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Editorial Note

Dear Readers,

We, as the Editorial Board of Journal of Management Matters, are glad to present the Volume 9, Issue 1 of the journal. The Journal of Management Matters is a refereed bi-annual journal published by the Faculty of Management Studies of Rajarata University of Sri Lanka. In this issue, we received research articles from both academics and practitioners, which, in fact, reflect the significance of the journal to their career. The research articles received to the journal were reviewed by at least by two renowned reviewers. Based on reviewer's comments, authors were asked to revise and resubmit their papers. Finally, we selected five research papers for the publication of the Volume 9, Issue 1 of the journal. The research papers accepted for this issue covers a variety of latest research perspectives, providing new theoretical, methodological, and practical insight in the field of management.

Turning to the Journal's current issue, three of the five articles relate to transition of academia and industry to "New Normal" caused by the COVID-19 pandemic. In relation to the academia, Chandradasa and Galhena investigated about the factors which influence on Sri Lankan university students' intention to continuous use of government-introduced zoom applications for e-learning during the post COVID-19 pandemic. The study had been conducted as a survey for a sample of undergraduates of the Faculty of Management and Finance, University of Ruhuna. The rest two articles have concerned on the effect of digital transformation on employee engagement at the energy sector of the economy, and executives' adaptation to hybrid working arrangements in the apparel industry in Sri Lanka. Thileepan and Raveendran conducted a survey for a sample of employees working at Ceylon Electricity Board in the Northern Province of Sri Lanka to examine the effect of digital transformation on their work engagement. Liyanage and Galhena studied about determinants of intention to adopt hybrid working model by the executive employees of the Sri Lankan apparel manufacturing enterprises. The remaining two articles of this issue concerns on two themes – digital marketing and employee work focus. Wijerathna and Wijesundara examined the mediation role of trust on the effect of perceived authenticity in micro-influencer marketing on purchasing intention in the fitness sector. Gunathilake and Jayasooriya attempted to theorize "employee work focus" and develop a scale to measure this construct.

We take this opportunity to acknowledge all the authors for their contribution to the journal by submitting their research articles. We are also very grateful to all reviewers for providing quality inputs to the submitted articles. Further, we would like to thank editorial assistants of the journal for their support rendered to the editorial board to bring out the Issue 1 of Volume 9 in the scheduled time.

Journal of Management Matters

Volume 9 Number 1 September 2022

Editorial Board

Journal of Management Matters

Volume 9 Number 1 September 2022

Panel of Reviewers

Journal of Management Matters

Volume 9 Number 1 September 2022

Contents

Journal of Management Matters

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Faculty of Management Studies ,Rajarata University of Sri Lanka

Impact of perceived authenticity in micro-influencer marketing on purchasing intention in fitness sector: The mediation role of trust

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Abstract

The purpose of the current study is to examine the impact of perceived authenticity in Micro-influencer marketing on purchasing intention with the mediation role of trust in the fitness sector. This is an explanatory study and the primary data were collected through an online self-administered questionnaire. The sample consisted of 150 respondents who are already following micro-influencers in the fitness sector on social media platforms. Partial Least Square Structural Equation Modelling was performed with Smart-PLS to estimate the path coefficients and to test the hypotheses developed in the study. The study discovered that there is a direct impact of perceived authenticity on purchasing intention and the relationship is partially mediated by trust. Subsequently, the theoretical and practical implications of the study are discussed.

Keywords*: Micro-influencer marketing, perceived authenticity, purchasing intention, trust*

1. Introduction

Most micro, small, and medium-sized businesses in Sri Lanka have begun to use social media as a platform to promote business with the emergence of social media applications by the general public. This has created a new market for business and has changed the traditional way of doing business including marketing activities. Hewage and Weerasekara (2020) emphasized that currently, 52% of marketing activities include sponsored content on social media, thus the influence of social media on consumer decisions is becoming significant. This influencer marketing uses

paid personalities for posting product-related information on social media (Campbell & Farrell, 2020), and it denotes a $10 billion industry in 2020, especially in the B2C context (Haenlein et.al., 2020). Three categories of influencers can be distinguished based on the number of followers: Everyday influencers (those with more than 1000 followers), Premium influencers (those with between 10,000 and 100,000 followers), and A-list Influencers (more than 100 000 followers) (Bruns, 2018). The first two types are considered micro-influencers, while the third category is known as macro-influencers (Newman, 2016b). In particular, Facebook, YouTube, and Instagram are the key social media sites where the current study focuses on fitness micro-influencers. The fitness sector is one of the rapidly growing sectors (Mulcahy & Parkinson, 2016) and fitness influencers can be classified into several niches like yoga, running, weightlifting, cross-fit, healthy lifestyles, weight loss, and more, as well as these influencers tend to endorse brands of sports, food & drink related to the health & wellness industry (Influencer Marketing Hub, 2020). Modern consumers, often look out for product and brand-related information and recommendations from trusted sources that can be easily and conveniently accessed (Landy, 2016).

1.1. Research Problem

'Bruns-Siddiqui Intention-to-buy Model 2018' was initiated by Bruns (2018) to identify the impact of influencer marketing on the purchase intention of generation Z (mid to late 1990s as starting birth years and the 2010s as ending birth years) in Ireland by considering the factors of trust and perceived authenticity. The model was developed based on the theoretical foundation of the original conceptual model introduced by Hajli (2014). Bruns (2018) recommends that testing this model in various cultures and industries is essential to validate the model. As such, the model was tested by a few researchers in different cultures based on different industries and generations (Abreu, 2019; Gautam, 2020; Mamhare & Mingyue, 2020). Abreu (2019) studied that perceived authenticity and trust in social media micro-influencers and their impact on the purchasing intention of millennials in Brazil based on the Apparel industry. Gautam (2020) tested the impact of influencer marketing on buying behavior of millennials in the Indian apparel industry. The same model was tested by Mamhare and Mingyue (2020) to

study the utilization of social media influencers for customer retention instead of purchase intention and this study has focused on both millennials and generation Z in China. Thus, the current study attempts to contribute to the theory by testing the model in the Sri Lankan context. Though some researchers have studied influencer marketing in Sri Lanka (Guruge, 2018; Lakmal, Hettiarachchi, & Anuranga, 2019) still much attention has not been given to empirical studies that follow the quantitative method. Though this is a new concept in Sri Lanka, most businesses have started to leverage influencers to support their business activities. Today, even SMEs have identified influencer marketing as cost-effective and very productive at communicating and promoting strategy (DailyFT, 2020). Thus, with the arising importance of influencer marketing, many influencer marketing agencies also have emerged to help both brands and influencers with their growth. As such, researchers identified the importance of examining the influencer marketing concept in the Sri Lankan context.

1.2. Research Questions

Q1: What is the impact of perceived authenticity on consumers' purchasing intention in fitness sector?

Q2: What is the impact of perceived authenticity on trust in the fitness sector?

Q3: What is the impact of trust on consumers' purchasing intention in the fitness sector?

Q4: Does trust mediate the relationship between perceived authenticity and purchase intention?

2. Literature Review

2.1. Micro-Influencers

Abidin (2016) defines influencers as individuals who are active on various types of social media and often concurrent on several platforms such as Instagram, YouTube, Twitter, and other professional/commercial bloggers. The term 'Micro-influencer' is referred to influencers who have a finite number of followers (Abidin, 2016; Bijen, 2017; Zietek, 2016). They

are the real individuals who act as everyday experts while having a higher reach than the average person (Berger & Group, 2016). Most researchers categorized the number of followers for Micro-influencers between 10,000 and 100,000 (Influencer Marketing Hub, 2020; Newman, 2016a; Westwood, 2018).

2.2. Perceived Authenticity

Authenticity can be referred to as the level of genuine social media influencers acting within their community and being relatable with their followers (Hamann, 2014). If influencers are sincere, open, and honest with their followers, then they are authentic (Glucksman, 2017) and they induce to disseminate their thoughts, opinions, and their styles to other people to create user-generated content (Mains, 2017).

2.3. Trust

Trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trust, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995, p. 20). The majority of successful influencers have created a higher degree of trust with their audience in order to make the feel of the content feel more authentic and genuine, even though these influencers received some payment for the content that they sponsored (Woods, 2016). Therefore, the trust level between a follower and an influencer is raised when the post discloses whether it is sponsored or not (Dahlqvist & Preiksaite, 2018).

2.4. Purchase Intention

Consumer's buying intentions comply with their behaviour, perception and attitude and it can be served as the best predictor of the actual purchasing behaviour of customers (Brown, Pope, & Voges, 2003). Thus, the possibility that the customer buying the offer under some given conditions can be considered as the purchase intention (Morwitz, Steckel, & Gupta, 2007). Consequently, it may be a great desire to purchase a product very shortly (Cheung & Thadani, 2017).

2.5. Research Hypotheses

Some researchers use the term credibility instead of authenticity (Sertoglu, Catli, & Korkmaz, 2014; Silvera & Austad, 2004). Silvera and Austad (2004) emphasized that, when consumers are perceived as an influencer is more credible, the purchasing intention of such consumers is higher. Thus, the perceived credibility of Instagram influencers positively correlated with their intention to buy (Sertoglu et al., 2014). According to Chen, Nguyen, Klaus, and Wu (2015), purchase intention is enhanced when the perceived authenticity of a recommendation by influencers via the public perception of proper intention and the moment of truth of reviewing a product.

The researcher who developed the research model called, 'Bruns-Siddiqui intention-to-buy Model 2018', found a positive correlation between perceived authenticity and the intention to buy (Bruns, 2018). The study emphasized that, if the influencer is not authentic, most people do not like to make a buying decision (Bruns, 2018). Furthermore, other researchers who followed the same model also agreed with this relationship (Abreu, 2019; Gautam, 2020). Thus, perceived authenticity represented a positive correlation with buying intention (Abreu, 2019). Moreover, Gautam (2020) found that there is a significant and positive relationship between perceived authenticity and purchasing intention.

H_1: There is a positive impact of perceived authenticity on consumers' purchasing intention.

Although the original conceptual model (Hajli, 2014) did not test the relationship between perceived authenticity and trust, Bruns (2018) tested this and concluded that there is a link between perceived authenticity and trust. Then, people were more willing to build trust with influencers when they and their advertising messages were perceived as more authentic (Bruns, 2018). Consequently, there is a link between the individuals' personal preferences toward posts and the content created by the influencer (Bruns, 2018). Furthermore, this study emphasized that not only the connection should be a positive one but also perceived authenticity can harm the trust when an influencer was not felt as authentic. Thus, influencers'

perceived authenticity is very important because only then trust can occur (Bruns, 2018). In addition, Abreu (2019) also found that trust is built on perceived authenticity and perceived authenticity is positively correlated with trust.

H_2: There is a positive impact of perceived authenticity on trust.

The original model also tested the relationship between these two factors and the study found that trust has been ensured to have a positive impact on purchasing intention (Hajli, 2014). Moreover, trust can be considered as the signifier that plays a significant role in observing the real behavior of consumers (Akroush & Al-Debei, 2015; Dost, Illyas, & Rehman, 2015). Nishi, Jannach, bin Ibrahim, Esfahani, and Ahmadi (2016) also found that there is a relationship between the trust of customers and buying intention in electronic commerce recommendation systems. Furthermore, micro-influencers who are active on social media have a more positive impact of trust in a particular brand on purchase intention than usual social media influencers (Bijen, 2017). Thus, Oliveira, Alhinho, Rita, and Dhillon (2017) conducted a particular study to explore the fact that most of the online purchases were largely performed based on a higher level of trust. The study results concluded that 57.5% of all online purchases can be represented in terms of overall trust in the business company (Oliveira et al., 2017).

Bruns (2018) tested this relationship and found that trust has a direct and positive impact on buying intention. Then, when people are believing the influencer, they are more willing to purchase a product that has been advertised by the influencer. When influencers are more trusted, people tend to adapt to trends more easily and products that have been promoted by those influencers (Bruns, 2018). Abreu (2019) also showed that people do not consider buying brands or products promoted by micro-influencers when they do not trust them and then trust is positively correlated to the intention to buy (Abreu, 2019).

Although Gautam (2020) also tested this relationship, the study results did not present a significant relationship between trust and intention to buy,

implying that trust does not have an impact on the intention to buy (Gautam, 2020).

H_3: There is a positive impact of trust on consumers' purchasing intention.

With Bruns (2018) started to test the relationship between perceived authenticity and trust, it leads to creating a mediate impact between perceived authenticity and purchasing intention on the trust that beyond a just direct impact of perceived authenticity on purchasing intention and direct impact of trust on purchasing intention. Therefore, Bruns (2018) found that both perceived authenticity and trust of micro-influencers have a significant influence on purchasing intention. Finally, the results of the study emphasize that perceived authenticity bear a major role and have a direct impact on purchase intention. In addition, perceived authenticity has a positive impact on trust as well. Thus, trust and its impact on purchase intention are also identified as contributory factors (Bruns, 2018).

However, the same relationship was tested by Abreu (2019) and the results of the study show that even though trust is constructed on perceived authenticity, both these constructs (perceived authenticity and trust) were showing a positive correlation with purchasing intention, and the size of the impact of trust on buying intention is stronger than the size of the impact of perceived authenticity because trust showed a higher value of correlation than perceived authenticity (Abreu, 2019).

H_4: Trust mediates the relationship between perceived authenticity and purchase intention.

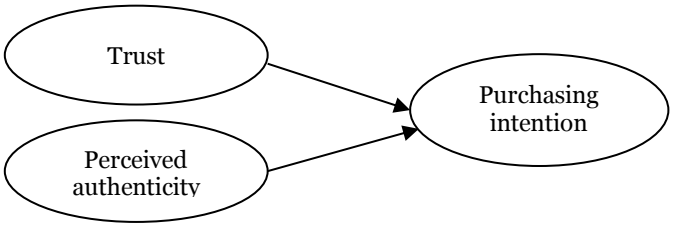

Figure 1. Conceptual Framework

3. Methodology

The researcher tested the pre-existing model (Bruns-Siddiqui Intention-to-buy Model 2018) by following the deductive reasoning approach with the positivist philosophy. The current study used the quantitative research method and cross-sectional design with an affordable and less time-consuming sampling technique namely, the convenience sampling technique that tries to grab a sample via using more convenient elements for the researcher (Malhotra, 2011).

The researcher distributed 250 self-administered questionnaires among the social media followers who are following Fitness micro-influencers on any social media platform mainly, via Facebook, Instagram, and YouTube. However, only 150 questionnaires were effective indicating a 60% effective rate which is a satisfactory level (Baruch, 1999). The questionnaire was created in both English and Sinhala languages for more convenience of the respondents. As recommended by Su and Parham (2002) cultural translation, back-translation iterative process, and pre-test were done in the translation process. The questionnaire consisted of a demographical section and close-ended questions with 5 points Likert scale for measuring independent and dependent variables. Both the two independent variables (trust and perceived authenticity) and dependent variables were measured based on 5 points Likert scale which ranges from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree'. Each independent variable was measured by 4 items using scales that have been developed previously (Abreu, 2019; Bruns, 2018; Hajli, 2014) while Purchase intention was measured by 5 items that were already developed by scholars (Abreu, 2019; Bruns, 2018).

4. Results

4.1. Demographic Analysis

According to Table 1, 88 respondents represented females out of 150 respondents. Thus, a proportion of 58.7% has been represented by females while another proportion of 41.3% of total respondents been represented by males. According to the table, most of the respondents were in the age range of 18-28 years representing 115 respondents out of 150 respondents. As a percentage, it is taken as 76.7%. Secondly, 18% of the respondents were

represented by the age range between 29-39 years. While 4.7% of the respondents represented the people who are in between 40-50 years, only 7% of the total respondents were above 50 years of age.

Table 1. Demographic Information

	Frequency	Percentage
Gender;		
Male	62	41.3
Female	88	58.7
Age;		
Between 18-28	115	76.7
Between 29-39	27	18.0
Between 40-50	7	4.7
Above 50	1	0.7
Social Media Platform;		
Instagram	37	24.7
Facebook	70	46.7
YouTube	38	25.3
Other	5	3.3
Total	150	100.0

The study's goal was to determine which social media network the respondents utilized most frequently to follow fitness micro-influencers. Facebook is the most popular social media platform in the chosen sample, as seen in Table 1. According to that, Facebook carried 70 respondents out of the total respondents. While it presents 46.7%, YouTube has obtained a second place as the most used social media platform. Then, 25.3% of the respondents engaged with YouTube, and 24.7% of the respondents used Instagram. In addition to these three social media platforms, other social media platforms have also been used by 3.3% of the respondents out of the total respondents.

4.2. Measurement model

According to Hair Jr, Hult, Ringle, and Sarstedt (2016), the reflective measurement model was assessed by reliability and validity. Indicator reliability, internal consistency reliability, convergent validity and discriminant validity were examined to ensure that the analyzed figures are at a satisfactory level in order to evaluate the path coefficients of the structural model (Wong, 2016).

4.2.1. Indicator reliability

Indicator reliability was initially checked by the researcher to prove that the related indicators have much in common with the latent variable (Wong, 2016).

Table 2. Outer Loadings & Indicator reliability

Items	Outer loadings	Indicator reliability
Perceived authenticity;		
I trust the Influencers who have a brand's sponsorship.	0.799	0.638
I believe that Influencers' recommendations are trustworthy when they receive a sample product from a company to test/review it but are not being paid to promote it.	0.786	0.617
I believe that Influencers' recommendations are more trustworthy when they are not being sponsored by the brand they are recommending.	0.738	0.544
Trust;		
I think the Influencers who communicate with their followers, (for example by answering questions asked in the comments) are more trustworthy.	0.740	0.547
Based on my experience with Influencers I know they care about their followers.	0.778	0.605
Based on my experience with Influencers I know it is honest.	0.812	0.659
I believe that the Fitness Micro-Influencer that I follow is committed to telling the truth about products/brands even if he/she is sponsored by that brand.	0.810	0.656
Purchasing intention;		
My favorite Influencers are important to me when it comes to new trends/products.	0.828	0.685
I am very likely to buy a product that has been promoted by an Influencer on Social Media.	0.731	0.534
I have already bought a product which has been promoted on.	0.703	0.494
I have become aware of a new Fitness brand/product through the Micro-Influencer that I follow.	0.720	0.518
I have felt more confident about buying a Fitness product after seeing the Micro-Influencer that I follow recommending/using it.	0.847	0.717

Hair Jr et al. (2016) stated that the outer loading size can be considered indicator reliability and the value of the outer loading of all items should be

statistically significant while standardized outer loadings being 0.708 or higher.

Through examining the outer loadings of three variables in the study, the indicator of "I think that the advertising messages do not affect the overall credibility of the influencer" has to be removed from the construct of "Perceived authenticity" due to the outer loading of that indicator (-0.513) is smaller than the standardized threshold level of 0.4 (Hair, Ringle, & Sarstedt, 2013). All other indicators are remained in the model since any other indicator, not in the range between 0.4-0.7 and outer loadings of all other indicators are higher than 0.7. Indicator of "I have already bought a product which has been promoted on" is showing the indicator reliability value (0.494) a bit less than the significance level (0.5), the researcher has remained that indicator in the model since 0.70 is considered close enough to 0.708 as acceptable (Hair Jr et al., 2016).

4.2.2. Internal consistency reliability

When measuring the internal consistency reliability of the measurement model via Smart PLS, Composite reliability is considered rather than Cronbach's alpha. According to Bagozzi and Yi (1988), a threshold level of 0.60 or higher is needed to ensure standardized composite reliability. Thus, Hair Jr et al. (2016) stated that the composite reliability values of 0.60 to 0.70 are acceptable in exploratory research while values between 0.70 and 0.90 can be considered at a satisfactory level for more advanced stages of research. Therefore, composite reliability for the variables in the current study is on a satisfactory level as presented in Table 3.

Table 3. Cronbach's Alpha & Composite Reliability

	Cronbach's Alpha	Composite Reliability	AVE
Perceived authenticity	0.669	0.818	0.660
Trust	0.793	0.866	0.617
Purchasing intention	0.826	0.877	0.590

4.2.3. Convergent Validity

Convergent validity refers to which an indicator positively correlated with alternative indicators of the same variable or the construct (Hair Jr et al., 2016). It explains the ability of the model to explain the indicator's variance (Wong, 2016). Moreover, convergent validity can be established by measuring the Average Variance Extracted (AVE) and the value should be 0.5 or higher to ensure convergent validity (Hair Jr et al., 2016). When considering AVE for the three constructs in the current study, Table 3 shows that the ability of the model to explain the variance of the indicator is enough and acceptable to ensure convergent validity.

4.2.4. Discriminant validity

Discriminant validity can be established when the construct is truly distinct from the other constructs (Hair Jr et al., 2016). The researcher has used two approaches to evaluate the Discriminant validity in the study the Fornell-Larcker criterion and the HTMT Ratio approach. As a traditional approach, in the Fornell-Larcker criterion, the square root of AVE compares with the Latent Variable Correlation (LVC). Subsequently, the square root of each AVE value of the construct should be higher than its largest correlation value with any other construct (Hair Jr et al., 2016). Table 4 shows that discriminant validity can be established along with this approach.

Table 4. Latent Variable Correlations (LVC)

Variables	Perceived authenticity	Trust	Purchasing intention
Perceived authenticity	0.775		
Trust	0.565	0.786	
Purchasing intention	0.653	0.691	0.768

The Heterotrait-monotrait ratio (HTMT) has also been utilized to ensure the discriminant validity in PLS-SEM (Henseler, Ringle, & Sarstedt, 2015). According to Henseler et al. (2015), the constructs in the path model are conceptually very similar when the threshold level is 0.9. Then, the HTMT value above 0.9 has been suggested to a lack of discriminant validity. Therefore, since all values are below the threshold level (0.9), this approach is also supported for establishing discriminant validity (Table 5). Therefore,

the researcher was able to conclude that the current study has ensured discriminant validity successfully.

Table 5. HTMT Ratio

	Perceived authenticity	Purchasing intention
Trust	0.767	0.839
Purchasing intention	0.855	

4.3. Structural Model

The capability of the research model to predict the variance in the dependent variables is considered the structural model (Hair Jr et al., 2016). The structural model has been assessed by examining the major assessment criteria, such as coefficients of determination, magnitude, and significance of path coefficients, after reliability and validity have been verified.

4.3.1. Collinearity Assessment (VIF)

The structural model's possible issue with collinearity can be assessed by examining the value of the Variance Inflation Factor (VIF) (Hair, Ringle, & Sarstedt, 2011). In the PLS-SEM context, a tolerance value should be 0.20 or higher and a VIF value should be 5 or below to prevent the collinearity issue, according to Hair et al. (2011). As a result, VIF values are determined by doing the following linear regression using SPSS software. Table 6 is a summary of the collinearity assessment. The researcher can infer that there is no issue with collinearity between independent variables because all VIF values are less than five and tolerance values are more than 0.20.

Table 6. Variance Inflation Factor (VIF)

Model	Collinearity Statistics		Collinearity Problem? (VIF>5?)
	Tolerance	VIF	
Perceived authenticity	0.681	1.469	No
Trust	0.681	1.469	No

4.3.2. Coefficient of Determination

The main component of structural model evaluation is the examination of the coefficient of determination (R^2). The threshold values of 0.25, 0.5,

and 0.7, according to Hair et al. (2013), are typically useful to interpret a weak, moderate, and strong coefficient of determination. As shown in Table 6, two constructs—perceived authenticity and trust—have combined to account for 57.9 percent (0.579) of the variance in consumers' intentions to buy. As a result, the R^2 of perceived authenticity on trust can be calculated at 31.9%. (0.319). As a result, perceived authenticity has a sufficient impact on trust, whereas perceived authenticity and trust both have a moderate to significant impact on the intentions to purchase.

Table 7. R-Square

Variables	R^2
Purchasing intention	0.579
Trust	0.319

4.3.3. Path Coefficients

Through the use of bootstrapping, path coefficients and associated t-values are investigated to ascertain the correlations between constructs. Every association in the structural model is significant, as shown in Table 8, ensuring that all p-values were 0.000. Thus, corresponding t-values of 5.735, 7.856, and 7.511 were observed. Because all p-values are lower than the significance level (0.05) and all t-values are higher than 1.96, all hypotheses can be accepted (Wong, 2016).

Perceived authenticity has a significant impact on trust (0.565) when the values of the path coefficients between the variables are examined, although trust's influence on purchase intent is only minor (0.473). Additionally, the direct impact of perceived authenticity on purchasing intention has drawn attention to a weak effect (0.386).

Table 8. Path Coefficients

	Path Coefficients	t-value	p-value
Perceived authenticity→Purchasing intention	0.386	5.735	0.000
Perceived authenticity→Trust	0.565	7.856	0.000
Trust→Purchasing intention	0.473	7.511	0.000

4.3.4. Mediation Effect

By taking into account both the direct and indirect effects on the path model, the influence of mediation can be quantified. The current study examined the direct effects of perceived authenticity on purchase intention (without the use of a mediator) as well as the indirect effects of perceived authenticity on purchasing intention via the trust-mediated mediation effect. Because the t statistic (5.410) is higher than 1.96 and the p-value (0.000) is lower than the significance level, it can be inferred from the PLS output (Table 8) that perceived authenticity has a direct impact on purchasing intention (0.05). In addition, because the t statistic (4.296) is higher than 1.96 and the p-value (0.000) is below 0.05 when evaluating the particular indirect effect, there is an indirect impact of perceived authenticity on purchase intention via the mediation effect from the trust. Because both the direct and indirect effects are substantial, trust has a partial mediating effect (Baron and Kenny,1986).

Table 9. Mediation Analysis

		t-value	p-value
Direct effect without mediator	Perceived authenticity→Purchasing intention	5.410	0.000
Indirect effect with mediator	Perceived authenticity→Trust→Purchasing intention	4.296	0.000

4. Discussion

The current study focused on the impact of micro-influencer marketing in fitness. As such, two objectives were developed as to identify the impact of perceived authenticity on purchasing intention and the role of trust in the relationship between these two variables. To achieve the research objectives, four hypotheses were postulated based on existing literature and tested by partial least square structural modeling. The study confirms that there is an impact of perceived authenticity on purchasing intention and trust partially mediates the aforementioned relationship.

The idea of influencer marketing existed for years in both offline and online environments, even though the micro-influencer marketing notion is relatively new. Prior researchers have studied and repeatedly demonstrated the beneficial association between perceived authenticity/credibility of

influencers and purchasing intention (Chen et al., 2015; Sertoglu et al., 2014; Silvera & Austad, 2004). The researcher who created the conceptual model on which it is based has investigated this connection and discovered a favorable link between perceived authenticity and purchasing intent (Bruns, 2018). Additionally, other researchers who used the same model concurred that these two constructs have a positive and substantial association (Abreu, 2019; Gautam, 2020). Despite having been discovered in other nations before, the current study also establishes this association in the Sri Lankan setting. When perceived authenticity and trust were put to the test, Bruns (2018) discovered a strong correlation between the two concepts. According to Abreu (2019), perceived authenticity and trust are positively correlated. Trust is a foundational element of perceived authenticity. The results above are supported by the current study.

In studies based on many industries and nations, prior literature has demonstrated the beneficial association between consumers' trust and their inclination to purchase (Akroush & Al-Debei, 2015; Bijen, 2017; Dost et al., 2015; Nilashi et al., 2016; Oliveira et al., 2017). Additionally, the underlying conceptual model's original model investigated this link and discovered that trust had a favorable impact on consumers' intent to purchase (Hajli, 2014). Bruns (2018) established this connection by showing that trust has a direct and advantageous impact on purchasing intention. Additionally, Abreu (2019) found a favorable correlation between trust and purchase intention. This conclusion is supported by the current study when applied to Sri Lanka.

For the first time, Bruns (2018) tested the mediate impact of trust, between perceived authenticity and buying intention. According to Bruns (2018), perceived authenticity has played a major role and there was a positive and significant indirect effect of perceived authenticity (with the mediation role of trust) on purchasing intention. A scholar who tested the same relationship found that, even though trust is constructed on perceived authenticity and both perceived authenticity and trust were correlated as positively to buying intention, the size of the effect of trust on purchasing intention is higher than perceived authenticity because trust showed higher correlation value than perceived authenticity has (Abreu, 2019). There was a positive, specific indirect impact of perceived authenticity on purchasing

intention via the mediation effect from the trust. Therefore, the researcher discovered that there was both direct and indirect impact (with the mediation effect of trust) of perceived authenticity on purchasing intention. Although Bruns (2018) has emphasized perceived authenticity as the key factor that affects purchasing intention, the current study has shown that trust played a major role in the high path coefficient value rather than perceived authenticity. Then, the trust of fitness micro-influencers is affected strongly by consumers' purchasing intention in the Sri Lankan context. It may be due to the cultural and social background that exists in the Sri Lankan context. Sri Lankan consumers usually depend on trusted sources and it largely impacts their purchasing patterns and intention (Athapaththu & Kulathunga, 2018; Wijesundara, 2008). Especially, in the industries like Health and wellness or fitness, most things depend on the trust of such influencers or their advertising message or whatever they have promoted. Therefore, the trust might be the most influential factor in purchasing intention rather than the perceived authenticity of such micro-influencers.

5. Conclusion

5.1. Theoretical Implications

Since the idea of micro-influencer marketing is still somewhat new in Sri Lanka, there isn't much solid academic study on it. By observing the effect of perceived authenticity in Micro-influencer marketing on consumers' purchasing intention with the mediation role of trust in the context of Sri Lanka, the researcher has attempted to test the conceptual model that has previously been tested in other contexts and support the previous literature.

The confirmation of all proposed hypotheses is one of the main contributions of this study. It means that the conceptual model that has previously been tested in other countries is applicable as it is in the Sri Lankan context as well. Therefore, the research findings of the current study make a contribution to the literature regarding this particular area. Although the micro-influencer marketing concept is a very effective, cost-efficient and high engaging approach, it is a rather new marketing concept in the Sri Lankan context. So that, the knowledge created by this study supports the development of the micro-influencer marketing concept. Since this study has

quantitatively proven the impact of two affecting factors of micro-influencers on purchasing intention, the knowledge created from the current study is useful and important for future academic work in Sri Lanka. Therefore, the current study has succeeded to prove that the micro-influencer marketing concept can be utilized to influence customers' purchasing intention in relating to the Sri Lankan context. Additionally, the scale that was used to assess how both of the dimensions affected purchase intention was capable of meeting the requirements for indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. As a result, subsequent investigations can also use the same scale. By properly utilizing the research findings, this study may be applied to both undergraduate and graduate research since it creates more theoretical benefits for upcoming academies.

5.2. Managerial Implications

When considering managerial implications, influencer marketing can be explained as one of the best forms of digital marketing in terms of generating a high ROI (Landy, 2016). As Influencer Marketing Hub (2020) stated, for every dollar expended on influencer marketing, such brands can earn up to $5.78 in return. Additionally, most companies that engage with influencer marketing concepts believe that it is an effective communication technique (Nielsen Catalina Solutions, 2016). When it comes to micro-influencers, can be viewed as relatable and engaged to their audience. The high engagement rates of these micro-influencers make it easier for companies to create specialized sponsorship with these influencers (Influencer Marketing Hub, 2020).

Furthermore, the results of the current study have demonstrated that micro-influencers influenced consumers' means to purchase. Six reasons why businesses should use these influencers can be outlined, especially because the current study focused on fitness micro-influencers. The emergence of several credible health and wellness influencers, practitioners moving to online healthcare, the ability to connect fitness influencers at scale, and strong ROI are all mentioned by Landy (2016) as reasons why influencers in the health and wellness sector are more trusted and qualified. People are also

more motivated to take action to improve their health. These factors allow managers in the relevant industry to include influencer marketing in their marketing strategies. Influencer marketing is currently a growing trend for businesses looking to engage with their clients in Sri Lanka as well. Companies should consider factors other than the number of followers when choosing the influencers who will be most effective and suited for promoting their brands. Micro-influencers can then be used to effectively influence a certain niche. Although recommendations from trusted sources are more effective, managers have previously faced certain difficulties as a result. In the modern world, Sri Lanka is a prime example of the social network period since it offers the chance to spread the electronic word of mouth by interacting with the right influencers rather than only watching and analyzing these interactions. Therefore, using the micro-influencer marketing concept, marketers in the Sri Lankan context have made two-way contact possible. Managers should focus more on the influencers' genuineness when creating marketing plans that use them. According to research, consumers' buy intentions will decrease if they believe influencers are not real or spread false information. As trust partially mediates the influence of authenticity on purchase intention, consumer trust is also important when building marketing strategies.

6. Limitations and Future Research Recommendations

The number of aspects connected to influencer marketing has been revealed by numerous conceptual types of research, but the current study was only able to examine the effects of two constructs (perceived authenticity & trust) on consumers' intentions to purchase. Future research can then include more micro-influencers that affect purchasing intention, expanding this conceptual model. Despite the fact that a number of elements or qualities have been identified by earlier researchers in various contexts, four traits are picked to suggest for exploration in future studies because they were associated with the Sri Lankan setting. The top four "REAL" attributes are Relatedness, Engagement, Authenticity, and Loyalty, according to a recent qualitative study carried out in Sri Lanka (Lakmal et al., 2019). As a result, the researcher suggests doing a quantitative study to determine how these additional factors—relatedness, engagement, and loyalty—affect consumers' willingness to buy in Sri Lanka. Additionally, factors like expertise,

attractiveness, and interaction can be tested (Guruge, 2018). The current study is restricted to concentrating just on three social media platforms that have been used by micro-influencers (Facebook, Instagram, and YouTube). Future research can concentrate on other viral social media platforms run by similar micro-influencers to draw deeper insights. Due to time and financial restrictions, this study only used a quantitative approach to complete the research. As a result, to produce both general and focused results, future research can be carried out using both quantitative and qualitative methods. To yet, no concrete model has been developed to assess the efficiency of micro-influencers, though. Therefore, future research investigations should fill in this study vacuum.

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Continuous intention of using zoom for e-learning: Empirical evidence from management undergraduates in University of Ruhuna, Sri Lanka

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Abstract

The purpose of this study is to investigate the factors that influence Sri Lankan university students' intention to continuous use of government-introduced zoom applications for e-learning during the post-COVID-19 pandemic. This study is a quantitative study and self-administered questionnaire survey was used to collect data for a sample of 200 undergraduates of the Faculty of Management and Finance, University of Ruhuna. The results of the study found that performance expectancy, hedonic motivation, effort expectancy, work-life quality, facilitating conditions and internet experience are the most influential factors that influence Sri Lankan university students' intention for continuous use of zoom application for e-learning. The study's findings provide important recommendations for policy-makers, designers, developers, and researchers, allowing them to get more familiar with the main factors that influence to continue the use of zoom for e-learning during the pandemic. Recognizing the factors influencing the intention for continuous use of the system is a major problem faced by the universities and higher educational institutions that implement e-learning for conducting academic activities continuously since there is a lack of knowledge on the essential issues and elements that influence the student's continuous intention for use of e-learning systems during and after the COVID-19 pandemic. Further, the current study was done by adding another three variables to UTAUT 2 model to examine students' continuous intention of using zoom for e-learning.

Keywords: *e-learning, intention of continuous use, post Covid-19, undergraduates*

1. Introduction

Coronavirus disease (COVID-19) is an infectious disease transmitted from human to human rapidly and individuals infected with the COVID-19 virus suffer mild to severe respiratory infections (WHO, 2020). The mode of transmission of coronavirus from humans to humans necessitated social distancing and avoid-

ance of crowded environments (WHO, 2020). The epidemic has spread to 210 countries and territories worldwide, with more than 576 million confirmed cases of the COVID-19 reported, and a death toll of more than 6.4 million based on the statistics of the COVID-19 world meter for the date of 30th July 2022 (WHO, 2022). Given this, most governments have closed schools and institutions where large crowds are unavoidable until further notice.

The sudden closing of educational facilities led officials to propose emergency remote teaching to ensure that students are not left idle during this pandemic period. As a result, for the time being, traditional approaches have been replaced by online e-learning (Mpungose, 2021). E-learning is defined as learning that is enabled electronically (Akbar & Rais, 2020). Typically, e-learning takes place over the internet where students may access their learning materials at any time from any location. Online courses, online degrees, and online programs are the most common forms of e-learning (Mpungose, 2021). At the same time, the government of Sri Lanka has ordered the closure of all educational institutions, including 15 state universities and around 40 additional state and non-state tertiary education institutions as of March 12, 2020 (Hewagamage et al., 2020). Interruptions in higher education induced by the COVID-19 may postpone the development of the leaders and skilled workforce needed for the country to successfully transition to upper-middle-income status (Hewagamage et al., 2020).

According to the Sri Lankan university grant commission, there are around 100,000 undergraduates and around 35,000 postgraduate students enrolled in 15 state universities. Due to the pandemic situation, face-to-face lectures were closed in higher education institutions. Moodle-based learning management systems are hosted on university web servers to offset the impact of interrupting learning (Hewagamage et al., 2020). The Lanka Education and Research Network (LEARN) was linked to university web servers and was used for online learning. The network may track Zoom usage daily (Hewagamage et al., 2020). Furthermore, throughout the epidemic, all internet service providers in Sri Lanka gave free access to university web servers (Hewagamage et al., 2020) and continuously provide free service to the Sri Lankan university system. Zoom is a video conferencing technology that has been introduced and imposed as a convenient medium for engaging with students virtually to disseminate content while they are in class (Mpungose, 2021). From the 17th of March 2020, Sri Lankan

universities will continue their education system using the Zoom application. After more than two years, overall deaths and affected persons in Sri Lanka have been steadily rising due to the rapid spread of the novel COVID-19 based on Sri Lankan health ministry figures, 2022. According to Sri Lankan Health Ministry figures, the overall number of deaths reported to end of July 2022 as 16519. Several times in the past, from 2020 to 2022, Sri Lankan universities attempted to re-open universities for physical education programs, but all attempts were futile, and universities continued education activities through the Zoom application.

Moreover, not only the COVID-19 circumstance but also due to the economic crisis experiencing by Sri Lanka during the 2022 year, most of university administrations continue university academic activities by using Zoom application (UGC, 2022). However, the undergraduates' intention to continuous use the online teaching is an important phenomenon to be investigated further as the level of participation with online teaching significantly fluctuates over the time.

As the university administration expecting to continue this practice until the situation comes back to normal understanding the factors influence on intention to continuous use online teaching via Zoom is of paramount importance. As the previous studies continue, intention focus is lacking and only examined based on UTAUT-introduced constructs. Therefore, this study aims to identify the factors that influence undergraduates' continuous intention to use Zoom for e-teaching.

1.1. Research Problem

Due to the extreme the COVID-19 outbreak, most universities and higher educational institutes around the world have shifted their academic activities entirely to e-learning mode (Mpungose, 2021). Due to that traditional classroom activities moved to online platforms and the usual learning culture completely changed. This transformation of e-learning required to be familiarity with modern technologies for successful implementation (Mpungose, 2021).

A significant consideration to consider in this implementation is whether the learners can use e-learning and whether it would be effective in an online environment based on their responses (Demirel & Diker, 2010). When comparing the developed world to developing countries, it was discovered that developing countries face problems such as slow internet access, insufficient knowledge

about how to use ICT, and a lack of content development when using e-learning (Jain, 2018). E-learning use and acceptance by users is a difficult problem for many institutions in developing countries, but it is likely to be less of a challenge in developed countries. The reason for that is the ability of developed context students due to the use of the e-learning systems, as major progressive steps have already been taken in this regard (Venkatesh, Thong, & Xu, 2012).

According to Eltahir (2019), the complexities of implementing an e-learning framework in developing countries remain a challenge due to the digital gap in the developing context. While learners can show favouritism in traditional education and classroom settings, this alone does not guarantee success in an online learning environment. The level of acceptance to continue using e-learning among university students, who are expected to benefit from it, determines e-learning performance (Lewis, Fretwell, Ryan, & Parham, 2013).

Many studies have shown that most higher education institutes in developing countries that have already built e-learning programs are not adequate due to a variety of challenges (Samsudeen, & Mohamed, 2019; Zozie & Chawinga, 2004). However, the issue of low use and acceptance persists due to several factors that contribute to learners' inability to use modern technologies in developing countries (Almaiah, Al-khasawneh, & Althunibat, 2020). As a result, empirical research is necessary to recognize the key challenges that face e-learning system continues use during the COVID-19 pandemic as well as necessary situations to assist policymakers in universities in overcoming the problem of low e-learning system use.

Sri Lanka is a developing country that is experiencing a COVID-19 pandemic, with deaths and infected people steadily increasing from 2020 to 2022. The Sri Lankan Ministry of Health anticipates that total deaths will rise with the new variants found in COVID-19 (Sri Lanka Health Ministry report, 2022). Due to the released COVID-19, safety precautions were again established, and Sri Lanka Health Ministry regulated to wearing a mask is essential in public places. The Sri Lankan government has attempted several times to re-open universities for undergraduate students, but each time has been unsuccessful. Due to the current economic crisis and COVID-19 situation, Sri Lankan universities continue academic activities by using the zoom application. The University of Ruhuna is a state university in the southern province of Sri Lanka, ranked third in

webometrics rankings among Sri Lankan universities. Around 10,000 internal undergraduates and around 1,000 postgraduates are enrolled at the University of Ruhuna, which is comprised of ten faculties.

Concerning government instruction, the University of Ruhuna has been conducting academic activities using the Zoom network since the 30th of March 2020 and several times re-open and all unfortunately due to the COVID-19 and now the economic crisis that efforts also wasted and currently several faculties including Faculty of Management and Finance continue academic activities by using Zoom application. For decades, the acceptance and usage of information technology have been critical to information systems study and practice (Dwivedi, Rana, Chen, & Williams, 2011).

A mini survey was conducted with the participation of several academics in the university system to find out the trends in using online teaching. This revealed that though students were initially motivated to actively participate in online teaching, relatively participation level is reducing over the period. As it is uncertain when the university is going to start offline teaching and learning practices and they are expecting to continue online teaching and learning mode in the future as well this low participation becomes a critical issue.

The UTAUT 2 model used most of the studies to examine the intention of students' technology adoption. That model is limited to a few variables that influence students' intention of adopting technology. Sri Lanka is a developing country that is far from technology infrastructure and knowledge compared to developed countries. Therefore, factors that influence students' continuous intention to use technology is varying and more factors are derived from students' continuous intention to use technology. Therefore, based on the previous literature researchers extended the UTAUT 2 model by adopting three additional variables.

Further, most of the previous studies focus on the initial intention of adopting technology (Ndubisi, 2004; Zhang, Wen, Li, Fu, & Cui, 2010) and do not properly study the continuous intention to use technology in an e-learning setting. Therefore, to fill this theoretical and empirical knowledge gap current study focuses on investigating the factors that influence undergraduates' continuous intention to use Zoom applications for e-learning.

2. Literature Review

2.1. E-Learning

E-learning is the use of electronic interventions for teaching, learning, and evaluation (Mlitwa, & Belle, 2011). E-learning is defined as flexible learning that makes use of ICT resources, tools, and applications, with an emphasis on information access, interaction among teachers, learners, and the online environment collaborative learning, and the development of materials, resources, and learning experiences (Bagarukayo, 2015). E-learning allows students to improve their problem-solving skills while also allowing educators to better convey and teach knowledge (Bagarukayo, 2015).

2.2. E-Learning Usage

E-learning usage refers to either the amount of effort exerted in interacting with a particular technological system (Fitzgerald, 1993). Continuous use of technology refers to a person's future desire, expectation, or goal to employ presently in use technology or system. According to Ajzen and Fishbein 1980, this is a measure of a person's propensity to continue using technology or system. E-learning definitions emphasized that e-learning is done by interacting with technology.

Thus, e-learning refers to the use of technology. Several theoretical models have emphasized the significance of behavioural intention as the most important predictor of human behaviour in the continuous use of technology (Lee & Rao, 2009). In the context of the present study, the intention was to assess if the undergraduates, who are using e-learning for their academic activities, would be willing to continue using the e-learning method for future studies. From the 30th of March 2020 Sri Lankan university students using the zoom application for e-learning (Hewagamage et al., 2020) Thus, the study aims to assess students' intentions regarding the continued use of the provided e-learning system in future e-learning activities.

In the current study, we specify an e-learning application namely zoom. Accordingly, Zoom is a free HD meeting app with videos and screen sharing for a limited crowd. The reason for selecting zoom for this study is Sri Lankan government introduced zoom to Sri Lankan universities for e-learning in the pan-

demic era. Government links the zoom portal with LEARN system and provides free access to users in Sri Lankan universities (Hewagamage et al., 2020). Zoom is an information and communication technology application founded by Eric Yuan (Akbar & Rais, 2020). Thus, this study investigates the continued use of zoom applications for e-learning.

2.3. Theories of E-Learning Usage

The most widely used technology usage and adoption explained theories are Technology Acceptance Model (TAM) by Davis (1989), Theory of Planned Behavior by Ajzen (1991), Theory of Reasoned Action by Fishbein and Ajzen (1977), Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) and Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) by Venkatesh et al. (2012).

According to Hone, Tarhini, Hone, & Liu (2014), UTAUT2 is the most commonly and widely used model in recent times to explore areas of use information technologies, including e-learning. Thus, in the current study, we used UTAUT to develop a theoretical model. Based on the UTAUT2 model following constructs were selected as the drivers of e-learning usage.

2.3.1. Performance Expectancy

Performance expectancy is described as the extent to which a person feels that using the method can assist him or her in achieving improvements in performance tasks (Venkatesh, 2003). It further indicates that an individual's degree of confidence in the use of a certain information system using, it will improve his or her learning performance (Almaiah et al., 2020). The previous studies indicated that when performance expectancy is aligned with an e-learning sense, e-learning assists learners by allowing them to conduct their learning tasks quickly and easily, as well as enhancing the learners' educational skills and efficiency (Samsudeen, & Mohamed, 2019).

2.3.2. Effort expectancy

Effort expectancy refers to the degree of ease associated with learners' use of technology (Venkatesh & Zhang, 2014). It is the level of comfort associated with the use of information systems (Venkatesh & Zhang, 2014), and the extent to

which a person feels that he or she can use technology without extra effort (Budu, Yinping, & Mireku, 2018).

It demonstrates the ease at which users interact with technology (Wilson & Budu, 2018). Since e-learning is still in its early stages, effort expectancy is regarded as one of the most significant considerations in determining users' behavioural intention to use the systems (Salloum, 2018).

2.3.3. Social influence

Social influence can be defined as the degree to which a person perceives influences of the system for using the new system (Venkatesh & Zhang, 2014). Further, social influence describes as an influence that other people's opinions have over someone's decision to use an information system (Ruiz, Mintzer, & Leipzig, 2006). People are more likely to use a particular device if it comes highly recommended by those that are important to them (Zuiderwijk, Janssen, & Dwivedi, 2015).

2.3.4. Hedonic motivation

Hedonic motivation is the pleasure or gratification obtained from the use of a technology (Venkatesh & Zhang, 2014). It assesses users' perceived happiness and entertainment (Venkatesh & Zhang, 2014). Venkatesh has been using this variable in the UTAUT2 model to investigate the function of endogenous utilities. It's the joy of experimenting with a new system. The hedonic motivation's main impact is brought by the innovativeness inherent in a modern method (Dwivedi, 2015).

2.3.5. Internet experience

Internet experience has a direct association with technology adoption (Ali, Raza, Qazi, Phuah, 2018) and Internet experience is accepted to be included as one of the key factors determining technology acceptance by past studies (Dwivedi, 2015). Anandarajan et al. (2000) emphasized the importance of internet experience in technology-related investigations. Even though prior studies on web-based learning systems focused less on internet experience as a key determinant (Ali et al., 2018), this study attempts to investigate internet experience on e-learning continued usage.

2.3.6. Work-life quality

Work-life quality refers to a person's expectation or impression that by using a tool, their work quality can increase; in this instance, the use of an e-learning system is intended to improve student's learning process by saving them time and money as they download learning materials and literature or interact with their colleagues or teachers (Hone, Tarhini, Liu., 2014). Further, Hone et al. (2014) and Kripanont (2007) investigated the importance of acceptance of technology to enhance work-life quality (Tarhini, 2014).

2.3.7. Facilitating Conditions

The degree to which an individual feels that an organizational and technological infrastructure exists to facilitate the operation of the system is referred to as the Facilitating Conditions (Venkatesh et al., 2003). Factors in the environment that impact a person's motivation to complete a task, such as technical help, skill training, and access to information or resources, are examples of facilitating conditions (Groves & Zemel, 2000). Accordingly facilitating conditions could directly predict the influence of the continuous use of computers and other technical systems (Alalwan et al., 2013).

3. Methodology

In this study, UTAUT is regarded as a baseline paradigm that has been used to investigate the application of diverse developments in a variety of operational environments. Performance expectancy, effort expectancy, facilitating conditions and social influence adopt from UTAUT developed by Venkatesh et al. (2003). Hedonic motivation, (Venkatesh & Zhang, 2014) from UTAUT2. In addition, internet experience (Ali, Raza, Qazi, Phuah, 2018) and work-life quality (Hone et al., 2014) have been adopted to develop the conceptual framework this study showed in Figure 1.

3.1. Conceptual Framework

Figure 1 shows the conceptual framework of the study.

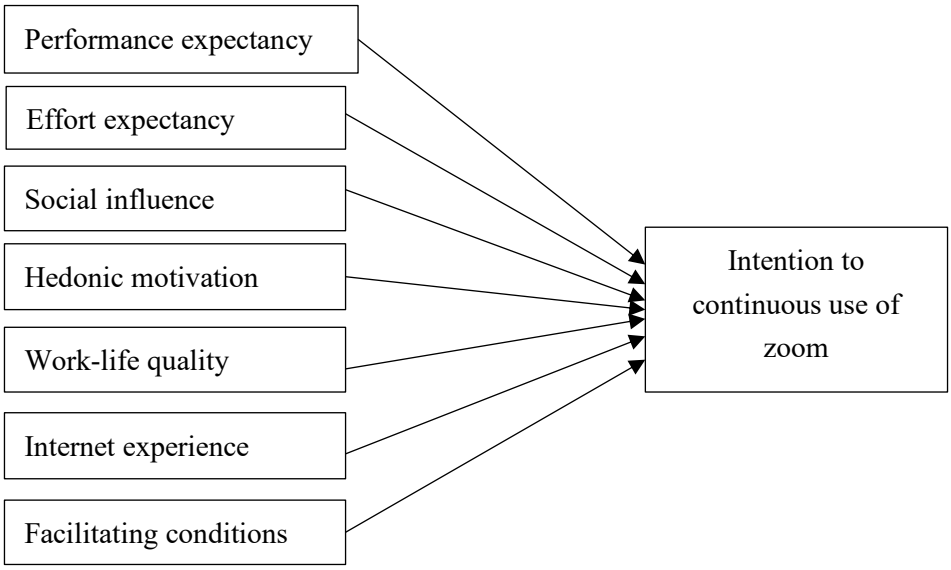

Figure 1. Conceptual Framework

3.2. Hypotheses Development

Performance expectancy in the e-learning context indicates the degree to which e-learning assists learners to conduct their learning tasks quickly and easily, as well as enhancing the learners' educational skills and efficiency (Zuiderwijk, Janssen, & Dwivedi, 2015). Performance expectancy is an indicator of intention to use a new method in a variety of contexts, including e-learning (Hone et al., 2014). According to the current literature, Performance expectancy has a substantially positive relationship with behavioural intention's use of an e-learning method (Samsudeen, & Mohamed, 2019; Budu, Yinping, & Mireku, 2018). As a result, the following hypothesis was formulated:

H_1: Performance expectancy has a positive impact on students' continuous intention to use Zoom for e-learning.

Effort expectancy means the degree of ease associated with users' use of technology (Punnoose, 2012). It is the level of ease associated with the use of information systems (Venkatesh, 2003) and the extent to which a person feels

that he or she can use technology without extra effort (Zuiderwijk, Janssen, & Dwivedi, 2015). Since e-learning is still in its early stages, effort expectancy is regarded as one of the most significant considerations in determining users' intention to use the method (Mpungose, 2021). The ease of use and user-friendliness of e-learning programs can influence individuals' adoption and desire to use such systems (Salloum, 2021). Previous research has shown that effort expectancy affects positively the intention to use a system and is a key determinant of intention to use e-learning programs (Hone et al., 2014; Dwivedi et al., 2011). Thus, this study assumes that if a learner finds an e-learning system easy to use, he or she is more likely to adopt it. As a result, the following hypothesis was developed:

H_2: Effort expectancy has a positive impact on students' continuous intention to use Zoom for e-learning.

Social influence defined by Venkatesh et al. (2003) emphasized that social influence is the degree to which a person perceives that essential other believe he or she would use the new system. That is the influence that other people's opinions have over someone's decision to use an information system (Zuiderwijk, Janssen, & Dwivedi, 2015). The UTAUT model suggested that social influence captures the position of social forces, pictures, and subjective norms. Many studies have confirmed SI as a major influence factor that decides people's intention to use (Almaiah et al., 2020; Dwivedi, 2015). Thus, this research assumes that individuals' intentions to continuous use an e-learning method are conditioned by their lecturers, teachers, and colleagues' beliefs and based on the following hypothesis postulated:

H_3: Social influence has a positive impact on students' continuous intention to use Zoom for e-learning.

Hedonic motivation is the pleasure or gratification obtained from the use of a technology (Venkatesh & Zhang, 2014). It assesses users' perceived happiness and entertainment (Venkatesh & Zhang, 2014). Venkatesh used this variable in the UTAUT2 model to investigate the function of intrinsic utilities. Prior research (for example, Zuiderwijk, Janssen, & Dwivedi (2015)) discovered that hedonic motivation plays an important role in influencing users' intentions to use technology, especially in e-learning and Hone et al. (2014) emphasized that because

using an e-learning framework makes people happy, they are more likely to try it again. Based on that the following theory was postulated:

H_4: Hedonic motivation has a positive impact on students' continuous intention to use Zoom for e-learning.

Work-life quality (WLQ) refers to a person's understanding or belief that by using a tool, their work quality can increase, in this instance, the use of an e-learning system is intended to improve student's learning process by saving them time and money as they can download learning materials and literature or communicate with their colleagues or teachers (Ali, Raza, Qazi, & Puah, 2018). The value of work-life quality-related studies on e-learning is very limited. Hone et al. (2014) and Ali, Raza, Qazi, & Puah (2018) have shown that Work-life quality has an important effect on the decision to use e-learning programs. As a result, work-life quality can be a good indicator of an individual's plan to use e-learning programs. Thus, the following hypothesis was derived:

H_5: Work-life quality has a positive impact on students' continuous intention to use Zoom for e-learning.

Internet experience means individual internet use and familiarity have a major association with technology adoption (Dwivedi, 2015). Internet experience is recognized as a primary factor in assessing technology acceptance by previous research (Dwivedi et al., 2011). Individuals' perceptions of using electronic systems are firmly developed as the internet experience increases (Hone et al., 2014). Previous research on Web-based learning systems have paid less attention to internet experience as the main determinant and this study aims to incorporate internet experience as an exogenous factor influencing e-learning system and purposed the following hypothesis:

H_6: Internet experience has a positive impact on students' continuous intention to use Zoom for e-learning.

Facilitating condition is the belief in the availability of characteristics and resources that will support students in e-learning learning activities (Chiu & Wang, 2008). In the university system, there are several parties for support and facilities to students, especially in the task related to technology (Rahmat & Au,

2013). In an e- learning environment university technological infrastructure, university academic staff support, and nonacademic staff assistance are significant for the success of implemented systems. Previous research has shown that there is a favourable and substantial association between conducive conditions and the desire to continue using (Tarhini, Hone & Liu, 2013; Rahmat & Au, 2013). Based on that following hypotheses were derived for the study.

H_7: Facilitating conditions have a positive impact on students' continuous intention to use Zoom for e-learning.

This employed a descriptive research design that allows assessing the associations between the variables described in the model. After reviewing the literature, six independent variables were identified. Based on the conceptual framework shown in Figure 1, seven hypotheses were postulated.

This study focuses on investigating the intention to continuous use of online teaching for Sri Lankan university undergraduates. Hence, the unit of analysis was individual. The theoretical population of this study is undergraduate students at state universities in Sri Lanka. Among them, 2nd largest annual intake for Sri Lankan national universities enroll under the Management stream (UGC, 2021). From that, Management undergraduates from the University of Ruhuna were chosen as the study population. The faculty of Management and Finance is the 6th Faculty of the University of Ruhuna established in 2003. Since 2021, annually 2n d largest batch of the management stream enrolled in the Faculty of Management and Finance, the University of Ruhuna among 16 management faculties of 16 state universes in Sri Lanka (UGC, 2021). Each undergraduate year represents students from 9 provinces in Sri Lanka and different demographic and socio-economic backgrounds. Therefore, the authors believed that the generalizability of the study findings among undergraduates of Sri Lankan is high due to the authors of this study selecting undergraduates of the Faculty of Management and Finance, the University of Ruhuna as the study population and data gathered from them.

A questionnaire was designed using Google Forms. Designed questionnaires were distributed among 250 undergraduates of the Faculty of Management and Finance, University of Ruhuna by using emails and social media networks, and 200 responses were gathered proceed for further analysis. The study had to adopt

the snowball sampling method because requested respondents to pass the questionnaire among undergraduates in the faculty.

The constructs of the research model were measured using previously validated instruments. All the constructs used a five-point Likert scale where respondents marked their agreement scaling from strongly disagree (1) to strongly agree (5). Gathered data analyzed by using SPSS 25 version. In SPSS, internal consistency was tested using reliability analysis and validity was assessed using discriminant and convergent validity analysis. To check multicollinearity issues correlation analysis was performed and descriptive analysis was used to describe the demographic characteristics of respondents. The hypothesis was tested by using multiple regression.

4. Results

4.1. Sample Composition

The data was gathered from 200 undergraduates of the Faculty of Management and Finance, University of Ruhuna. According to table 1, 41.5% represents the 21-22 age group, the 25-26 age group represents 25% of the sample, and the lowest percentage 4% represents from 19-20 age group. According to the responder' year of study 1st, 2nd, 3rd and 4th years represent 79,17,17,87 students respectively. According to gender 116 (58%), students are female and 84 (42%) are male. Pertaining to the devices used to access for zoom platform most of the students (104) used the laptop, 85 students used a smartphone, 10 students used a desktop, and one student used a tablet. 105 (52.5%) used dialog and 77 (38.5%) use SLT-Mobitel as their internet service provider.

Further, 17 students used Hutch, and 1 student used Airtel internet service provider for access to zoom. 73 students used zoom only for one semester as a percentage it is 36.5%. 59 students use 2 semesters, and 54 students use three semesters of zoom application for e-learning. 12 students experiencing zoom for more than 4 years and the rest of the others in the sample use the zoom application for three semesters for e-learning.

Table 1. Sample composition

Variable	Category	Frequency	Percentage (%)
Age group	19-20	8	4
	21-22	83	41.5
	23-24	44	22
	25-26	50	25
	More than 21	15	7.5
Gender	Male	84	42
	Female	116	58
Undergraduate Year	1st year	79	39.5
	2nd year	17	8.5
	3rd year	17	8.5
	4th year	87	43.5
Number of semesters use zoom application for e-learning	1 semester	73	36.5
	2 semesters	59	29.5
	3 semesters	54	27
	4 semesters	2	1
	More than 4 semesters	12	6
Used device for access to zoom platform	Desktop	10	5
	Laptop	104	52
	Smartphone	85	42.5
	Tablet	1	0.5
Internet service provider used for access to zoom	Dialog	105	52.5
	SLT-Mobitel	77	38.5
	Airtel	1	0.5
	Hutch	17	8.5

Moreover, a considerable deviation is not observed in descriptive statistics analysis and the possible reason might be the period of data collection and especially since this application is new to a majority of respondents of this study. Furthermore, respondents of this study are undergraduates and all of them enrolled on universities after completing of General Certificate Examination of Advanced Level. During that period, they have to complete the General Certificate of Information and Communication Technology course and through that provide adequate knowledge about managing and handling Information and Communication Technology tools and applications. Due to that students have a certain level of confidence in using these kinds of applications for their studies.

4.2. Reliability

The reliability of the constructs was measured using Cronbach alpha values and the results are indicated in Table 2. The highest reliability value indicates (0.962) by Hedonic motivation while the lowest reliability value is

reported by effort expectancy (0.825). According to (Bagozzi & Yi, 1988) a threshold level of 0.6 or the highest value is required to demonstrate a satisfactory level of reliability. As all constructs meet the threshold value there are no concerns about low internal consistency among the constructs.

Table 2. Reliability Statistics

Variable	Cronbach's Alpha	No of Items
Performance Expectancy	0.900	5
Effort Expectancy	0.825	4
Social Influence	0.919	3
Hedonic Motivation	0.962	3
Work-Life Quality	0.878	4
Internet Experience	0.885	3
Facilitating Conditions	0.843	4
Behavioural intention	0.934	5

4.3. Correlation and Multicollinearity

According to Table 3, correlation coefficient values between the independent variables were very high. Multicollinearity was evaluated using Tolerance and VIF values and the findings indicate that there is no multicollinearity among all independent variables since the Tolerance values are greater than 0.10 and the VIF values are lower than 10.

4.4. Hypothesis Testing

The hypothesis was tested using multiple regression analysis using SPSS and regression results are shown in Table 4. The Adjusted R Square value amounts to 0.701. Thus, the regression model explains 70% of the variance in the intention to continuously use e-learning with Zoom with the seven independent variables specified in the research model and the ANOVA test confirmed that the regression model is statistically significant (F = 78.622, P= 0.000).

Table 3. Correlations and multicollinearity diagnostics

	PE	EE	SI	HM	WLQ	IE	FC	Continues intention	Tolerance	VIF
PE	1								.202	4.800
EE	.822								.210	4.702
SI	.801	.722							.241	4.186
HM	.799	.784	.722						.212	4.326
WLQ	.805	.789	.766	.701					.253	4.786
IE	.712	.699	.612	.621	.589				.208	4.921
FC	.831	.788	.766	.752	.749	.786			.191	5.227
Continues intention	.843	.811	.800	.710	.763	.721	.774	1	.254	5.412

Note: All correlation coefficients are significant at 1% level of significance.

According to Table 4 Performance expectancy (b = 0.445, p = 0.000). Hedonic Motivation (b = 0.191, p = 0. 000)., Work-Life Quality (b = 0.904, p = 0. 000)., Internet Experience (b = 0.370, p = 0.002)., and facilitating conditions (b=0.242, p=0.001) have significant positive effect on explaining intention to continuous use of zoom application for e-learning. Thus, derived H_1, H_4, H_5, H_6 and H_7 hypotheses were accepted with observed data. Effort Expectancy had a significant negative impact on intention to continue the use of zoom application for e-learning, supporting H_2 (b = -0.196, p = 0.044). Social Influence was not found to have a significant effect on the intention to continue the use of zoom application for e-learning, not supporting H_3. In sum, this study confirms the results of UTAUT.

Table 4. Regression results

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
PE	0.445	0.090	4.925	0.000
EE	-0.196	0.098	-1.997	0.044
SI	0.068	0.064	1.063	0.289
HM	0.191	0.052	3.701	0.000
WLQ	0.904	0.168	5.368	0.000
IE	0.370	0.121	3.068	0.002
FC	0.242	0.101	3.956	0.001
Adjusted R^2	0.701			
ANOVA	F = 78.622, (P= 0.000)			

5. Discussion

The objective of this study is to investigate about factors that influence for intention to continuous use of zoom application for e-learning among undergraduates in Sri Lankan universities. The results of the study indicate that performance expectancy, hedonic motivation, work-life quality, internet experience and facilitating conditions significantly and positively impact the intention to continuous use the zoom application for e-learning. Further, effort expectancy is significantly and negatively related to the intention to continue the use of zoom applications for e-learning.

This study found empirical support for the relationship between performance expectancy and intention to continuous use of zoom applications for e-learning. This means that undergraduates use the zoom application for future e-learning activities if they feel that the system helps them to reach their goals of learning activities and benefited from a climb up their expected performance level. These findings are consistent with previous work (Samusdeen, 2019). The relationship between hedonic motivation and intention to continuously use zoom application for e-learning has been documented and the results confirmed the importance of the link between them. This finding indicates that undergraduates use the zoom application for their future studies if the application derives pleasure in the e-learning described. Consistent with the previous empirical findings of Ali, Raza, Qazi, & Puah (2018), the present study found empirical support for the relationship between work-life quality and intention to continuous use of zoom application for e-learning. This means that the usage of the zoom application is supposed to improve students learning process by bringing savings for them in terms of time and cost when they download learning materials and literature or making communications with their colleagues or teachers (Hone et al., 2014). Moreover, this study found empirical support for the relationship between internet experience and intention to continue the use of zoom applications for e-learning. Internet experience is considered a key factor determining technology acceptance by past studies (Ali, Raza, Qazi, & Puah, 2018) and this study indicated the same results and derived that if students have previously strong internet experience, they might use the zoom application in future e-learning activities.

This study found significant results confirming the relationship between effort expectancy and intention to continuous use of zoom applications for e-learning. This implies that students are willing to use e-learning platforms for their future studies when they perceive that the online platform is not much complicated to learn and operate. This finding is consistent with the previous work (Samusdeen, 2019). Further, it found empirical support for the relationship between facilitating conditions and undergraduates' continued intention to use zoom for e-learning (Azlina, Bakar, Bin & Razak, 2014). However, contrary to the previous studies of Venkatesh et al. (2003), Venkatesh and Zhang (2014) and Hone et al. (2014), this study did not find an empirical support for this claim. A possible reason for insignificant results would be that respondents in this context did not pay keen attention to the other influences practically for using the zoom application in their future studies. In sum, Sri Lankan university students' intention for continuous use of zoom application for e-learning is explained by the performance expectancy, work-life quality, hedonic motivation, effort expectancy and internet experience.

From a theoretical standpoint, the conceptual model validated in the developing context gives a clearer understanding of the variables that affect students' continuous intention to use the Zoom application which is mostly used in Sri Lankan higher education for e-learning activities. This study was laid from the UTAUT model with the addition of three variables adopted from previous empirical research findings. The findings emphasize how important the adopted variables are to deriving students' continuous intention to use such e-learning applications. Thus, this study provides a base for future studies conducted on the same study phenomenon by using an extended version of the UTAUT model.

For practical implications study results will point out that more effort could be paid to make to ensure the continuous intention of using e-learning applications in higher education. It gives them a deeper view of the preferences of university students in the case of e-learning system implementation, as well as what these students would want to see and, in their technology, -assisted learning phase lead them to a high satisfactory level of e-learning. So those potential implementations and current installations can be better tailored to meet these students' needs and desires and finally, it leads to continuous intention towards using such applications for e-learning.

For vendors who develop these applications that add more attractive features to enhance the ability to meet the users' expectations, concern about designing more convenient and user-friendly applications, providing regular updates and upgrades about applications and providing superior service to users will determine the continued intention of undergraduates regarding use of e-learning applications. Therefore, vendors and developers must consider the above things when they design, develop, and offer these applications to the market. Not only that make these applications easier for students to use e-learning services by working with mobile and tablets and developing applications that provide pleasure and enjoyableness also determine the user's continuous intention to use these applications and vendors have to consider those when designing and updating their e-learning applications.

Lecturers and instructors need to allow students with little internet experience to use e-learning systems and to try to increase the work-life quality of university undergraduates and it will also increase their continuous intention to use these applications. Moreover, this study derived implications for the country's policymakers and relevant authorities. Those are offering low-cost Internet data services with dedicated dongles for university students and provide hardware devices based on instalment plans and that kind of other methods also ensure students' continuous use of these applications for e-learning.

Students are willing to use zoom for e-learning continuously if the facilitating things such as technology infrastructure, necessary resources, and further assistance and support will provide by the university academic, nonacademic staff and administration. Therefore, as the implementors of the system, it is highly necessary to provide technology technological support and assistance for handle the system and it will increase students' continuous intention for using zoom for e-learning.

6. Conclusions

During the pandemic era, Sri Lankan universities launch the zoom platform for e-learning. As a result, universities must continue to use zoom during the pandemic period. Sri Lankan undergraduates have been using zoom for over a year, but there is a question about whether they would be willing to

continue using it in the future. This study investigated the reasons that undergraduates seek from the system and system operators to continue utilizing zoom for their e-learning activities. According to the findings, the factors that Sri Lankan universities considered are performance expectancy; work-life quality, hedonic motivation, effort expectancy, internet experience and facilitating conditions for continued use of zoom for e-learning. According to the literature Rajeh et al. (2021) conducted a theory-based study about the same phenomenon and explore students' continuous intention to use technology for their learning activities in different contexts and the findings of that study were different from the current study.

Moreover, Fuady et al. (2021) explore the student perception of using these e-learning applications specifically during the COVID-19 period and Damuri et al. (2021) explore the same phenomenon in secondary school students. However, there is a gap in the literature about undergraduates' continuous intention regarding e-learning applications and in the Sri Lankan university education system. Thus, it is paramount important to know specifically how students perceive Zoom application since it is the only application that is freely available for Sri Lankan university undergraduates. Further, due to the economic crisis and COVID-19 situation university administrations are expected to continue education activities by using Zoom it is necessary to check students' intentions because all of these systems' success depends on the user's perception of that particular application.

Moreover, in the Sri Lankan setting, there is a challenge in generalizing findings of developed countries' studies because Sri Lanka is different in terms of technology infrastructure and resource availability, technological knowledge and attitudes. Thus, this study fulfils existing theoretical and empirical research gaps by exploring undergraduates' continuous intention of using Zoom for e-learning activities and adding value to existing literature. From a theoretical standpoint, the conceptual model developed by extending UTAUT 2 model validated in the Sri Lankan context gives a clearer understanding of the variables that affect students' continuous intention and e-learning system usage behaviour. The results will point out that more effort could be paid to make the adoption process a success. It gives them a deeper view of the preferences of university students in the case of e-learning system implementation, as well as what these students would want to see and see in their technology-assisted

learning phase. So those potential implementations and current installations can be better tailored to meet these students' needs and desires.

We acknowledge the following limitation of the study while indicating directions for future research. The first limitations refer to the sample size and the context of the study. Due to time and financial constraints, the sample was limited to 200 respondents from the University of Ruhuna. A larger sample would increase the statistical power and offer rigorous findings (Hair et al., 2010). Future studies with a larger sample size representing undergraduates from other universities are therefore required. The second limitation pertains to the research design. This study used a cross-sectional design, wherein data were collected at one point in time. As the intention to continuous use e-learning is viewed as a psychological construct where longitudinal empirical studies are required to gain in-depth understanding future studies with a longitudinal research design would greatly contribute to the literature.

The fourth limitation is related to the data collection tools. The present study used a questionnaire survey to collect primary data about the phenomenon of interest. Alternative mechanisms, such as interviews would facilitate an in-depth understanding of the continuous usage behaviour and its determinants. Thus, future studies that employ interviews and qualitative analysis of interview data would generate important insights into this phenomenon. The fifth limitation relates to the inclusion of independent variables in the research model. The study used only seven factors based on the UTAUT theory and literature. Additional variables specified in other theories, Theory of planned behaviour, institutional theory, transaction cost theory, and Diffusion of Innovation Theory might have an impact on the intention to continue the use of e-learning.

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Impact of digital transformation on employee engagement at Ceylon Electricity Board in the Northern Province of Sri Lanka

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Abstract

Most of the organizations in the present complex business era have understood the dynamic environment of business and focus on how information technologies are creating digital transformation. To meet the challenges of digital transformation, business firms require greatly encouraged, motivated, and engaged employees at all the level of business processes. In this study, an effort was made to examine the digital transformation and its impact on employee engagement. A sample of 273 staff were selected from Ceylon Electricity Board in Northern Province of Sri Lanka using stratified random sampling method. In this study, an explanatory research design was employed in a cross-sectional time horizon and a survey method was used. The variables were measured using standard questionnaires. Correlation and regression analyses were performed to identify the association between the variables and ANOVA and Independent sample t-test were performed to compare means. The study revealed that the dimensions of digital transformation namely customer service, operational efficiency and business modelling positively impact employee engagement. The research provides useful understandings for administrators to realize the connection among digital transformation and employee engagement and how far each of the dimensions of digital transformation contributes to increase employee engagement. Based on the results, recommendations are made to enhance the employee engagement in the workplace.

***Keywords**: Business modeling, customer service, digital transformation, employee engagement, operational efficiency*

1. Introduction

The essential role of electricity plays in modern life, bringing in economic benefits and developmental progress to various sectors such as transportation, production, communication, agricultural as well as the mining sectors. Electricity is an essential part of people's life and important to the country's economy (Aladejare, 2014). Electricity makes it possible to achieve the full potentials of any society and makes life worthwhile in the society. In the present network system, the electricity supply has been modernized in Sri Lanka by Ceylon Electricity Board (CEB) to improve the power supply quality by adapting variety of modern technologies into that system. To cope with this large customer base and to serve the customers effectively, CEB has digitalized most of the business operations by adapting new technologies. The digital transformations are established in human resource management, financial transactions, production process, material handling, metering functions, collection of revenue, breakdown handling, etc.

Information Technology plays a main role for supporting CEB's efficient operation and customer service. The extensive application of information technology at several stages in the organization has made many digital changes and helping management for reaching digital transformation. The human resource is a key factor to achieve the goal of digital transformation in all stage of collaboration, ecosystem, culture, empowerment, etc.

The human resources are playing major part in productivity of CEB. Effective HRM practices lead to positive HR outcomes (Gamage, 2015). Without proper human resources management, firms would not be able to effectively create a positive workplace culture and environment. CEB needs to have a confident, motivated, committed and engaged staffs to work with newly added technology. To enhance the reliability and supply quality of its service depends on committed and engaged employees. Ismail (2019) stated that employee engagement positively influences job performance. Further, Patro (2013) reported that high levels of employee engagement results in improved employee commitment and involvement in the job. And Gruman and Saks (2011) stated that engaged employees are emotionally attached to their organization and greatly involved in their work going additional mile beyond the employment contract.

Many organizations around the globe adapt new technologies and change their business models. Digitalization is the use of digital technologies to transform a business model and deliver new revenue and value-producing opportunities. There are studies that examined the impact of digital transformation on organization performance, individuals job performance, leadership behaviours, experience, communications, engagement, etc. (Gasparovich, Uskova & Dongauzer, 2020; Mubarak et al., 2019; Goswami & Upadhyay, 2019). Then, Tohanean (2018) shows that digitalization improves the performance of today's organizations. Further, Digital transformation has a significant positive impact on improve business performance (Mubarak et al., 2019) and to increases the efficiency of enterprises (Gasparovich, Uskova & Dongauzer, 2020). Digitalization has changed the workforce population, the skill set needed, and the way to interact and collaborate as well as to communicate within an organization not only from employee's side but also from the management side. Goswami and Upadhyay (2019) explained the high level of engaged employees is available in a digitalized environment as compared to manual working environment. However, CEB has changed several business activities and processes into digital form. The currrent level of employee engagement in CEB is unknown with related to digital transformation. Further, None of the studies examined the influence of digital transformation on employee engagement at CEB.

Aladejare (2014) stated that employee engagement is one of the central constructs that plays a crucial role in increasing organizational performance and ultimately profitability of the organization. Otieno, Waiganjo and Njeru (2015) found that employee engagement encourages employee development thus affecting the organizational performance. As such, it is essential for employers and managers to understand how to promote job engagement of their employees.

The main objective of the current study is to examine the impact of digital transformation on employee engagement in CEB in the Northern Province, Sri Lanka. The study also attempts to examine the difference in employee engagement based on demographic factors. In the path of enriching lives of Sri Lankans through power while lighting the nation, it is the responsibility of CEB to provide an efficient and reliable power supply to all customers at a minimum cost. The quality of the service delivery of CEB to

the consumers is determined by tangibility, empathy, responsiveness, reliability, and assurance (Achchuthan, Sivathaasan, & Jayasundara, 2014). There are multiple factors which influence CEB performance. One of the critical resources is employees to determine the firm's productivity because, without better performance of its employees, any organization cannot expect high organizational accomplishment. The CEB has adopted the technology advancement into business process. It does not have the idea of how employees are being engaged with their job after digital transformation. Employee engagement is one of the critical factors for organization performance. Therefore, it is required to understand the level of employee engagement toward their job in relation to digital transformation.

Digital transformation has given much attention among different context in different countries. Goswami and Upadhyay (2019) have found positive relationship between digital transformation and employee engagement in IT firms located in NCR region, New Delhi. Gallup (2013) study which was conducted from 2011 to 2012 in 142 countries concluded that 13% of the employees are engaged in their jobs, 63% are not engaged and 24% are actively disengaged. The same study revealed that, in Sri Lanka, 14% of the employees are engaged, 62% are not engaged and 23% are actively disengaged. Hence, this finding emphasizes the need for examining the antecedents of employee engagement in the Sri Lankan context. In the study conducted by Mayuran and Kailasapathy (2020) among the managerial level employees from licensed commercial banks in Sri Lanka, the antecedents of employee engagement were examined. The study revealed that employer brand, perceived organizational politics, and self-efficacy were significantly related to employee engagement. However, digital transformation has not been studied as a predictor of employee engagement in the Sri Lankan context.

Vial (2019) stated that digital technologies provide more information, computing, communication, and connectivity. He further explained that digital transformation creates dependencies among employees whose interests may not be in line with organization's interest. Digitalization offers enormous potential for innovation and performance in organizations. Perera (2021) reported that digital technologies have an impact on marketing, promoting customer relationships and increasing the value of the firm. Digital transformation reflects a particular person's engagement or disengagement

towards their job, co-workers, supervisors, organizations goals and work-related activities in that person's surrounding environment. Digital transformation is likely to affect a person's engagement, and this makes the enthusiasm to study and know about digital transformation. Thus, there is a need for investigating digital transformation as an antecedent of employee engagement in Sri Lanka.

However, there are lot of studies taken place to evaluate the impact of digital transformation in different context such as marketing, firm performance, human conduct, business model design and process, leadership styles, decision management, employee engagement etc. Hence, researchers have examined the positive and negative impacts of digital transformation in the organizations (Khitskov et al., 2017; Parsons, Boonman & Obrist, 2000; Veleva & Tsvetanova, 2020; Kaur, 2019). As per the review of literature, there are little empirical studies that discovered the relationship between digital transformation and employee engagement and these studies have been done in the Western countries and in some Asian countries (for example, Goswami & Upadhyay, 2019; Winasis, Riyanto & Ariyanto, 2020; Singh & Atwal, 2019). Winasis et al (2020) recommended that, considering the inadequacy of studies regarding the effect of digital transformation on employee engagement in developing countries, further studies have to be done. Iddagoda and Opatha (2017) have identified a gap of nonexistence of empirical tests on the factors influencing employee engagement in Sri Lanka.

In the review of research literature in Sri Lankan context, few evidences are available. Specifically, analysis of digital transformation challenges in banks and financial institutions (Jayalath & Premaratne, 2021), digital transformation for emerging economy (Rassool & Dissanayake, 2019), forced and unplanned digital transformation in education (Rajaguru, 2021), evaluation of digital transformation in the success of public sector hospitals (Sarathchandra, 2019), digital transformation success (Ghobakhloo & Iranmanesh, 2021) are few examples. In Sri Lankan context, there are some studies available based on employee engagement (Iddagoda & Opatha 2020; Thisera & Sewwandi, 2018; Weerasooriyan & Alwis, 2017). Most of the studies were related to employee performance, financial performance, leadership styles, etc. However, none of them has examined the association between digital transformation and employee engagement. There is a study

conducted at CEB to examine the employee engagement in relation with leadership styles (Samarasinghe & Darshani, 2019). Although, no study has taken place to examine the impact of digital transformation on employee engagement at CEB in Northern Province, Sri Lanka. Therefore, there is a need to fill this gap by doing research on these phenomena. Hence, The following research question was formulated in this study.

"What is the impact of digital transformation on employee engagement at CEB, Northern Province, Sri Lanka?"

2. Literature Review

2.1. Digital Transformation

Digital transformation is the integration of digital technologies into the business to transform existing traditional and non-traditional business processes or services or creating new once, to meet changing business and customer expectations, thus completely shifting the way businesses are accomplished and functioned and how value is delivered to customers. This reimagining of business processes or models in the digital age is digital transformation. According to Liu, Chen and Chou (2011) digital transformation is referred as the integration of digital technologies into the existing business processes or creating a new one. The basis digital transformation concept is to integrate the digital technologies into business. Organizational transformation is something that is inevitable and business administrators must be ready for it with an organizational change management approach or strategy. An organization's strategy is formulated and implemented by leveraging digital resources to create differential value (Bharadwaj, Sawy, Pavlou & Venkatraman, 2013). The use of digital technologies to facilitate key business enhancements (Fitzgerald, Hackling & Dawson, 2013). Digital transformation is the degree to which an organization participates in any activity of information technology (Mithas, Tafti & Mitchell, 2013).

Digital transformation is customer-driven and involves organisational shift along with the application of digital technologies. Reddy and Reinartz (2017) defined digital transformation as the use of computers and internet technology for a more well-organized and effective economic value formation

process. Ismail, Khater and Zaki (2017) argue that numerous analyses of success stories discovered that the improved competitive placement of successful companies do principally depend on strategies which their managers deploy and only secondarily on the information technologies they adopt. According to McKeown and Philip (2003), a while ago that business transformation is a predominant idea which combines various competitive strategies that firms must adopt if they intend to have substantial increases in business performance.

As a requirement for effective digital transformation, administrators need to structure the transformation initiatives. Gimpel and Hossseini (2018) created a holistic yet solid framework with six action fields such as customer, value proposition, operations, data, organization, and transformation management. Bumann and Peter (2019) have done a comparative analysis of over one hundred defined action fields and identified six action fields that provide framework for businesses to succeed in digital transformations. The actions include strategy, the organisation, corporate culture, technology, customers and employees. Davydenko, Kolomytseva and Kolesnikova (2020) stated that the key drivers of digitalization are the company's innovative potential such as digital personalization, goods servitization, processes and structural changes.

Organizations focus mainly on people and business process driven by digital technology which may affect the transformation of their business model (Kutnjak, Pihiri & Furjan, 2019). The digital transformation gets more focus to create values for the organization and to add value to its products and services. The way to achieve excellence in driving digital change is still unidentified. Though there are various models of digital transformation, the present study uses Digital Maturity Model (DMM). Deloitte's consulting agency in partnership with the TM forum has developed the DMM (Deloitte, 2018). As the research suggests, the DMM consists of five assessment areas: customer service, strategy, business modelling, operational efficiency and organization and culture. In a survey conducted by MIT Centre for Digital Business and Capgemini Consulting (Westerman et al., 2011), three key dimensions of a business can be digitally transformed: (1) customer service, (2) operational efficiency and (3) business models. These three dimensions of

DMM were taken into consideration in the current study and the dimensions are described below.

- Operational Efficiency: Developing technology and its broad use in business process has forced management to see towards extremely motivated and engaged employees so that operational efficiency can be achieved. Various analyses concentrate on the impact of information technology on operational efficiencies and value creation and found positive relation (Hong & Lee, 2017; Taiminen, Saraniemi, & Parkinson, 2018). These studies state operational efficiency is a better dimension to measure the technology advancement.
- Customer Service: According to Westerman and Bonnet (2015), digital transformation promotes customer interactions. This leads to an extensive development of customer service expectation (Peppard & Ward, 2016). This is a key part of digitalization process to initiate with getting to understand the customer well. Kotarba (2018) concluded that customer service experience is a core dimension of evaluating digital transformation channel advancement and their usability.
- Business model: Vukanovic (2016) specifies that a business model has three components: content, customer experience and platform. These three components act collectively to produce a value proposition for the customer. According to Abolhassan (2017), a business model includes new sales models, new products models and new business models.

Technological transformation requires a set of capabilities of employees such as experience, knowledge, characteristics related to their emotional state, attitudes, motivations, etc. It is important to expand competencies so that people face challenges and generate innovative ideas for finding solutions to problems at work (Mohamad et al., 2016).

2.2. Employee Engagement

It is important for an employer to make the environment favorable to employees in order to improve their performance and also to increase organizational efficiency. Employee engagement is considered as the bond employees have with their organization. When employees really care about the organization, they are more likely to go the extra mile. Perrin's (2003) Global Workforce Study uses the definition "employees' willingness and

ability to help their company succeed, largely by providing discretionary effort on a sustainable basis." Engagement has been defined as: "an energetic state of involvement with personally fulfilling activities that enhance one's sense of professional efficacy" (Maslach & Leiter, 2008, p. 498), "the individual's involvement and satisfaction with as well as enthusiasm for work" (Harter, Schmidt, & Hayes, 2002, p. 269), and as a "distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with role performance" (Saks, 2006, p. 602).

Employee engagement is the emotional attachment of employees towards their place of work, job role and position in the company, colleagues and culture. The attachment impacts wellbeing of employees and leads to high productivity. Madan and Srivastava (2015) reported that employee engagement leads to commitment and drives to go ahead the call of duty relating to the organization's purpose. Ghuman (2016) distinguished employee engagement as the willingness and energy provided to the organizational goal accomplishment with more endeavour on a continuous basis.

Employee engagement is a particular phenomenon, combination of behaviour and attitude. Therefore, employee engagement is identified by three dimensions: cognitive, emotional and physical/ behavioural involvement (Iddagoda, Opatha & Gunawardana, 2016). According to Dunham (1984), physical/ behavioural engagement involves the behaviours apparent at work. Certain behaviours are timeliness, attendance, retention, etc. Robbins and Judge (2013) state that emotional element is the feeling-segment of engagement. It is concerned with the degree to which employees trust the organisation. According to Robbins and Judge (2013), cognitive element of engagement is the faith of an attitude. It is related to the need for employees to be aware of and aligned with the organization's strategy.

2.3. Empirical Evidence of digital transformation and employee engagement

Studies have been conducted to examine how digital technologies transformation and bring various transformation into business world (for example, Siemens (2014), Resnick (2002), & Hanna (2016)). Adoption of emerging technologies like social media, mobile technologies, cloud technologies, big-data analytics etc. have made transformation in the way the

businesses operate in the market. Lauby (2018) worked on digital transformation and explored about employee engagement through digital transformation. The author opined that advancement of digital age, introduction of artificial intelligence, business automation and application of Internet of things into business are redefining the workplace. The author also cautions that in virtual environment, jobs are disappearing, employees' traditional attitudes are shifting, times are changing very fast and pressures are mounting and hence future generation employees should transform themselves to meet the challenges of technology enabled business". As the digital transformation of the organization is taking place, it is necessary to have an engaged work force due to its several advantages (Buhler, 2006). Developing technology and its vast use in business operation has pushed administration to look in the direction of highly motivated and engaged employees so that operational efficiency can be attained. Most of the literature concentrates on advantages and disadvantages of digital transformation but very little research literature showing correlation among digital transformation and employee engagement are available. Winasis et al. (2020) pointed out that, considering the inadequate studies on the impact of digital transformation on employee engagement in developing countries, further studies should be conducted on these phenomenon.

Goswami and Upadhyay (2019) reported that the digital transformation has an impact on employee engagement based on the survey of 186 staff from different IT companies situated in NCR region (Delhi). The results stress that various aspects of digital transformation are the great predictors of employee's engagement. Winasis et al. (2020) concluded that digital transformation has significant positive impact on employee engagement by surveying 41 staff from a private bank situated in Jakarta (the capital of Indonesia). The bank had a total of 110 employees and had implemented a digital transformation process for one year. The positive impact of digital transformation on employee engagement has been reported by few other researchers (for example, Purba (2021)).

The dimensions of digital transformation namely operational efficiency, business modelling and customer service positively impact employee engagement (Goswami & Upadhyay, 2019). There is a widespread agreement in the service sector that frontline employees play a critical role in

determining positive customer experience (Slatten & Mehmetoglu, 2011). Johnson, Park and Bartlett (2018) reported that customer service positively affect employee engagement.

As per the detailed review related to digital transformation and employee engagement, not much studies have taken place in Sri Lanka. Though there are some studies available based on employee engagement (Iddagoda & Opatha, 2020; Thisera & Sewwandi, 2018; Weerasooriyan & Alwis, 2017), they are not directly related with digital transformation. Most of the studies were related to employee performance, financial performance, leadership styles, etc. Samarasinghe and Darshani (2019) conducted a study at Ceylon electricity board to examine the employee engagement in relation to leadership styles. But no study had taken place to measure the impact of digital transformation on employee engagement at CEB in Sri Lanka.

3. Methodology

3.1. Conceptual Framework

In the present study, the variables are conceptualized as shown in Figure 1.

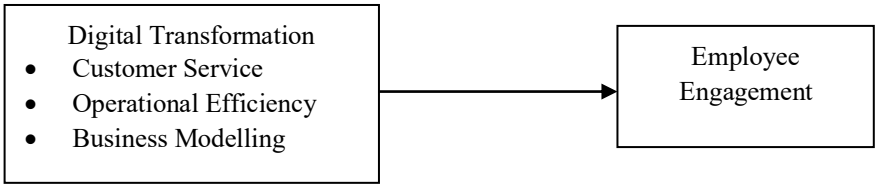

Figure 1 Conceptual Framework

3.2 Working definitions of the study variables

The present study includes three dimensions of digital transformation as independent variables that predict employee engagement. The working definitions of the variables are given below.

- Customer service is related to customer engagement, customer experience, insights and behaviours as perceived by the managers and employees.
- Operational efficiency is related to change management practices, automated resource management, integrated service management and automation.

- Business model involves application of technology, data and analytics, network, delivery governance and new business models.
- Employee engagement is the level of enthusiasm and dedication of employees toward their job.

3.3 Hypotheses Development

The following hypotheses were established based on the literature review.

H_1: Customer Service Experience has a significant positive impact on employee engagement at CEB, Northern Province in Sri Lanka.

H_2: Operational Efficiency has a significant positive impact on employee engagement at CEB, Northern Province in Sri Lanka.

H_3: Business modelling has a significant positive impact on employee engagement at CEB, Northern Province in Sri Lanka.

3.4 Research Design

The objective of this study is to describe the impact of digital transformation on employee engagement of both managerial and non-managerial employees in Ceylon Electricity Board in the Northern Province. In this research, three digital transformation components which are believed to be vital in the employee engagement have been identified as possible contributing factors. In this study, we made an attempt to create the relationship among the dimensions of digital transformation namely customer experience, operational efficiency and business model, and employee engagement. Therefore, this is an explanatory study that seeks to discover the connection among variables. It is a quantitative research and deductive approach was used. The data were collected from managerial and non-managerial employees of CEB and thus the unit of analysis of this study is individual.

3.5 Population and Sampling

The population of the present study includes managerial and non-managerial employees working at CEB offices in the Northern Province of Sri Lanka. The population size is 672 at the time of data collection. 40%

employees from all categories were selected based on stratified random sampling method and the sample size is 273 employees. Out of the total sample, 225 usable surveys were returned and the response rate was 82%. The sampling framework is shown in Table 1.

Table 1. Sampling framework

Division of CEB	Population	Sample
DGM Office	84	34
Area Office Jaffna	189	77
Area Office Vavuniya	127	52
Area Office Kilinochchi	89	36
Area Office Jaffna East	72	29
CE (Construction) Office	38	15
CE (DM) Office	57	23
CE (Planning) Office	6	3
Distribution Control Centre	10	4
Total	672	273

3.6 Data Collection

In this study, questionnaire method was used to collect data and the questionnaire was accompanied by a covering letter that described the purpose of the study. General instructions on how to fill the questionnaire and the significance of answering all questions were also stated. The questionnaire consists of three sections, section one comprises the demographic characteristics of the employee and other two sections are related to digital transformation and employee engagement. Goswami and Upadhyay (2019)'s questionnaire was adopted to measure Digital transformation. Employee engagement was measured using Job Engagement Scale (JES) developed by Rich et al. (2010)

3.7 Analysis tools

The data analysis was performed using SPSS 20.0 software. Descriptive statistics were utilized to get frequency distribution, mean and standard deviation. Correlation and regression analyses were used to determine the linkage among study variables. In addition, Independent sample t-test and ANOVA were used to compare means based on demographic factors.

4. Results

4.1 Sample profile

The profile of research participants was examined based on demographic factors, and the results are reported in Table 2. The questionnaire was distributed to employees who are working at CEB, Northern Province, Sri Lanka. Table 2 shows that 78.7% of the research participants are males and 21.3% of the participants are females. In case of marital status of the employees, 60.9% of the employee are married and the 39.1% of the employees are unmarried.

Table 2. Sample Profile

	Frequency	Percentage
Gender		
Female	48	21.3
Male	177	78.7
Total	225	100.0
Marital Status		
Married	137	60.9
Unmarried	88	39.1
Total	225	100.0
Age groups		
Below 25 years	29	12.9
25-34 years	98	43.6
35-44 years	77	34.2
45-54 years	15	6.7
55 years and above	6	2.7
Total	225	100.0
Experience		
less than six months	8	3.6
6-12 months	7	3.1
01-03 years	44	19.6
4-6 years	51	22.7
above 6 years	115	51.1
Total	225	100.0
Educational Qualification		
Up to Ordinary Level	34	15.1
Advanced Level	127	56.4
Diploma	32	14.2
Degree	32	14.2
Total	225	100.0

Age distribution of the employees represents that 43.6% of the employees belong to the age group of 25-34 years and a very less percentage of employees (2.7%) belong to the age group of 55 years and above. Among the participants, 3.6% have below 6 months of working experiences; 3.1% of have 12 months of working experiences, 19.6% of the employees have 1 to 3 years of working experiences; while majority of the participants (51.5%) have more than 6 years working experience. When consider the education qualifications, most of the employees have passed G.C.E.A/L examination which represent 56.4% of the respondents whereas 14.2% of them have a diploma and 14.2% have a degree.

4.2 Reliability

To measure the reliability of the digital transformation and employee engagement measures, Cronbach's alpha was calculated in the SPSS software. Nunnally (1978) proposed that the Cronbach's alpha should be 0.7 or higher to ensure good reliability. A reliability estimate in between 0.6 and 0.7 also can be acceptable (Hair et al., 2010; and Malhotra and Peterson, 2006). The results of the reliability analysis are shown in Table 3. Reliability of measuring instruments are in the range from 0.665 to 0.894. These values are in the acceptable range. Therefore, the measuring instruments have satisfied the reliability requirement.

Table 3. Reliability of constructs

Variables	Cronbach's Alpha	Number of Items
Customer Experience	0.665	4
Operational Efficiency	0.706	4
Business Modelling	0.692	2
Digital Transformation	0.814	3
Employee Engagement	0.894	3

4.3 Descriptive Statistics

Descriptive statistics are used to perform univariate analysis. Table 4 represents the descriptive statistics of independent variables namely customer service, operational efficiency and business modelling, and the dependent variable namely employee engagement. The mean values for these variables

fall in-between 3.691 and 4.425 (in 1-5 scale). The results show that the mean value of employee engagement is 4.425. This reveals that the mean of digital transformation dimensions and employee engagement are at high level at CEB, Northern Province.

Table 4. Descriptive statistics

	Mean	Std. Deviation	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
Customer Service	3.752	0.667	-0.639	0.162	0.812	0.323
Operational Efficiency	3.691	0.702	-0.611	0.162	0.762	0.323
Business Modelling	3.891	0.747	-0.674	0.162	0.405	0.323
Employee Engagement	4.425	0.592	-2.011	0.163	1.873	0.324

Skewness and kurtosis values of a data distribution are considered to determine normality of a dataset. The normality of a data distribution is considered acceptable if the values of skewness or kurtosis fall between -2.0 to +2.0 (Hair, Black, Babin & Anderson, 2010). In the present study, as reported in Table 4, the skewness of all variables is in the range from -0.611 to -2.011 and the Kurtosis is from 0.405 to 1.873. It denotes that the data recorded for the digital transformation variables and employee engagement were approximately normally distributed.

4.4 Mean Comparison

Employee engagement was analysed based on demographic factors to compare means and to identify if the mean value of engagement differs based on the factors. Independent sample t-test was used to compare means based on gender and marital status whereas one way ANOVA test was used to compare means based age group, experience and educational qualification.

Table 5. Independent sample t-test for mean comparison of employee engagement

		Mean	Std Deviation	t-value	Sig. (2-tailed)
Gender	Male	4.237	0.643	2.509	0.013
	Female	4.476	0.568		
Marital status	Single	4.414	0.591	-0.350	0.726
	Married	4.442	0.596		

According to the Table 5, there is a significant mean difference in engagement among males and females as the independent sample t-test

produced significant results (t= 2.509, p< 0.05). Accordingly, the mean value of employee engagement of females (4.476) is higher compared with the mean value of males (4.237). At the same time, employee engagement does not significantly differ based on marital status as the independent sample t-test is not significant (p=0.726).

Table 6. One way ANOVA test for mean comparison of employee engagement

	Sum of Squares	df	Mean Square	F	Sig.
Age group					
Between Groups	1.487	4	0.372	1.062	0.376
Within Groups	76.670	219	0.350		
Total	78.157	223			
Educational qualification					
Between Groups	0.508	3	0.169	0.480	0.696
Within Groups	77.648	220	0.353		
Total	78.157	223			
Experience					
Between Groups	5.627	4	1.407	4.247	0.002
Within Groups	72.530	219	0.331		
Total	78.157	223			

As reported in Table 6, one way ANOVA test was conducted to compare mean value of employee engagement based on age groups, educational qualification and experience. The ANOVA test revealed that there is no significant mean difference in employee engagement between age groups (F= 1.062, p > 0.05). ANOVA test results also revealed that there is no significant mean difference in employee engagement based on educational qualifications (F=0.480, p > 0.05). At the same time, the mean of employee engagement differs based on experience level and the difference is significant (F=4.247, p<0.05).

4.5 Correlations

Pearson Product Movement Correlation was calculated to find the relationship between the variables and the results are depicted in Table 7. According to the results reported in the Table 7, the correlation values range from 0.412 to 0.530 between independent variables (customer service,

operational efficiency, business modelling and digital transformation) and dependent variable (employee engagement). The results showed that there is a moderate level positive relationships between the independent and dependent variable. These relationships were statistically significant as the correlations were at 0.01 levels (1 –tailed). The associated significant values (p) are less than 0.05. The results explained that digital transformation and its dimensions namely customer service, operational efficiency and business modelling are positively correlated to employee engagement in CEB in Northern Province.

Table 7. Correlations with employee engagement

Variables	Employee engagement
Customer service	0.468*
Operational efficiency	0.480*
Business modelling	0.412*
Digital transformation	0.530*

Note: * denotes the significance at the 0.01 level (1-tailed).

4.6 Regression Analysis

The regression analysis was carried out to test the impact of customer service, operational efficiency and business modelling on employee engagement. Table 8 shows the summary of the findings. The outcome of the analysis shows that the independent variables statistically significantly predict the dependent variable ($F = 29.810$, $p < 0.001$) and the regression model is a good fit for the data.

Table 8. Results of multiple regressions analysis

	Adj. $R^2 = 0.289$		F value = 29.810	Sig F = 0.000[b]	
Predictors of the Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	2.431	0.216		11.562	0.000
Customer service	0.243	0.063	0.274	3.868	0.000
Operational efficiency	0.200	0.075	0.237	2.666	0.000
Business modelling	0.172	0.064	0.213	1.867	0.002

a. Dependent Variable: Employee Engagement

b. Predictors: (Constant), Customer service, Operational efficiency and Business modelling,

According to the model, all variable t values are in between 1.867 to 3.868 and the p values are less than 0.05. This implies that there is a positive

impact of variables namely customer service, operational efficiency and business modeling on employee engagement. From the analysis, the hypothesis H_1: "Customer service has a positive impact on employee engagement at CEB, Northern Province in Sri Lanka" is supported. The hypothesis H_2: "Operational efficiency has a positive impact on employee engagement at CEB, Northern Province in Sri Lanka" is supported. Also, the hypothesis H_3: "Business modelling has a positive impact on employee engagement at CEB, Northern Province in Sri Lanka" is supported.

Moreover, the R^2 value of 0.289 depicts that the model explains 28.9% of the variation in employee engagement can be explained by customer service, operational efficiency and business modelling. The remaining 71.1% of variance in employee engagement will be explained by other variables which are not included in this study.

5. Discussion

The main objective of this research was to examine the impact of digital transformation on employee engagement. According to the research findings, dimensions of digital transformations such as customer service, operational efficiency and business modelling positively affect employee engagement at CEB, Northern Province. From the finding, it can be said that digital transformation has positive impact on employee engagement. The results are in line with the findings reported by Goswami and Upadhyay (2019) and Winasis et al (2020). These studies considered digital transformation as a total variable in predicting employee engagement. There is no evidence of the impact of each dimension of digital transformation on employee engagement in the existing literature. Hence, we couldn't compare the present study's findings of the impact of each dimension of digital transformation on employee engagement with the previous research findings. In overall, the findings denote that employee may be more engaged in a digitalized work environment.

The specific objective of this research was to examine the impact of customer service, operational efficiency and business modelling on employee engagement. Regression analysis was done to examine the association between independent variables (customer service, operational efficiency and

business modelling) and dependent variable (employee engagement). As per the results obtained in this study, it is concluded that the digital transformation factors positively contribute considerable amount to employee engagement. This result is well supported with the statement of Winasis (2020).

Another specific objective was to examine the differences in employee engagement based on demographic factors. The outcome of the analysis indicated that female employees are more engaged with their organization compared with males. In case of marital status, it is found that there is no significant difference in employee engagement among married and unmarried respondents. Also, study revealed that there is no significant differences in employee engagement based on age groups as well as educational qualifications. In case of experience, there is significant difference in employee engagement among employees with different experience levels.

6. Conclusion

The main objective of this research was to examine the impact of digital transformation on employee engagement. According to the research findings, dimensions of digital transformations such as customer service, operational efficiency and business modelling positively affect employee engagement at CEB, Northern Province. From the finding, it can be said that digital transformation has positive impact on employee engagement. The results are in line with the findings reported by Goswami and Upadhyay (2019) and Winasis et al. (2020). These studies considered digital transformation as a total variable in predicting employee engagement. There is no evidence of the impact of each dimension of digital transformation on employee engagement in the existing literature. Hence, we couldn't compare the present study's findings of the impact of each dimension of digital transformation on employee engagement with the previous research findings. In overall, the findings denote that employee may be more engaged in a digitalized work environment.

The specific objective of this research was to examine the impact of customer service, operational efficiency and business modelling on employee engagement. Regression analysis was done to examine the association between independent variables (customer service, operational efficiency and

business modelling) and dependent variable (employee engagement). As per the results obtained in this study, it is concluded that the digital transformation factors positively contribute considerable amount to employee engagement. This result is well supported with the argument of Winasis (2020). The consequences of change are going to directly affect the psychological condition of employees.

Another specific objective was to examine the differences in employee engagement based on demographic factors. The outcome of the analysis indicated that female employees are more engaged with their organization compared with males. In case of marital status, it is found that there is no significant difference in employee engagement among married and unmarried respondents. Also, study revealed that there is no significant differences in employee engagement based on age groups as well as educational qualifications. In case of experience, there is significant difference in employee engagement among employees with different experience levels.

The present study concludes that the dimensions of digital transformation namely customer service, operational efficiency and business modelling positively affect employee engagement at CEB, Northern Province. According to Parry (2014), digital technologies play an important role in the lives of both employees as well as the organization. As employee engagement acts as a catalyst for innovation and new ideas, the antecedents of engagement should be focused by managers. Hence, digital technologies should be carefully introduced to get the best out of employees in terms of employee retention, higher productivity, lower costs, efficient utilization of resources and better service to the customers.

The digital culture plays as an important role and avoids duplication of work. It would make employees to work effectively without stress and to increase the productivity. The employees' unique ideas could be integrated in the future digital transformation to advance the engagement in the innovations. Allowing feedbacks from all category people under different departments about the digital transformation would give the insight of the employees' perceptions. The researcher recommended that employees need to adopt in a working environment which will lead them to exhibit behaviour that

organizations are looking for. Therefore, the organization should focus on the digital transformation dimensions which influence engagement through each business function.

The findings of the study are useful to understand the association between digital transformation and employee engagement. This study would help the managers in improving employee engagement and thereby to reach organizational goals. Also, the research would provide guidance to change the digital transformation in a proper manner to gain more employee engagement to the individuals. Engaged employees of the firm last long for years and support for the efficient operation of the organization. As a result, this research study would bring new insight and new knowledge regarding digital transformation and employee engagement. This is very valuable in this knowledge-based society since knowledge creates power.

Since the employee engagement is a function of digital transformation, it is expected that this research provides valuable information which will be of great value to CEB as well as Sri Lankan economy as a developing country. This is because this research offers refreshing insights as to enrich the employee engagement through building suitable set of digital transformation. To provide the better services to all consumers in the province with a safe, reliable and quality supply of electricity at statutory voltage at the lowest cost, guaranteeing that the proceeds return is optimal and that the system is established as planned and supplies to consumers are delivered expeditiously and to gain ISO 9000 Quality Management Certification. Therefore, it is vital to visible to the customers regarding the productivity of CEB. It is clear that this study would provide a clear idea of the connection among the study variables. Consequently, it is sure that the future researchers will take this as a base for further investigation.

In the present study, we analysed employee's engagement through digital transformation in a very restricted scope with a number of limitations. As per the review, it is understood that there are limited studies available about digital transformation in relation to employee engagement. With the increasing technological complexity, the concept of employee's engagement has emerged as the essential element for the long-term goal achievement and

survival of the business organizations. The technological implication is bound to be widely utilized in future. Consequently, in the interest of organization as well as employees, digital transformation and its impact on employee's engagement are required to be accurately assessed in the social context. As the current study was limited to CEB in the Northern Province of Sri Lanka, future studies should be extended to other regions as well as other sectors. In addition, the potential mediators such as leadership, organizational culture, motivation, etc. need to be examined to identify the intervention of those variables in the digital transformation-engagement relationship.

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Drivers of intention to adopt hybrid working model: Evidence from executives and above level employees in the selected apparel manufacturing enterprises in Sri Lanka

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Abstract

Hybrid working arrangement received significant popularity during the post COVID - 19 era as travel restrictions and social distancing moved remote working from an option to a necessity. Employees generally resist accepting changes as they are willing to stick with the status quo which is more comfortable. Thus, stimulating employees for adopting a hybrid working model becomes a challenging task and scholars' and practitioners' attention is received on the phenomenon of hybrid working model adoption behaviors of the organization and employees. However, the phenomenon is underexplored in the context of an emerging economy. This study aims at identifying the determinants of intention to adopt hybrid working model by the executive and above-level employees of the Sri Lankan apparel industry. The model was developed using the UTAUT model. Data was collected using a self-administered questionnaire from the sample of 101 executives and above-level employees from the three leading apparel companies in Sri Lanka. A stratified sampling technique was used while the list of employee details provided by the administrative officers of the three apparel firms was taken as the sample frame of the study. Multiple regression analysis was used to test the hypothesis and the findings revealed that performance expectancy; effort expectancy, and social influence explained the intention to adopt the hybrid working model. This study contributes to the theory by enhancing the understanding of HWM adoption behavior of employees in developing economies as the study identifies drivers of HWM adoption behavior of the executives and above-level employees in the apparel sector specifically in Sri Lanka. The study found that the UTAUT model explains only 38 percent of the variance of the intention to adopt HWM. This indicates that some variables which have not been specified in the model have an impact on determining the HWM adoption behavior of the employees. Thus, future studies are opened up for further development of the research model.

Keywords: *Effort expectancy, hybrid working model (HWM), performance expectancy, social influence*

1. Introduction

Inevitably the people are now supposed to live and work in a volatile, uncertain, complex, and ambiguous (VUCA) world (Hänti et al., 2021) and this was well confirmed with the outbreak of COVID 19 pandemic (Murugan et al., 2020). COVID-19 has been a turning point; especially in businesses since e-working which was practicing even before the pandemic but at a smaller scale, came to practice along with many other changes impacting traditional practices (Beno, 2021; Mariniello et al., 2021). Hybrid work model (HWM) is found as a mixture of working remotely (From anywhere except the office) and in-person (Beno & Hvorecky, 2021). The HWM consists of direct positive outcomes for both employees and the company. Increased productivity, higher job satisfaction, better employee engagement, wider access to the labor market, saving on utility, infrastructure maintenance, and other facilitating costs have benefitted the organizations (Allen, Golden, & Shockley, 2015; Eurofound, 2020; Mariniello et al., 2021; Brunelle, 2012). Employees experienced less commuting costs, more time to spend with family, work with less distraction, and managing networking at a specific level, through the HWM (Lenka, 2021; Nguyen, 2021).

Poor management of HWM generates negative consequences such as lower productivity due to disturbed coordination while blending between onsite and remote work, digital exhaustion (Cameron, & Garrett, 2017; Wheatley, 2017; Chung, & Van der Lippe, 2020; Spreitzer, Caranto et al., 2020). Moreover, poor management of the work arrangement leads to work-life imbalance due to lengthening work hours and thereby decreasing job satisfaction (Timms, Brough, O'Driscoll, Kalliath, Siu, Sit, & Lo 2015). Further, the isolation created by the higher proportion of remote working, disturbed team working and brainstorming, and shrinking network (Alexander et al., 2021; Bohan et al., 2021).

The hybrid working model received noteworthy attention among academics and practitioners in the recent past and previous studies mainly aimed at exploring the drivers of hybrid/flexible working model acceptance (Ahmed, & Khalil, 2021; Ko, & Kim, 2018) and outcomes of the implementation of the flexible/hybrid working arrangements (Abeysinghe, Ranasinghe, Mendis, & Gunathilake, 2021; Wheatley, 2017).

Though the phenomenon of hybrid working model has been a topical area, the empirical studies carried out in the literature are not sufficient to explain the adoption behavior of the employees and organization as there are some inconsistencies in the findings (Ateeq, 2022). Though many studies conducted to explain the hybrid working model adoption behavior (Iqbal, Khalid, & Barykin, 2021; Lenka, 2021; Skountridaki, Marks, & Mallett, 2021; Williamson, & Colley, 2022), still determinant's of intention to adopt HWM by executive level employees seems to be a grey area that is open for further studies. Especially when it comes to developing countries like Sri Lanka very little research is carried out and it is rather challenging to generalize the findings of the studies conducted in other contexts due to the economic, social, cultural and technological differences between the developed and Sri Lankan context (Beno, 2021; Gensler Research Institute, 2020).

The studies conducted in the Sri Lankan context mainly explored the perceptions of academics of work from home (Rathnayake, Kumarasinghe & Kumara, 2022), the legal status of work from home (Mudalige & Edirisinghe, 2020), the impact of Work from Home on Work-Life Balance (Nizath & Karunaratne, 2021), the effect of WFH on employee engagement (Perera & Manjaree, 2021). This reveals that previous studies in the Sri Lankan context did not explore the determinants of hybrid working model adoption. Moreover, previous studies in the context of Sri Lanka aimed to explore the phenomenon in the academic community (Rathnayake et al., 2022), public (Mudalige & Edirisinghe, 2020) and different industries of the private sector employees (Nizath, & Karunaratne, 2021).

However, no studies aimed at exploring the phenomenon in the apparel industry which is the largest export income earner for the country that marks more than 45 percent of the total export revenue over the last years (CBSL, 2019). Hence, there is a importance in studying the drivers of hybrid working model adoption behavior of the executive employees in the apparel sector. This study is focusing on contributing to fill the contextual gap by exploring the compatibility of the UTAUT model to understand the factors that influence the intention towards participating in the Hybrid work model from the perspective of the executive and the above-level employees in the Sri Lankan apparel industry.

2. Literature Review

2.1. Hybrid Work Model

Hybrid work model became visible mainly after the COVID -19 as a new term to academia. As shown in Table 1, it could be identified that specially in early 2020, the concept of Hybrid working model only covered the split between the office and home, and gradually remote working was included while taking the split to work from office and work from anywhere out of office. Hessels (2021) compressed this split between office and home to a work week. No other conceptualizations explain a specific time period for the split. Sen (2020), Lenka (2021) and Sini (2021) brought the term physical presence or the in person presence to the definition but only Lenka (2021) specified that this physical presence takes place in the office.

Hessels (2021) highlighted some unique points within both the definition that was given by highlighting that office will be used as a place of improved engagement as well the split of work time between the home and office happens according to employees' choice. Thus, the hybrid working model could be explained as a work arrangement of which the employee works from office on some days and work from home or any other location away from office on the other days.

2.2. Behavioral Intention to Adopt Hybrid Working Model

Behavioral intention is the subjective probability of an individual that he/she will perform that behavior and these intentions act as a predictor of the actual behavior (Ajzen, 1991). Consequently, the intention to perform a certain behavior (intention to adopt a new practice) could be identified as a variable that evolved from individual acceptance of a behaviour which is subjected to each individual's expectations. As well as the intention of behavior forecasts the actual action to a certain extent.

In order to select the most appropriate theory for designing a research model and developing the hypothesis, extant literature on the intention to adopt hybrid/flexible working models was reviewed. Since Hybrid working model is considered as a technically supported innovative practice, the literature on information technology/innovation adoption was investigated.

Table 1. Conceptualization of Hybrid Working Model

Definition	References
"A combination and interplay between remote and in-person arrangements"	Sen et al. (2020)
"A work model where workers would ideally split their time between the office and home during the typical workweek".	Gensler Research Institute (2020)
"Working some time at home and sometime in the office".	Gensler Research Institute (2020)
"Using mix of home and office as the place to work"	Gratton (2021)
"Split time between the office and a remote or work from home setting"	Schettler & Schettler (2021)
"The combination of remote work and physical presence in the office".	Lenka (2021)
"A model that enables employees to work from home by choice and use the office as a meeting place to become inspired and to stay engaged".	Hessels (2021)
"The freedom for employees to schedule their workweek in a way what suits them best; the possibility to choose where to work, either office or home"	Hessels (2021)
"A work model that in which employees work both remotely and in the office"	Alexander et al. (2021)
"Work activities in both physical and virtual environments".	Sini (2021)
"Some people will work in the office and some will work at home or in a third place".	Steelcase (2022)

Previous research that study predictors of the intention to adopt flexible/hybrid working arrangements used several technology acceptance theories namely Theory of Planned Behavior (Ahmed & khalil, 2021; Ko & Kim, 2018), Theory of Reasoned Action (Abeysinghe et al., 2021), Technology Adoption Model (Pérez, Sánchez, de Luis Carnicer, & Jiménez, 2004). These theories have different explanatory power in explaining the flexible working adoption intention. The UTAUT model proposed by Venkatesh et al. (2003) has received more attention in predicting human behaviors pertain to the technology adoption.

The UTAUT has received significant attention among the scholars and many studies used the UTAUT to explain adoption behaviors of individuals and organizations pertain to various phenomenon: Internet banking adoption (Foon & Fah, 2011), mobile learning acceptance (Chao, 2019; Bere, 2014), Social media adoption (Salim, 2012), ICT Infrastructure adoption (Garcia, Aunario & Handriyantini, 2019). Extant literature stressed that UTAUT model is an integrated model that can be used to explain the intention and actual adoption behavior of the individuals compared to other technology adoption

theories such as TAM, DOI and TPB (Bommer, Rana & Milevoj, 2022; Chatterjee et al., 2021) However, no studies used the UTAUT model to explain the behavioral intention to adopt hybrid working arrangements by employees. Acknowledging the applicability of the UTAUT model in explaining technology allied applications, the present develop research model (Figure 1) is based on the theory proposed by the UTAUT Model.

2.3. Research Model

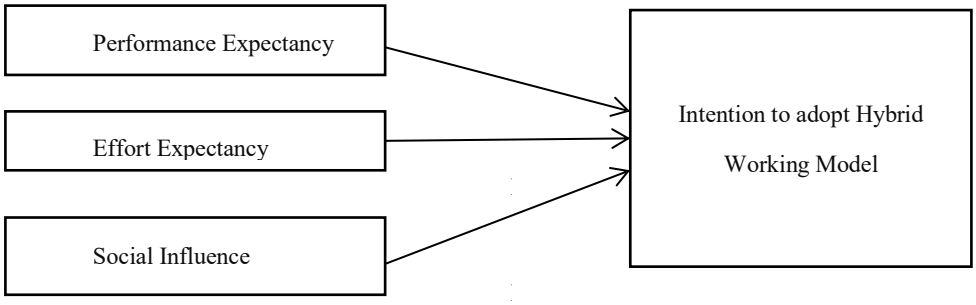

Figure 1. Research Model

2.4. Hypotheses

2.4.1. Performance expectancy

Performance expectancy is "the degree to which an individual believes that using system will help him or her to attain better job performance" (Venkatesh et al., 2003). In this study, it is the extent to which an employee believes that adopting hybrid work model aid him/her in attaining better performance in his job. Performance expectancy consist the beliefs on career success, improved performanceproduc tivity and efficiency, getting interesting high-profile assignments, new networking opportunities and career progression (Moore & Benbasat, 1991; Thompson et al., 1991). Whereas if the employees believe that working in hybrid working model will increase their career success then the performance expectancy increases and that will make a positive push to their intention to adopt hybrid working model. Following hypothesis postulated based on the above rationalization.

H_1: Performance Expectancy positively influence on the intention to adopt hybrid working model

2.4.2. Effort expectancy

Effort expectancy is "the extent of which an individual believe that ease incorporated with using new system" (Venkatesh et al., 2003). In the current study it is the degree that the employee believe in the effortlessness associated with adopting hybrid work model. Venkatesh (2003) further explains that the effort expectancy contains two dimensions as belief on ease of performing the action and the ease of learning how to perform. Ease of performing the action means how easy for someone to work with or practice the new practice (Davis et al., 1989). Ease of learn depicts how effortlessly the new practice can be learnt during the early stage (Moore & Benbasat, 1991). Therefore if the employees believe that hybrid working model is easy to adopt and that process of adoption could be easily learned that will increase their effort expectancy: degree of ease associated with adopting the new model increase and thereby the employee's intention to adopt hybrid model will increase. Flowing hypothesis postulated based on the above rationalization.

H_2: Effort Expectancy positively influence the intention to adopt hybrid working model

2.4.3. Social influence

Social influence or the subjective norm is "the degree to which a person is conscious of his important others believe he should use the new system" (Ajzen, 1991; Hale et al., 2009). For this study social influence can be expressed as the extent which an employee believes that his important crowd believes that he should adopt hybrid working mode. What the individual think of important others' preference on his choice create an extinct motivation; which refers to behavior which controlled by external factors (Benabou & Tirole, 2003). That will directly influence the individual's behavior intention. Consequently if the employees believe that his family members, colleagues, superiors, subordinates or any other person whom is important to him expect he would adopt hybrid working model, that will motivate him to adopt hybrid working model. This rationale leads to the following hypothesis.

H_3: Social influence is positively influence on the intention to adopt hybrid working model

3. Methodology

The current study comes under explanatory research design as the purpose is to identify the predictors of hybrid working model adoption (Zikmund et al., 2010). The study deployed deductive research approach as the study focus on testing existing theory. The study applied cross sectional research designs as the study collect data only one point in time. The current study is focusing on identifying determinants of adopting hybrid working model by executives and above level employees in the three leading firms in the apparel industry. They are the respondents of the survey whereby the unit of analysis for the present study is "individual". A pre-study was conducted before proceeding to the final survey. Since a pretest does not require a statistical sample (Zikmund et al., 2010), it was conducted by interviewing a conveniently selected sample of 10 executives and above level employees. Respondents were initially contacted and asked to fill in the self-administered questionnaire. Subsequently, to get the feedback on the survey instruments, interviews were conducted with them at their respective offices. The average time spent on each interview was around one hour. Based on the feedback, slight modifications such as use of technical terms (Hybrid working Model, social influence) were made to the questionnaire.

The population of the study was the entire executive and above-level employees of the three leading apparel firms in Sri Lanka. Three leading apparel firms in Sri Lanka were selected based on their annual revenue and number of employees. From this study population, 130 executive and above level employees were selected for the sample using stratified sampling technique. List of employees provided by the administration of three companies were considered as the sampling frame of the study. These sampling frames include all the executives and above-level employees deployed by the companies and they were employed in various branches, factories located in several geographical regions in Sri Lanka. Initially, Human Resource Managers of the three apparel firms were contacted and upon received the approval for contacting respondents, 130 employees were selected for the sample using the list of employees provided by the administration of three companies. Sample composition is shown in Table 2.

A self-administered questionnaire was used to collect data from the respondents and on-line survey was circulated among the respondents with the contact details received from the administration. Within first week after delivering the survey, 53 completed questionnaires were returned. Just after the first reminder another 24 questionnaires were received. Remaining 24 questionnaires were received after sending second reminder to the respondents. Altogether 101 responses received and proceeded for the further analysis. Non response bias was tested using ANOVA test by categorizing early and late respondents to three groups and results revealed that there are no significance differences of the responses among the three groups confirming that there is no any concern with non-response bias. Previously validated instruments were used to measure the constructs and the Five point Likert scale was used as scale anchors. Data collected through questionnaire survey feed into the SPSS. Descriptive statistics and frequency were used to analyze the sample composition while correlation was used to test the linearity. Reliability of the constructs was assessed using Cronbach alpha and the multiple regression analysis was conducted to test the hypothesis.

Table 2. Sample composition

Variable	Operationalization	Frequency	Percentage
Gender	Male	60	59.4
	Female	41	40.6
Age	20-25	36	35.6
	26-32	37	36.7
	33-40	27	26.7
	41 and above	01	1.0
Marital Status	Single	65	64.4
	Married	36	35.6
Parental Status	Having kids	25	24.8
	Not having kids	76	75.2
Party that decide where to work from	Self	08	7.9
	Supervisor	22	21.8
	Self & Supervisor	45	44.6
	Company	26	25.7

4. Results and Discussion

Demographic profile of the respondents was first analyzed and results are shown in Table 2. The sample consists of 60 percent of male respondents and 41 percent of female respondents. Majority of the respondents (36.7%) belongs to age category of 26-32 years. Almost all the respondents were above

the age of 40. Two third of the respondents (64.4%) were single and with the effect of this around 75 percent of the respondents were not having kids. Majority of the employees were taking a mutual decision with the supervisor on where to work, as a very small number (7.9%) of employees got the full autonomy to decide on where to work. Consequently, internal consistency of the constructs was tested through Cronbrach's alpha and as illustrated in Table 3 variables met the threshold level of 0.7 confirming the reliability of the variables.

Table 3. Reliability test

Variable	Cronbach's Alpha	Number of items
Intention to adopt hybrid working model (IAHWM)	0.813	3
Performance Expectancy (PE)	0.807	4
Effort Expectancy (EE)	0.793	3
Social Influence (SI)	0.923	4

Correlations among variables were tested using person correlation and results along with mean and standard deviations are shown in Table 4. As of the matrix all the variables are presenting positive relationships with each other variables. The correlations among independent variables do not exceed the 0.6 which confirms that there is no issue with multi-coliniarity.

Table 4. Mean, standard deviation and correlation coefficients

	Mean	Std. Deviation	Correlation		
			IAHWM	PE	EE
IAHWM	4.204	0.569			
PE	4.168	0.559	0.493*		
EE	3.874	0.727	0.452*	0.233*	
SI	3.720	1.004	0.245*	0.126	0.119

Note: * denotes significance at the 0.05 level.

4.1. Hypotheses Testing

Hypotheses testing are based on regression analysis using SPSS version 20. Table 5 summarizes the results of hypothesis testing with R^2, standard coefficient, and statistical significance. The Adjusted R^2 value amounts to 0.386 which indicate that the model explains 38 percent of the variance in the intention to adopt hybrid working model (IAHWM) among respondents with the three independent variables specified the research model. ANOVA test

indicates the regression model is statistically significant (F = 20.343, P= 0.000). Supporting H_1, performance expectancy (PE) had significant effects on IAHWM (β=0.394, p = 0.004). Effort Expectancy (EE) make a significant impact on IAHWM, supporting H_2 (β=.342, p = 0.000). Moreover, Social influence is influencing determining the IAHWM supporting H_3 (β = 0.155, p = 0.053).

Table 5. Regression Results

Model predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.170	0.396		2.957	0.004
PE	0.401	0.084	0.394	4.787	0.000
EE	0.268	0.064	0.342	4.158	0.000
SI	0.088	0.046	0.155	1.924	0.053
Adjusted R^2	0.367				
ANOVA	F = 20.343, P = 0.000				

5. Discussion

The results of the study indicate that the IAHWM is positively influenced by the Performance Expectancy, Effort Expectancy and Social Influence. As long as employee believes that hybrid working model supports the career success, performance productivity and efficiency, while providing interesting high-profile assignments, new networking opportunities and career progression, employees intend to adopt hybrid working model. This finding is consistent with those of prior studies on adoption of flexible working arrangement (Almer, Cohen, Single, 2003; Maruyama, Hopkinson, & James, 2009).

The findings of this study confirm a positive and statistically significant relationship between effort expectancy and IAHWM. As long as employee believe in the effortlessness associated with adopting hybrid work model, his/her intention to adopt hybrid working model rise. Belief on ease of adopting the hybrid working model and ease of learning how to adopt hybrid working model get the employee attracted towards adopting the hybrid working model. It's same as how Davis (1989) explains the ease of use of IT influence the intention to use it. This could be identified as an intrinsic motivation which means the perception of an individual to perform an activity

for the sake of doing as it's interesting and enjoyable even without any external reinforcement (Fred et al., 2021; Moore & Benbasat, 1991). Thus, the current results support the works of (Almer, Cohen, Single, 2003, Pearce, 2009), who found that effort expectancy is a key driver of explaining flexible work arrangements such as work from home, tele-working.

As hypothesized, social influence was found to be a significant predictor of the IAHWM. Subjective norm (social influence) which refers to the degree to which a person believe that his/her important others believe that he/she should adopt the hybrid working model will influence the employee intention to perform the same. Mathieson (1991) and Taylor (1995) explains the same in their studies as any behavioral intention, or an intention to perform a certain action is influenced by the important others to the persons performing this action. The current study's findings support the work of (Almer, Cohen, Single, 2003) that suggests that a social influence is positively influenced on determining adoption of flexible working arrangements.

6. Implications

This study contributes to the theory by enhancing understanding of IAHWM of employees in developing economies as the study identifies key drivers of intention to adopt hybrid working model of the executives and above level employees in apparel sector specifically Sri Lanka. This study is conducted based on UTAUT model proposed by Venkatesh et al. (2003). This model was not previously tested in developing economy setting i.e. Sri Lankan context to predict IAHWM of the employees. Thus, the study contributes to the present literature by providing insights into the factors influencing on IAHWM among executive level employees in apparel sector in Sri Lanka. Further, this study confirms the applicability of the UTAUT model partially in explaining IAHWM in the Sri Lankan context.

This study provides valuable insights for HR managers, particularly for making accurate decisions about designing, implementing and maintaining HWM. Due to hybrid working being a popularized practice in today's working world as well as to a certain future period, employers and the management need to have a better understanding on the concept and its influencers and impact to utilize the HWM for the betterment of the company's success.

This study found that performance expectancy is an important consideration in making the decision to adopt hybrid working model. Thus, HR Managers are required to understand the performance related outcomes associated with hybrid working model and it is necessary to make necessary arrangements to aware the employees on such positive outcomes. The present study also found that effort expectancy has a significant influence on the hybrid working model adoption. In this endeavor, managers are required to gather evidence about the degree to which it is easy to learn to operate, use, and perform tasks using the hybrid working model. Consequently, appropriate strategies need to be pursued to communicate the employees on the less complexity associated with hybrid working model. Moreover this study found that social influence is a significant driver of determining IAHWM. This has important implications for HR managers in designing appropriate strategic intervention for encouraging employees on adopting hybrid working model. The employees who hold positive attitudes on the hybrid working model can be selected and utilize them as role modelers for persuading others to choose hybrid working model.

7. Limitations and Directions for Future Research

There are several limitations identified with reference to this study. Only 101 executive and above employees of the three leading companies in Apparel sector in Sri Lanka were studied. Therefore sample size is considered as limitation with the study which reduces the generalizability. The future studies are required to explore this phenomenon choosing several other organizations. Moreover, this study is limited to apparel sector employees. However, there is a potential for implementing hybrid working model for other sectors as well. Thus, future studies concerning other sectors are warranted. Online survey which was used as the data collection method is again a major limiting factor for the study. As the survey is non-interacted data collection method with less open ended questions the ideal attitudes and preferences are getting limited in responding. Though this study is focused on a behavioral phenomenon, not conducting a rigorous study due to different constrains has limited the study outcomes. Thus, future studies are required to employ interviews and focus group discussion to find rigorous understanding on this phenomenon. The study found that UTAUT model explains only 38 percent of the variance of the IAHWM. This indicates that some variables which have not specified in

the model have an impact on determining the hybrid working model adoption behavior of the employees. Thus, the futures studies are opened up for further development of the research model.

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Employee work focus: Conceptualizing and developing a multidimensional scale

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Abstract

'Focus' has been conceptualized in a multitude of overlapping domains closely associated with constructs such as prioritizing, attention, concentration, cognitive control, etc. yet employee work focus (EWF) remains a fuzzy construct in the literature. This research aims at theorizing this construct and developing a scale to measure EWF. A qualitative inquiry was done using grounded theory and content analysis to develop an initial framework which was used to develop an initial pool of 40 items. Thirty-Two items were retained based on the values of the content validity ratio (CVR>0.51). Those were subjected to two rounds of exploratory factor analysis using a big sample pilot study followed by the main study with 434 professionals in total from service and manufacturing industries in Sri Lanka which resulted in a best-fit model of three distinct factors of EWF namely alternative search, right focus (ability to prioritize) and sustained focus (attention). Confirmatory factor analysis along with a series of scale development tests including convergent and discriminant validity tests led to the final 3-dimensional 14-item scale to measure EWF with factor loadings over 0.5 and Cronbach α of 0.853. The authors presented a theoretical framework of EWF based on the aforesaid factor structure along with insights from the qualitative inquiry conducted using 29 respondents and reviewing previous empirical findings in over 100 publications. Finally, the article highlighted the managerial and theoretical implications of the findings and related future research avenues.

Keywords: *Alternative Search; Attention; Employee Work Focus; Focus; Prioritization; Scale Development*

1. Introduction

There was no better evidence of the importance of 'Focus' in one's work life than three of the most successful business tycoons namely Bill Gates, Steve Jobs, and Warren Buffott famously quoted for unequivocally attributing their success to being able to 'focus' when they were asked to name the single

most important characteristic that earned them their success (McKeown, 2014; Zitelmann, 2019).

Although many scholars and practitioners have diversely conceptualized the domain of focus, no comprehensive attempt at theorizing and measuring the construct of Employee Work Focus (EWF) could be found in the past literature other than diversely related and peripheral constructs such as regulatory work focus (Akhtar & Lee, 2014; Higging, 1997; Fellner at al.,2007), temporal work focus (Shipp et al., 2009), attention (Goleman, 2013, Mark, 2018 & 2017), state of flow (Csikszentmihalyi, 1990), clarity (Sawyer, 1992), cognitive control (Goleman, 2013), cognitive engagement (Webster & Hackly, 1997), the concept of essentialism (McKeown, 2014), etc. Focus has also been identified as an important construct in decision sciences. (Wang & Ruhe, 200). Scholars such as Goleman (2013) advocate work focus as the sustainability of attention or its efficiency aspect while others like McKeown (2014), Wriston (2007), etc. remain as advocates of its effectiveness aspect; the right focus or the ability to prioritize. This study attempted to address this theoretical and empirical gap with the primary objective of developing a comprehensive, statistically validated, and reliable scale to measure EWF.

A study done by Bialowolski et al. (2020) revealed distractions at work cost an average manufacturing firm in the USA almost 15 times more than health-related absenteeism, recording $10,086 and $6,703 as the annual distraction-induced productivity loss for an average office and manufacturing employee respectively. Works of many scholars and practitioners such as Collins (2002), Coyle (2019), Wriston (2007), etc. have identified work focus as an ingredient of creating great companies and sustaining high-performance cultures in organizations of all forms. Efforts on reducing distractions would certainly improve work focus which remains a leading cause of improving productivity (Mark et al., 2017). Therefore, it is imperative for organizations to assess how focused their employees are at work to take subsequent actions that create greater productivity and performance. Findings of the qualitative inquiry of the present study itself revealed the lack of focus of individuals at work as a primary reason for declining individual and subsequently, organizational performance, particularly in the public sector of Sri Lanka that

contributed to the socioeconomic crisis in Sri Lanka as observed by Sharma et al. (2022).

The works of Gunathilake and Jayasooriya (2022) were mainly used as a frame of reference for carrying out the qualitative aspect of this study while the quantitative study was based on an initial conceptualization formed through the former and a rigorous review of over 100 related publications. Further, it was also intended to define the concept and develop a theoretical model of EWF as secondary objectives.

2. Literature Review

Work focus has widely been recognized as an ingredient of success at organizational and individual levels (Goleman, 2013). It was also considered an important competence in many competency frameworks for different job roles (Gunathilake & Jayasooriya, 2021). Wriston (2007) identified focus as one out of four critical components necessary to create and sustain a high-performance culture. It was also a dimension in the 5-item high-performance culture model of Gunathilake and Jayasooriya (2022) where they uncovered four sub-themes or factors of focus namely work engagement, work alignment, work clarity, and awareness. Notably, in their study focus has received the highest ranking as an indicator or a constituent of a high-performance culture.

Wriston defined work focus as "the ability to limit our goals to those few that allow us to concentrate our limited resources to not only establish clear priorities but also to accomplish something of significance" (2007, pp.13). Maxwell (1999) identified prioritization and concentration as the keys to having focus which in turn is demanded from a truly effective leader. In light of the explanation of effectiveness as "doing the right things" and efficiency as "doing things right" (Drucker, 2006, cited in Sharma et al., 2016), authors were convinced the two-dimensionality of EWF as the 'clarity of priorities' and 'ability to sustain attention'. This argument was supported by the works of several scholars in the past literature (Goleman, 2013; Gunathilake & Jayasooriya, 2022; McKeown, 2014; Wriston, 2007). Maxwell (1999) articulated the two-dimensionality of EWF as "a leader who knows his priorities but lacks concentration knows what to do but never gets it done. If

he has concentration but not priorities, he has excellence without progress. But when he harnesses both, he has the potential to achieve great things" (pp. 53-54). McKeown (2014) highlighted the distinction of Focus as a noun characterized by being static and as a verb being dynamic in the face of changing demands. However, in the author's opinion, his model of four quadrants of focus both as a noun and a verb represent focus as right focus or prioritization and changes in sustained focus or concentration respectively. Therefore, this line of thinking reinforces the conception of EWF concluded in this study.

Alternatively, the flip side of focus, i.e., the distractions or human tendency for maximizing and one's level of awareness of such inhibitors, and the ability to eliminate, minimize or delay them could also be a constituent of EWF which affect the level of focus of employees (Goleman, 2013; McKeown, 2014). Collins (2002) so eloquently articulated this point as "good is the enemy of great" as the ability to settle with one great thing could mean the ability to forgo a few good things.

The focus has mainly been conceptualized as the ability to maintain sustained attention or concentration. Cognitive control, i.e., the ability to pay attention or a sustained focus on a given task for a considerable period is another area related to focus and attention research which associates itself with several constructs such as delay of gratification, allocation of attention, working memory, resistance to distractions, impulse inhibition, goal focus, etc. (Goleman, 2013). As stated by Goleman (2013), a longitudinal study done in New Zealand with 1,037 children aged 4-8 years showed a clear correlation between their cognitive controlling abilities and financial success when they were 32 years of age highlighting the importance of concentration in performance and success.

A plethora of research work reported on the cognitive and biological processes involved in intense focus with the meaning of extreme attention or intense concentration. According to Webster & Hackley (1997), attention focus is one of the dimensions of the three-dimensional construct of cognitive engagement which according to Balakrishnan & Dwivedi (2021) is an extension of the theory of absorption. Schaufeli and Bakker also identified cognitive absorption as a dimension of engagement (2010) which was used in this study

in operationalizing EWF. One of the best definitions of absorption could be found in the works of Tellegen and Atkinson (1974) who interpreted absorption as a disposition for having total attention that commands full engagement of one's perceptual, enactive, imaginative, and ideational capacity, which they termed representative resources, that leads to a heightened sense of the reality of the attentional object, resistance to distractions and changes in the sense of reality.

The theory of flow pioneered by Csikszentmihalyi (1990) is another most explored domain of attention research where Csikszentmihalyi introduced flow as a mental state when a person faces a task with a clear set of goals that requires appropriate responses and receives immediate feedback where attention becomes ordered and fully invested leading to a loss of self-consciousness, and a distorted sense of time (1990). According to Hernandez & Voser (2019), the state of flow is a mindset that pushes people to their limits, and Goleman (2013) defined it as a state of maximal cognitive efficiency or maximum neural harmony when one aligns excellence or skill, engagement, and ethics in what they passionate of doing. Hernandez and Voser (2019) outlined clear objectives, unequivocal feedback, concentration on the task, sense of control, loss of self-consciousness or awareness, distortion of time, autotelic experience, action-awareness merging, and challenge-skills balance as nine dimensions of their flow state measurement scale. Balakrishnan & Dwivedi (2021) observed both cognitive engagement and the theory of flow bring an experiential understanding of cognitive absorption theory.

Higging's Regulatory Focus theory (RFT) (1998) and subsequent re-search work have extensively studied self-regulation which could be regarded as the may-be-the-most researched aspect of focus. It distinguishes two types of goal selection and goal pursuit strategies namely promotion and prevention focus where the former advocates making achievement and the latter avoiding failure as primary drivers of selecting and pursuing goals (Fellner et al., 2007). Accordingly, RFT as a motivational theory identifies this dichotomy of focus as dual sources of motivation while recognizing the same duality in regulating one's decisions and behaviors as a self-regulation theory. Therefore, it can be argued the self-regulatory aspect (goal selection) of RFT advocates the

effectiveness aspect of EWF (right focus) while the motivational aspect (goal pursuit) of RFT addresses the efficiency aspect of EWF (sustained focus).

Temporal Focus Theory (TFT) is another related conception of focus that distinguishes the attention people devote to thinking about the past, present, and future (Shipp et al., 2009). There are several standard scales available to assess RFT & TFT. Considering the past literature in the domain of interest, the authors were convinced to employ a modified version of the conception of EWF by the works of Gunathilake and Jayasooriya (2022) as the initial framework for conducting the qualitative inquiry.

3. Methodology

The purpose of this research is to conceptualize EWF and thereby develop a measurement instrument of the aforesaid construct addressing the scarcity and lesser specificity of this domain. This cross-sectional research was conducted based on pragmatic research philosophy and mixed method using both qualitative and quantitative research methods (Saunders et al., 2014).

3.1. Scale Development

3.1.1. Item Generation

As suggested by Boateng et al. (2018) both deductive and inductive approaches were employed to define the construct and generate items due to the unavailability of an established theory in the domain of concern. In light of the past literature in the domain of interest, authors derived a framework of the construct mainly based on the works of Gunathilake & Jayasooriya (2022) which was employed as the initial base in qualitative data collection through two focus group discussions (N=12 each) and five in-depth interviews. A qualitative inquiry was conducted using grounded theory (Croseley & Rautenbach, 2021) to develop a model and clearly define the principal domain of concern. The content analysis technique was used with deductive coding in analyzing qualitative data derived for the research questions namely, “what defines EWF” and “what indicates the extent to which an employee is focused at work”. As suggested by Sharma et al (2016), semi-structured interview protocol was used based on the gaps identified during initial rounds of focus group discussions compared to the model derived from Gunathilake & Jayasooriya

(2022). This led to a definition of EWF as given under the results section and an initial pool of items and a conceptual framework illustrated in Table 02.

Item generation was based on the aforesaid framework illustrated in Table 02. which comprises items under two dimensions namely 'right focus' with the meaning of the ability to accurately and effectively prioritize one's work and 'sustained focus', i.e., ability to maintain continued attention conceptualizing the efficiency aspect of focus. Items coded with VI, DE and AB were extracted from the Utrecht Work Engagement Scale (UWES) of Schaufeli & Bakker (2010) corresponding to its 3-dimensions namely vigor, dedication, and adsorption capturing the sub-theme of work engagement under the main theme sustained focus (SF). Items corresponding maximization sub-theme were derived from several maximization and maximizing tendency scales of Dalal et al. (2015), Diab & Gillespie (2008), Germeijs & De Boeck (2002), and Schwartz et al. (2002). Item coded HS2 was adapted from McKeown (2014) based on the insights from the qualitative inquiry.

Five items each to measure both goal and procedural clarity were extracted from the role clarity scale of Sawyer (1992). Accordingly, role clarity was conceptualized as a two-dimensional construct comprising goal and procedural clarity with the meaning of the extent to which an employee is clear on the goals that he/she is expected to achieve and the means to achieve them. Some items under this sub-theme were modified based on the works of Schaufeli & Bakker (2010). Four items under the code OA to capture organizational alignment were extracted from the strategic alignment scale of Biggs et al (2014). PA1 and PA2 items under personal alignment were captured from two items adapted from the Gallup Q^{12} questionnaire (Schaufeli & Bakker, 2010) and PA3 was devised from the insights gained from the qualitative inquiry.

According to Boateng et al. (2018) a scale is a manifestation of a latent construct employing multiple items which are used to measure behavior, attitude, or perception that can not be captured in a single variable or item. The process followed in the development and validation of the scale in this study as outlined in Table 01, was influenced by the well-accepted guidelines of

Boateng et al. (2018), DeVellis (2012), Hinkin (1995), Sharma et al. (2016), and Tay & Jebb (2016).

The content validity of the instrument was established by subjecting the initial 40-item pool to an expert validation using 14 experts from the industry and academia. According to the widely accepted method suggested by Lawshe (1975), each item was rated whether 'essential', 'useful but not essential', or 'not necessary' considering their representativeness, comprehensiveness, and clarity towards the primary domain of concern. Subsequently, the content validity ratio (CVR) was calculated using the following equation for each item based on expert validation scores using Lawshe's method (1975, pp.567) where n_e is the number of cases an item was adjudged as essential and N is the total number of experts.

$$CVR = \frac{n_e - \left(\frac{N}{2}\right)}{\left(\frac{N}{2}\right)} \quad \text{.....(1)}$$

Items achieving a minimum of 0.51 CVR value were considered to have adequate content validity (Lawshe, 1975, pp.568). Accordingly, 32 items were qualified for further analysis as highlighted in Table 02. Cognitive interviews were conducted as suggested by Boateng et al. (2018) as a means of establishing face validity by administering the draft survey questionnaire with 32 items among 5 possible end-users and questioning their understanding that led them to their answers. This caused several changes in the wordings of some items such as changing the item "Considering all your work tasks, how certain are you that you know the best ways to do these tasks" adopted from Sawyer (1992, p.135) into "I know the best ways to do all my work tasks". The initial item pool with 40 statements was evaluated on a 7-point bi-polar Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Item generation guidelines of DeVellis (2012) were followed to accommodate social desirability concerns and making the statements as simple, straightforward, and unambiguous as possible. Items coded HS1 and AS1 were reworded based on the comments received in cognitive interviews. As suggested by DeVellis (2012) certain items such as GC and PC coded ones were also reworded to bring uniformity to the scale.

Table 1. Scale Development and Validation Process

Stages	Process Steps
Item Generation (40)	Literature Review Content Analysis of in-depth interviews & focus group discussions (N=29) Expert Opinion
Scale Development (Pre-testing, Item Reduction, Exploration of Factor structure)	Pre-testing items by cognitive interviews (N=5) Item Reduction 1. Expert Validation (N=14, 8 items with CVR<0.51 were rejected) 2. Pilot Study (N=202), Exploratory Factor Analysis EFA-1 (3-factor structure, 10 items were rejected) 3. Main study (N=232) EFA-2 (3-factor structure, 8 items rejected)
Scale Evaluation (Confirmation of Factor Structure)	Confirmatory Factor Analysis (CFA) (N=232, 14-item, 3-factor structure confirmed)

3.1.2. Item Reduction & Exploration

Both convenience and snowball sampling techniques were used to achieve two separate samples of over 200 subjects as recommended by Boateng et al. (2018). An online questionnaire was circulated via email and multiple platforms of social media such as LinkedIn, and WhatsApp in addition to a physical questionnaire among professionals in Sri Lankan manufacturing and service industries. The conceptual framework developed through the qualitative inquiry as illustrated in Table 02 was used as the measurement model for the scale. In the initial pilot study, 260 questionnaires were distributed and received 202 complete responses which were analyzed using SPSS 23.0 software. Kaiser-Meyer-Olkin (KMO) measure was used to establish sample adequacy and data suitability for factor analysis (Kaiser, 1960, as cited in Sharma, et al., 2016). Exploratory factor analysis (EFA) and reliability analysis was done for the initial 32 items to establish the dimensionality (and respective weights) and internal consistency of the scale using principal component analysis and varimax with Kaiser normalization as extraction and rotation methods and Cronbach's alpha respectively. Factor and item retention were determined based on simultaneous examination of factor loadings (>0.5), eigenvalues (>1), communalities (>0.4), and scree plots as suggested by past researchers. (Boateng et al., 2018; DeVellis, 2012; Sharma et al., 2016). According to Hair et al. (2006) percentage of explained variance and the

interpretability of factor structure were also used in determining the number of factors explaining the construct (cited in Pradhan & Jena, 2017, pp.8). A new pool of 22 items (under 3 factors) retained by the first round of EFA was administered in the main study among 300 respondents. A sample of 232 respondents was selected for the second round of EFA which retained 14 items based on the same criteria highlighted above.

3.1.3. Scale Evaluation

The 14-item scale derived from the EFA was further subjected to a confirmatory factor analysis (CFA) which is a structural equation modeling (SEM) technique used to analyze a structural model. (Pradhan & Jena, 2017) Analysis of movement structures (AMOS 23.0) software was employed in this multivariate methodology. The maximum likelihood estimation method was applied considering the covariance matrix of the items. As suggested by Boateng et al. (2018) absolute goodness-of-fit of the model was assessed using absolute and relative indices namely $\chi 2$ goodness-of-fit, root mean square error of approximation (RMSEA), Goodness-of-fit indices (GFI), and adjusted goodness-of-fit index (AGFI).

According to Strub et al. (2004), construct validity is an assessment of how well a set of items actually measure a particular latent unobservable construct, which could be established through two forms of validity, i.e., convergent validity and discriminant validity. Han & Perry (2020) defined convergent validity as the degree to which all indicators of a construct share a higher proportion of variance in common and when the variance captured by the construct is higher than the variance by the measurement error (Han & Perry, 2020, pp.236) or cross-loadings (Almén et al., 2018), it is considered to have higher convergent validity. The average variance extracted (AVE) was used to confirm convergent validity (AVE>0.5) (Latif, 2021). Almén et al. (2018) suggest AVE to be lower than composite reliability (CR) as an alternative criterion.

According to Boateng et al. (2018) discriminant or divergent validity is the degree of distinction between the construct understudy with other constructs that should not be highly correlated with each other. Therefore it

indicates how well a given construct differs from other constructs and statistically establishes the individuality of the given construct. As suggested by Latif (2021) Heterotrait-Monotrait Ratio (HTMT), a multitrait-multimethod matrix was used to assess the discriminant validity of the constructs with <0.90 as the benchmarking criteria.

Construct Reliability evaluates the degree to which a variable or a factor comprising a set of variables is consistent in measuring what it originally intended, which is usually assessed using composite reliability (CR) and Cronbach's alpha (Straub et al., 2004). According to DeVellis (2012), 0.7 could be considered the benchmark for modest reliability for both CR and Cronbach's alpha. Based on the factor structure of the confirmed scale and the findings of the qualitative study a model of EWF was proposed at the end.

Table 2. Results of the Content Analysis & the initial pool of items with CVR values based on expert opinion

Main Construct	Sub-Concept	Variable	Indicator/ Code	Content Analysis		Item Code	Initial Item Pool (40) Questions in the initial questionnaire	CVR	Source
				Frequency	%				
Employee Work Focus	Right Focus (ability to prioritize)	Work Alignment	Organizational Alignment (OA)	22	81%	OA1	I have a clear understanding of my organization's priorities.	.714	Biggs at al. (2014)
						OA2	I'm aware of how my day-to-day work aligns with the organization's priorities.	.857	
						OA3	I have a clear understanding of how my work group's operational priorities help the organization achieve its objectives.	.857	
						OA4	It is important to me to help the organization achieve its Objectives.	.714	
			Personal Alignment (PA)	16	60%	PA1	At work, I have the opportunity to do what I do best every day.	.571	Schaufeli & Bakker (2010)
						PA2	The mission/purpose of my company makes me feel my job is important.	.571	
						PA3	My job helps me achieve my priorities in life.	.714	Qualitative data
		Role Clarity	Goal Clarity (GC)	24	89%	GC1	I'm aware of my duties and responsibilities.	1.000	Sawyer (1992)
						GC2	I'm clear on the goals and objectives of my job.	1.000	
						GC3	I understand how my work relates to the overall objectives of my work unit.	.857	

						GC4	I'm clear on the expected results of my work.	.857	
						GC5	I'm aware of what aspects of my work will lead to positive evaluations.	.571	
			Procedural Clarity (PC)	15	56%	PC1	I know how to divide my time among the tasks required	.714	
						PC2	I know how to schedule my workday.	.571	
						PC3	I know how to determine the appropriate procedures for each work task.	.714	
						PC4	The procedures I use to do my job are correct and proper. **	.286	
						PC5	I know the best ways to do all my work tasks. **	.429	
	Sustained Focus (attention)	Work Engagement	Absorption (AB)	25	93%	AB1	Time flies when I'm working.	.571	Schaufeli & Bakker (2010)
						AB2	When I am working, I forget everything else around me.	.286	
						AB3	I feel happy when I'm working intensely.	.429	
						AB4	I'm immersed in my work.	.571	
						AB5	I get carried away when I'm working.	.286	
						AB6	It is difficult to detach myself from my job.	.714	
			Vigor (VI)	18	67%	VI1	At my work, I feel that I am bursting with energy	.571	
						VI2	At my job, I feel strong and vigorous.	.571	
						VI3	When I get up in the morning, I feel like going to work. **	.000	
						VI4	I can continue working for very long periods at a time.	.857	
						VI5	At my job, I am very resilient mentally.	.714	
						VI6	At my work, I always persevere, even when things do not go well.	.571	
			Dedication (DE)	17	63%	DE1	I find the work that I do full of meaning and purpose.	.571	
						DE2	I am enthusiastic about my job. **	.429	
						DE3	My job inspires me. **	.286	
						DE4	I am proud of the work that I do. **	.143	
						DE5	To me, my job is challenging. **	-.286	

		Maximizing	Decision Difficulty (DD)	20	74%	DD1	I find it easy to make decisions.	.857	Germeijs & De Boeck (2003)
						DD2	Once I have taken a decision, I stick to that decision. **	.714	
			Alternative Search (AS)	18	67%	AS1	I often fantasize about my role, goals, and ways of working that are quite different from the actual. (R)	1,00	Schwartz et al. (2002) Dalal et al. (2015)
						AS2	I'm uncomfortable making decisions before I know all my options. (R)	1.00	
			High Standards (HS)	17	63%	HS1	I usually don't settle with most circumstances at work. (R)	.857	Diab & Gillespie (2008)
						HS2	I find it difficult to say No to people and different demands at work. (R)	.714	McKeown (2014)
		Work Awareness	Prevention Awareness	4	15%		* Not considered for the initial item pool (as a component of the measurement model.)		
			Promotion Awareness	6	22%		* Not considered for the initial item pool (as a component of the measurement model.)		

Note: (R) denotes a reverse coded item, Items marked as ** were rejected due to poor content validity (CVR<0.51)
Source: Developed by Researchers based on the works of Gunathilake & Jayasooriya (2022) and Survey Data, 2022

4. Results

As the results of content analysis illustrated in Table 2, qualitative data analysis confirmed the two-dimensionality of the EWF construct namely right focus and sustained focus as identified by Gunathilake & Jayasooriya (2022). Following is an account of evidence from the qualitative data in support of the above claim.

> Respondent 02 in the focus group discussion 01: *A man with the absence of attention and another with the presence of the same on a wrong goal/s could both be considered to have poor focus.*

> Respondent 07 in the focus group discussion 02: *A focused person knows what he is expected to perform at work, he directs his efforts, attention, and energy with work that aligns with what he is personally fond of and what his department, team, and organization demanded.*

'Concentration' and 'attention' were identified as the codes most frequently associated with EWF which were categorized under the work engagement subtheme under the sustained focus theme. According to the findings of content analysis, 'absorption'' was found to have the highest correlation with its parent construct, i.e., work engagement and with the primary construct, EWF. Further 'awareness' sub-theme with promotion and prevention awareness in the aforesaid framework was not represented in the qualitative data and accordingly, it was dropped from further analysis. Alternatively, a new subtheme under the main theme of sustained focus (SF) was identified and coded as 'maximization' which resembled the maximization or maximizing tendency constructs (Dalal et al., 2015). Codes identified under this sub-theme closely correspond with the three-factor model of maximization (Schwartz et al., 2002) namely alternative search, decision difficulty, and high standards. A few pieces of evidence from the qualitative data are given below as a justification for the deductive coding of the aforesaid sub-theme and the inclusion of the maximization theme in the initial framework.

> Respondent 03 (in-depth interview): *A focused person could be identified as having the ability to make the right decisions with no hassle since he is*

clear on what he is expected to do, what he is good at doing, and what he is fond of doing. He […] makes decisions based on clear awareness of suitable options from an accurate search of alternatives [….] adapt a frame of reference or a set of standards guided by personal and organizational demands.

Respondent 04 in the focus group discussion 01: *You can't be everything to everyone. We all operate with our limitations of […] leaving us no option but to narrow ourselves down to only what is important. For that, you must first select from your options so you should first know what your options are and then decide what's your priorities to focus on, where difficulty or easiness in decision-making and ability to let go are some overarching attributes of focus at work.*

Table 3. Summary of Sample Characteristics

Demographic Characteristics of the Sample		Pilot Study (N=202)	Main Study (N=232)
Gender	Male	65.3%	61.2%
	Female	34.7%	38.8%
Marital Status	Married	68.9%	68.1%
	Unmarried	31.1%	31.9%
Age	20-30 Years	29.8%	28.4%
	30-40 Years	34.2%	43.5%
	40-50 Years	25.9%	20.7%
	Above 50 Years	10.1%	7.3%
Sector	Private	71.7%	74.5%
	Public	28.3%	25.5%
Industry	Construction & Real-estate	31.0%	36.6%
	Banking & Finance	14.9%	11.6%
	IT & Telecommunication	20.7%	16.7%
	Manufacturing	33.4%	35.1%
Highest Education Qualification	Certificate or Lesser	11.9%	11.6%
	Diploma Level	32.6%	25.4%
	Bachelor's Degree Level	37.7%	28.9%
	Master's degree or higher	17.8%	34.1%

Under expert validation, content validity ratios (CVR) were calculated as explained in the methodology section, and 8 items with CVR values less than 0.51 were rejected as per the recommendations of Lawshe (1975, pp.508). Summary of sample statistics with demographic data are given in Table 3 and accordingly both samples of the pilot and the main study present similar demographics to a greater extent. It comprises approximately 60% males and

68% married individuals with an educated sample of respondents of over 50% graduates. One-third of the same represented the manufacturing industry and the balance two-thirds comprises construction, banking, and IT & telecommunication industries.

In the first EFA with 32 items, DE1, VI2, OA1, DD1, and PA3 items were rejected due to being loaded into poorly interpretable or unrelated factors, or less than 3-item factors, and VI5, GC1, VI1, and HS2 were rejected due to lower factor loadings (<0.5). PC2 was rejected due to a lower communality value (<0.4) leaving only 22 items fit for further analysis. In the second round of EFA, items coded PC3, VI6, and AB2, were rejected due to lower factor loadings (<0.5) while PA1, PA2, AB5, and AB6 for having loaded under non-interpretable factors which violated the content validity.

Sample adequacy and data suitability for factor analysis were confirmed with a Kaiser-Meyer-Olkin (KMO) measure recorded 0.889 (p=0.00) as recommended by Kaiser (1960, as cited in Sharma et al., 2016). Second EFA resulted in four factors, and one was found non-interpretable with a completely unrelated combination of items leaving a 3-factor, 14-item model. Table 04 outlines the rotated factor loadings of the 14 items retained in the final scale. According to the cut-off criteria recommended by Boateng et al (2018), DeVellis (2012), and Sharma et al. (2016) all items were found to be satisfactory (>0.5). More specifically items other than OA4, AB1, and AB3 recorded excellent levels of loadings (>0.7). All items retained in the final scale recorded eigenvalues greater than 1, communalities greater than 0.4. This model accounted for 55.15% of variance which is satisfactory according to Hinkin (1995).

According to the cut-off criteria suggested by Almén et al. (2018) and Han & Perry (2020), the findings outlined in table 5 confirmed adequate convergent validity. Although the average variance extracted (AVE) value for SF and AS were recorded slightly lower than the cut-off criteria of 0.5 it could be accepted as the Composite reliability (CR) values were recorded higher than the benchmark (>0.7) for all factors (DeVellis, 2012; Latif, 2021).

Table 4. Summary Statistics of Exploratory Factor Analysis of Final Scale Items

Item Code	Scale Items	Factor Loadings (N = 232, KMO=0.889)		
		1	2	3
	Right Focus (RF – Prioritization)			
GC3	I understand how my work relates to the overall objectives of my work unit.	0.861		
OA3	I have a clear understanding of how my work group's operational priorities help the organization achieve its objectives.	0.818		
GC4	I'm clear on the expected results of my work.	0.815		
OA2	I'm aware of how my day-to-day work aligns with the organization's priorities/goals.	0.814		
GC5	I'm aware of what aspects of my work will lead to positive evaluations.	0.775		
PC1	I know how to divide my time among the tasks required of my job.	0.719		
OA4	It is important to me to help the organization achieve its Objectives.	0.650		
	Sustained Focus (SF – Concentration)			
AB4	I'm immersed in my work.		0.750	
VI4	I can continue working for very long periods at a time.		0.719	
AB1	Time flies when I'm working.		0.654	
AB3	I feel happy when I'm working intensely.		0.606	
	Alternative Search (AS)			
HS1	I usually don't settle with most circumstances at work.			0.759
AS2	I'm uncomfortable making decisions before I know all my options.			0.708
AS1	I often fantasize about my role, goals, and ways of working that are quite different from the actual.			0.706
	Variance explained by dimensions (%)	35.47	11.37	8.31
	Total variance explained (%)		55.15	
	Bartlett's Test of Sphericity		2,584.14	
	df		231	
	Significance		0.00	

Note: Results of Principal Component Analysis with Varimax Rotation, (R) denotes a reverse coded item, KMO (Kaiser-Mayer-Olkin)

Maximum shared variance (MSV) and average shared variance (ASV) were also found less than the AVE except for one instance with AS in terms of its MSV value. According to Latif (2021), discriminant validity was found

satisfactory with Heterotrait-Monotrait Ratio (HTMT) for all three factors recorded less than 0.9. It could also be confirmed as a satisfactory level of reliability due to Cronbach's alpha recorded at 0.853.

Table 5. Convergent and Discriminant Validity measures among the Dimensions of EWF

Dimensions	CR	AVE	MSV	ASV	HTML		
					RF	SF	AS
RF (Prioritization)	0.915	0.607	0.183	0.153	0.779		
SF (Concentration)	0.774	0.464	0.307	0.211		0.692	
AS (Alternative Search)	0.704	0.411	0.623	0.380			0.648

Note: CR (composite reliability), AVE (average variance extracted), MSV (maximum shared variance), ASV (average shared variance), RF (right focus), SF (sustained focus), AS (alternative search)

The findings of the confirmatory factor analysis confirmed that the full model achieved a satisfactory model fit at $\chi 2$= 92.510, df=65, N=232, P=0.14. As per the recommendations of Boateng et al (2018), all relevant indices are outlined in Table 6. Such as $\chi 2$ goodness-of-fit, root mean square error of approximation (RMSEA), Goodness-of-fit indices (GFI), adjusted goodness-of-fit index (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Tucker Lewis Index (TLI), etc. were found satisfactory.

Table 6. Model Fit Indices, Cut-off criteria, and final model values

	Index	Recommended cut-off value	Value in the model	Decision
Absolute Fit Indices	$\chi 2$ /df	<3.00	1.423	Satisfied
	GFI	>0.90	0.948	Satisfied
	AGFI	>0.90	0.917	Satisfied
	AIC	Lower the Better	172.51	Satisfied
	Hoelter's CN (0.5)	>200	236	Satisfied
Non-centrality-based Indices	CFI	>0.95	0.982	Satisfied
	RMSEA(L090, HI90)	>0.08	0.043	Satisfied
	PCLOSE	>0.50	0.715	Satisfied
Relative Fit Indices	IFI	>0.90	0.982	Satisfied
	TLI	>0.95	0.974	Satisfied
	NFI	>0.90	0.942	Satisfied

The proposed model of EWF as illustrated in Figure 01 with relatively higher unstandardized path coefficient values and satisfactory levels of residual error values confirm a good fit for the final model. Therefore, it could be concluded that employee work focus (EWF) is a three-dimensional construct, with right focus (RF-ability to prioritize), sustained focus (SF-

ability to sustain attention), and alternative search (AS) being those dimensions.

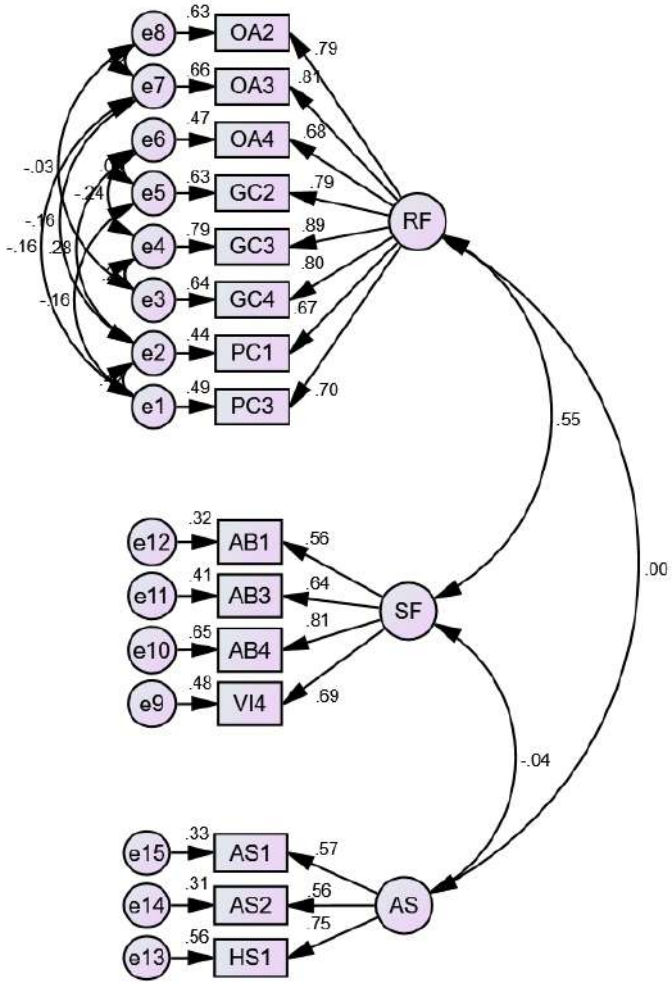

Figure 1. The final model with unstandardized path coefficients

4. Discussion

Based on the content analysis of qualitative data, the authors constructed the following definition of Employee Work Focus.

A cognitive capability of an employee to direct and sustain their energies (resources) only on accurately identified priorities at work in a way that meets both individual and organizational objectives.

Accordingly, EWF could primarily be identified as a decision-making process that is influenced by employee's awareness of clarity, and alignment with organizational goals, the meaningfulness of work to the individual, and the extent to which they incentivize the individual and his/her cognitive controlling capabilities such as the general tendency for maximizing, decision difficulties, etc. Based on qualitative data and the three-dimensionality of EWF derived through a statistical analysis of quantitative data, the authors propose a conceptual model of EWF as illustrated in Figure 2.

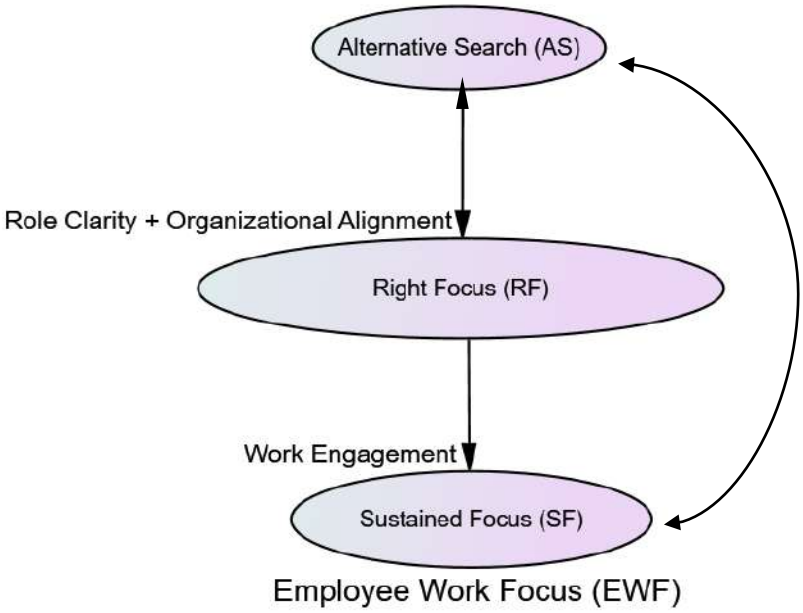

Figure 2: Final Theoretical Framework of EWF developed from primary data and existing literature in the domain of concern

Authors have identified some resemblance of the above model with established models of nomological constructs such as decision-making. Wang & Ruhe (2007)'s cognitive process model of decision-making provides a significant theoretical explanation of the proposed model and the association among the dimensions of EWF. It also provides the following justifications as characteristics of the EWF construct.

1. A decision-making competency as revealed in qualitative inquiry.
2. Its cognitive controlling aspect characterized by being able to stay on a purpose, a goal/s without being distracted as McKeown (2014) eloquently quoted as getting tricked by the trivial.

3. The aspect of prioritizing as a dimension of EWF with the idea of being able to distinguish between what to focus on and what not to.

Accordingly, an employee engages in a cognitive search of alternatives based on their clarity and awareness of priorities (importance against the urgency or the temporal aspects) and selects the best alternative/s to exert energy (resources) through an evaluation criterion based on priorities and perceptions. It is observed some people tend to continue with their alternative search behaviors incessantly (Diab & Gillespie, 2008) without being settled on one or few priorities and sustaining their efforts on such pursuits. This would be caused due to the perceived incentives of engaging in such alternative search behaviors outweighing the gains of rejecting them and their consequences which could be eliminated by having higher clarity, alignment with priorities, and making them appealing to the employees. Aligning employees with work that they are good at (PA1) and work they find deeper meaning and purpose associated with (PA2) and what the organization stands for (OA4) would help achieve this end of sustaining attention within EWF. Therefore, contrary to the popular conception of EWF or the focus in general, authors argue the right focus would be the most essential element of EWF as McKeown (2014) emphasizes in his conceptualization of focus construct as essentialism.

5. Conclusions

This study attempted to follow a range of widely accepted procedures in developing a psychometrically valid and reliable scale by employing both qualitative and quantitative methods. In a context where the primary construct was not clearly established a qualitative inquiry was initially conducted using grounded theory with reference to the available literature to clearly define the construct as highlighted in the results section. Data derived from a big sample pilot study and a subsequent main study with 434 respondents in total were analyzed using two rounds of EFA and the resulting model was further confirmed for its validity and reliability using CFA. The findings give rise to a 3-dimensional scale with 14 items thereby achieving the primary objective of this study. Further, a theoretical framework of EWF was developed extrapolating the findings of this study on existing literature as illustrated in Figure 2.

This along with a working definition of EWF leads to the achievement of both secondary objectives of this study.

As highlighted by Pradhan & Jena (2017) construct validity of any static scale of this nature could potentially be accrued over time with the changes in the social fabric and due to the influx of new studies warranting further fine-tuning of this scale. Testing the scale in a randomly selected sample and a different context would help increase its generalizability (Saunders, 2014) which could be proposed as a future research avenue. Further research could be warranted in establishing the nomological validity of the scale by testing some nomological networks of EWF including its potential relationship with outcomes such as individual work performance, organizational performance, accountability, subjective wellbeing, or high-performance culture as already identified by Gunathilake & Jayasooriya (2022) and Wriston (2007), or its antecedents such as the effectiveness of organizational systems or its constituent constructs such as work engagement, role clarity, maximization or maximizing tendency, etc. An empirical examination of EWF could have important implications for organizations and individual employees as a predictor of career and organizational success (Goleman, 2013; McKeown, 2014). Authors sincerely believe the attempt of theorizing this important construct would entice researchers to shed more light on the EWF construct in advancing the understanding of the domain.

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Contents

Journal of Management Matters Volume 9 Number 1 September 2022