violence or war at the surfacing or beginning stage of the conflict) or negatively (by escalating the disagreements and misunderstanding at the surfacing or beginning stage of the conflict into violence or war), and are also reflected in Galtung's classical table where peace journalism (which is essentially peace-oriented, truth-oriented, people-oriented and solution-oriented reporting) and war journalism (which is essentially conflict-oriented, propaganda oriented, elite oriented and victory oriented reporting) may respectively lead to resolution (positive contribution) or escalation (negative contribution) of a conflict at its early stage (Frank, 2018).

4.2 Escalation-management Phase

If effective measures are taken at the 'surfacing' phase, a conflict will be solved. If no effective measures have been taken at the beginning stage of the conflict, then the latter will escalate into the next phase, namely the escalation phase. This phase is usually characterized by efforts and strategies to control information and manipulate the media with the aim of limiting and halting violence to relatively tolerable levels which led to the term "escalation management" (Gilboa, 2009). As

noted by Kell, (2017), the assumption is that if left uncontrolled, media can lead to defeat, just as the media were responsible for the US defeat in Vietnam in the 1960s (the CNN effect). So, it is up to the policymakers, parties in a conflict and governments within conflict areas to control the media, especially by limiting "their access and ability to report from the battlefield" (Kell, 2017). And this is why Gilboa's framework gave significant attention to this phase of conflict to effectively manage conflict escalation unlike some others like peace journalism framework to was not specific on how conflict at this stage could be effectively managed by the media (Albert, 2019).

Different information management techniques/policies have been adopted in the past by warring parties in different parts of the world. They enabled policymakers and governments and their military forces to control information and manipulate the media during conflicts, especially wars. This includes the 'pool system' deployed by the British government and its military during the Falklands/Malvinas War in 1982; the Media Reporting Teams (MRTs) by the coalition nations – US, UK and France – and their militaries during the Gulf War I in 1991 and the 'embedded journalism' during the Gulf War II in 2003 (Cottle, 2006).

Interrogating Gilboa's framework at this stage of conflict, Calvin (2016) and Cottle (2006) averred that of critical concern to the media and journalists if the escalation phase presents a dilemma to media professionals and the media in general on one hand is the information management approach whereby the media primarily functions as a tool in the hands of policymakers. The argument is always that media coverage of violence has tremendous effects on public opinion at home (ref: the Vietnam War Syndrome in the US), on the soldiers at the front and on the enemy. Therefore, journalists and citizens are expected to

provide for the common defense in order to win the 'battle for hearts and minds' and conduct 'the propaganda war (Calvin, 2016; Cottle, 2006). In this case, the right to win wars and to save human life is regarded as more important than the public right to know.

On the other hand, as considered by Gilboa's framework, is the CNN effect approach (Cottle, 2006; Gilboa, 2006 as cited by Calvin 2016) whereby media determine the national interest and usurp policy-making from elected and appointed officials, just like the CNN effect causes the US and Western humanitarian military intervention in Iraq (1991), Somalia (1992 - 1993), Bosnia (1992 – 1995) and Kosovo (1999). In this case, media are supposed and expected to "fully expose and evaluate government policy and activities … forcing them to take actions they otherwise would not have taken, such as military intervention (Cottle, 2006; Gilboa 2006; cited in Calvin 2016). This also points to the more comprehensive nature of Gilboa's framework when compared with some others in media coverage of a conflict.

4.3 De-escalation-resolution Phase

This is a phase of formal negotiations and peace agreements, otherwise known as a phase of negative peace (Gilboa, 2009b) or absence of violence. It is usually characterized by politicians' and policymakers' attempts to negotiate an agreement to end violence (Gilboa, 2009a) hence the word 'resolution'. A critical discussion of the provision of Gilboa's framework at this stage of conflict by Rammel (2019) indicates that the media may perform at least two functions during this phase: the media diplomacy or the media-broker diplomacy function. The former involves "the use of media' in trying to end violence and the

latter refers to the actual involvement of the media in attempts to end violence (Rammel, 2019).

In the former, politicians and policymakers use the media to advance negotiations, build confidence and cultivate public support for negotiations and agreement, and in the absence of direct channels of communication, official use of media, with or without attribution, to send signals and messages to leaders of rival states and non-state actors. However, in the case of the latter, journalists "assume, directly or indirectly mediation roles where journalists can practically help parties "to begin official negotiations; realize the values of negotiations to resolve their conflict" or "secretly explore a possible solution" (Gilboa 2009a). This constitutes a very potent approach to handling conflict at this stage because politicians and policymakers as well as other leaders of a society have the priority responsibility of protecting lives and properties and ultimately instilling orderliness and peace in such society. So it was imperative for Gilboa's framework to have taken into consideration these key actors in media coverage of conflict (Chukwuma, 2022).

In other words, the media at the de-escalation phase are "actively and directly engaged" in the mediation process, either through their own initiative or by request from one or more parties of the conflict, and in so doing, they can "talk to the two sides of the conflict, transmit relevant information and suggest detailed procedures, proposals, and ideas that may advance official negotiations. If a formal agreement is reached, leaders may end the violence and facilitate transformation; if no formal agreement has been reached at this stage, then the parties in the conflict may resume violence or create a stalemate (Gilboa, 2009b). This is also a very fundamental conflict stage that the media should give attention to as specified by Gilboia's framework of media and conflict which detailed specific steps

to be adopted by the media for such engagement, unlike other frameworks. As well indicated, the media can de-escalate conflicts through their own initiative or by request from one or more parties of the conflict to ultimately accommodate the de-escalation messages that would appeal to all parties to the conflict (Wuan, 2018

4.4 Termination-reconciliation Phase

This is the last phase of conflict in line with Gilboa's framework. And this is no doubt, critical to the end of any conflict. Resolution is one thing and reconciliation is another. The former refers to the formal negotiations and peace agreements and usually involve only leaders and certain elites who surround them whereas the latter goes beyond conflict resolution and peace agreements, and addresses psychological and cognitive barriers to stable peace. The two must not be confused although they appear to be the same or similar. The conflict does not stop at the resolution stage; neither is it the end solution of a conflict. Instead, it has been argued that, for 'real' and true conflict resolution, and in order to achieve what Gilboa in his framework called 'true normalization and stable peace' or 'positive peace', or 'transformation' of a conflict. The peace process has to ensure the conflicting parties have been reconciled. Chukwuma (2022) gave credence to the above assertion when he opined that Gilboa's specifications on his framework stand to be superior when compared to others particularly when you critically look at the conflict stage of termination and reconciliation with the indication that sustainable conflict resolution must include a genuine reconciliation of the conflicting parties.

Scholars have warned that there is a danger when a peace process in a conflict does not go beyond the resolution stage;

that is, when parties, particularly only leaders and certain elites, are satisfied with only signing peace agreements without addressing the grievances, mistrust, hostility, and fear among the people. The danger is "the public may reject both the process and the results of their efforts (Wuan, 2018; Gilboa, 2009).

So, what is the role of the media in facilitating and bringing reconciliation? Making reference to Gilboa's framework, Rammel, (2019) notes that media support, especially local media, is very crucial to ensure or realise reconciliation. He argues that media communicate messages about peace and reconciliation... media frame the news and favourable framing can help reconciliation ... changing the cultural norms and policy of actors. As provided by the framework, the media can contribute to reconciliation in two ways. First is through media events. These are "spectacular celebrations of peacemaking and peace agreements...broadcast live, organized outside the media, pre-planned, and presented with reverence and ceremony" (Rammel, 2019, p.8). Second is through reconciliation events which refer to turning points leading to improving relations and lessening the chances of a recurrence of violence such as direct physical contact or proximity between opponents, usually at a senior level; a public ceremony accompanied by substantial publicity or media attention, that relays the event to the wider national society; and ritualistic or symbolic behavior that indicates the parties consider the dispute resolved and that more amicable relations are expected to follow (Rammel, 2019).

5. FINDINGS

The following findings were revealed based on the outcome of a careful interrogation of the framework as can be seen in the literature review and the discussion of findings:

a) The framework is more comprehensive for research and practice in media and conflict than the one stipulated by peace journalism theorists and other previous scholars and researchers in media and conflict.

b) It is a multidimensional as well as multidisciplinary framework for research and practice of reporting conflict.

c) It proposes "a four-dimensional framework for analyzing and practice of media when reporting conflict which combines and integrates the various components adopted from different yet relevant fields of science: international relations, conflict studies, communication, and journalism**.**

6. CONCLUSION

As can be clearly seen in the literature review and the discussion of findings, Gilboa's contribution is a more comprehensive framework for research and practice in media and conflict than the one stipulated by peace journalism theorists and other previous scholars and researchers in media and conflict. It is a multidimensional and multidisciplinary framework for research and practice of reporting conflict. The framework is very helpful in the practice and analysis of media when reporting conflict which combines and integrates the various components adopted from different yet relevant fields of science: international relations, conflict studies, communication and journalism. More so, Gilboa's framework specifically and systematically demonstrates how research and practice can be organized to explore positive and negative contributions of the media through the four phases of conflict; five levels of media; and the five media functions and dysfunctions as were clearly discussed.

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