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EDITORIAL NOTE

The Sri Lanka Journal of Social Sciences and Humanities (SLJSSH) is proud to announce the publication of its inaugural issue. One of the key objectives of SLJSSH is to promote publication from different streams of research that help enrich further the discourse on Social Sciences and Humanities. The journal encourages authors to publish up-to-date, high-quality and original research papers alongside relevant and insightful reviews. As such, the journal aspires to be vibrant, engaging and accessible, and at the same time integrative and challenging.

This inaugural issue owes much to many people. Especially, acknowledgement is due first to the Accelerating Higher Education Expansion and Development (AHEAD) Project for allocating funds under the activity five of the AHEAD/RA2/ELTA-ELSE/SUSL/SSL to develop collaborative research culture among the students and staff in the Faculty of Social Sciences and Languages, Sabaragamuwa University of Sri Lanka. Thanks are also due to the Editorial Board that drew up the parameters of the Journal enabling to publish scholarly work as well as to the Coordinating Editor for popularizing the Journal and accelerating the review process. Moreover, it is also acknowledged the service of the Text-Editor who has so generously given his time and expertise for editing and proof reading. Most of all, thanks must be expressed to all the reviewers for their professionalism and attention to detail which made seeing this issue into "print", a real pleasure. On a final note, the papers that you submitted, either individually or collaboratively, are much appreciated and has made a substantial contribution to the early development and success of the journal. Best wishes and thank you in advance for your contribution to the Journal.

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Breaking the Shell: Labour Force Participation among Married Women by Ethnic Sub Groups in Sri Lanka

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Abstract

Gender equality in decent work and economic decision-making are still not ensured in Sri Lanka although it ensures gender parity in both education and health care. Marriage, culture, and traditional values challenge the human right of independent economic decision making among women in developing countries. The main objective of this study is to explore the ethno-specific drivers of Labor Force Participation among married women in Sri Lanka to capture deep insights into the ethno-cultural picture of the issue. Secondary data were used from the Sri Lankan Labour Force Survey 2018 including 14,533 married females and four Binary Logistic Regression models were derived for female labour force participation among ethnic subgroups. The analysis concludes that ethnicity plays a major role in the career contribution of married females in the country. Concerning married Sinhalese women, the married women representing the Sri Lankan/Indian Tamils are more probable to join in the labour market, while married women representing the Moors are less probable to participate as they are highly intertwined to traditional and cultural boundaries. Employment and occupational sector of husband, availability, and age of children, family income, age, residential sector, province, disability, vocational training, and digital literacy are the key drivers of career contribution of married women that reflect distinctive impacts on different ethnic groups. Finally, the study proposed possible policy recommendations for encouraging Female Labour Force participation by addressing the ethno-marital issues.

Keywords: Ethno specific factors, Marital status, Women's labour force participation

INTRODUCTION

The role of human capital is considered as one of the decisive components while making national strategies for sustained growth and development of a developing country (Abraham et al., 2017). Contradictorily, these substantial investments in human capital have not been aligned with increasing women's labour force participation (World Economic Forum, 2016). Though, Sri Lanka provides a wonderful example for gender equality among other South Asian countries (Sarvananthan et al., 2017), the female labour force participation rate remains comparably low while making it a puzzle to many researchers (International Labour Organization, 2016). Samarakoon and Mayadunne (2018) stated that despite gender equality in education is favourable to women; still, most of the working age women in Sri Lanka are staying at home without participating in the labour market. Gunatilaka (2013) argues that females face a number of constraints due to different types of factors when they serve as single women, married and female heads of household in the case of participating in the labour force. This paper will analyse the determinants of married female labour force participation in the country by ethnicity.

Labour force participation rate of women, who live alone, is higher than that of women who live with a partner and kids. According to labour statistics on women (ILOSTAT, 2020), there is a considerable decrease in the Female Labour Force Participation (FLFP) when they are living with partners and kids. The presence of children forces women to be outside of the labour market. As per the statement of US Ambassador Alaina B. Teplitz at a Women Leaders' Business Panel in 2019, women in Sri Lanka currently account only for 35 percent of the workforce. That number is relatively lower when compared to the worldwide average of 47 percent. Therefore, it is very important to study the factors that affect FLFP, to identify the possible policy interventions to encourage females to work. A sharp decline in FLFP is seen with marriage in the region of Arab because marriage increases the home responsibilities of women and forces them to withdraw from the labour market involvement (Baxter, 1997). In common, and particularly in South Asia, it is accepted that social standards have a noteworthy impact on women's choice of career contribution. These standards work at different levels of society, circumstance, religion, caste, and locality (Das and Desai, 2003; Panda, 2003; Göksel, 2012; Jaeger, 2010).

Abraham et. al. (2017) mentioned many standard economic variables that impact FLFP, such as experience, wages, and incomes, education, etc. Apart from this, there are some other non-economic variables such as urbanisation, head of the household's status, land ownership and family size, employment structure and marital status, and fertility. Ajwad and Kurukulasuriya (2002) stated that worker's productive skills, educational attainment, and the number of years of work experience are the key dimensions that influence the FLFP. Additionally, ethnicity and gender are also considered as some important factors. According to Abdulai and Delgado (1999), ethnicity, gender, experience, non-labour income, number of children, age, age-squared to control for the nonlinear life cycle, education and household size are some of the key variables that impact FLFP. Women's Career

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Development, Individual Factors, Family Factors, Organizational Factors, Cultural Factors, Career-Focused, Family Support, Attitudes towards Organization are the broad factors that create the effect of a glass ceiling on women's career development in private sector organizations (Bombuwela and Alwis, 2013).

This study mainly focuses on the Ethnic Specific Drivers of Married Women's Labor Force Participation in Sri Lanka, as Sri Lanka is in a comparatively low position among other South Asian countries (The World Bank Annual Report, 2019). This is a problematic scenario for a country as FLFP is one of the standard measures that are being widely used to measure the development of a country. Both external and internal hindrances should be addressed equally for the successful economic empowerment of women (Sarvananthan et al., 2017). Therefore, it is important to find out the reasons behind the low rate of labor force participation among married women in the country.

In Sri Lanka, only limited studies have discussed the determinants of married women's labor force participation by ethnic subgroups and have attempted to illuminate the difficulties underlying the low rate of female labor force participation when they engage in their married life. The main objective of this study is to identify the drivers of married women's labor force participation decisions among different ethnic sub-groups in Sri Lanka. The specific objectives are, to identify the drivers of married women's labor force participation in Sri Lanka and to identify the factors that affect married women's labor force participation by ethnic sub-groups in Sri Lanka.

LITERATURE AND HYPOTHESES

Labour force participation is elucidated in many ways through various economic theories. Becker (1973) discusses labour market consequences of both men and women based on the marriage market through the Theory of Marriage concerning two assumptions; that every person tries to achieve as much as can be achieved and this so-called market is working at the equilibrium condition. Men vary in education or intelligence, race, physical capital apart from their effects on the wage rate, height, or any other attributes and will tend to marry women with like values of those characteristics, whereas the association between spouses for wage rates or for traits of male and female that are close replacements in household production, will be negative.

Becker (1965) explains the market and non-market activities by presenting the Theory of the Allocation of Time among unalike activities in detail. One of the concepts indicated in the theory is dividing the labour among the members of the family. If it is a multi-person Household (HH), the time will be efficiently allocated among the members rather than simply assigning among commodities. That means the time allocation of a member in the HH will greatly be affected by the chances open of other members in HH. According to The Labour-Leisure Theory, when wages rise, people accept an increased time cost of taking care of children, but also meet with inflated incomes (Aaronson et al., 2017). Further, the theory postulates that the reason for individuals and households entering the labour market is the need for higher income, and they work long hours till the benefits of market works exceed the household activities. Wage rate and non-labour income are the main economic variables impacting the availability of labour or the allocation of an individual's time between leisure and work (Abraham et. al. (2017).

Ethnicity and Marital Status on FLFP: Van Hedel et. al. (2015) have discussed the relationship between marital statuses and labor force participation in their study while using marital status, labor force activity, and mortality through a study in the USA and six European countries. Using related statistics they proved that there is a considerable difference among countries when it comes to the marital statuses and labor force participation within the population distribution. The majority of the literature has mainly given higher importance to women's labor force participation in developing countries for married women (Oppong, 1983; Wong and Levine, 1992; Doan and Popkin, 1989; Michalopoulos et al., 1992) since single women enjoy a considerably higher rate of employment as compared to married women (Panda, 2003). Baxter (1997) discusses the participation in HH work of people based on gender. He stated that females experience a higher amount of HH work compared to males and it seems to be a common phenomenon all over the world. A sharp decline in FLFP is seen with marriage in the Arab region. However, it rises where older, divorced, or separated and widowed women are concerned. Marriage leads to increased home responsibilities for women and forces them to withdraw from the labor market involvement. Marital status has been defined in different aspects by different scholars. A woman's legal status appeared statistically significant, indicating that the legal status perhaps was a crucial factor influencing the labor pool participation of a woman (Samarakoon and Mayadunne, 2018). On the contrary, Hussain et. al. (2012), Khan and Khan (2009), Grimm and Bonneuil (2001), and Faridi et. al. (2009) argue that there are neither positive nor negative relationships that exist between them. In traditionalist social orders, ladies have less freedom to select their accomplices, creating a lesser bartering control within the family. In a sense, instead of their fathers, they had to comply with their spouses after marriage (Göksel, 2012). When considering the Sri Lankan situation, Samarakoon and Mayadunne (2018) indicate that, when it comes to the occurrence of stopover at home, the uppermost is the females who are married and have children.

There are plenty of theories that discuss the determinants of labor supply of females, such as Becker (1973), Becker (1965), Neo-Classical Labor Leisure Model: Aaronson et. al. (2017), Azid et. al. (2001), etc. However, most of the popular theories examine the factors related to women's job contribution in a general context. Very few theories are based on their ethno and marital specific determinants. This study expects to scrutinize how the ethno specific drivers affect the married female's labor force participation and hope to provide a better contribution to fill this theoretical and empirical gap in the literature.

Social components constrain women's rights within the work environment and their engagement in work. Religion still includes a key part in deciding the sex standards in numerous nations (Pastore and Tenaglia, 2013). Economic, social, and political welfare factors directly influence female labour force participation through several aspects in the case of developing countries (Hussain et al., 2012). Females do not make choices in segregation, but the situations they live-in affect their conduct. Ladies in preservationist and conventional situations where men have a higher choice control, and which have more grounded social standards tend to remain at domestic, as expected by society, and gotten to be housewives (Göksel, 2012). Ethnical influence on female career contribution is confirmed by Samarakoon and Mayadunne (2018), Gunatilaka (2013) and Gunatilaka and

Vithanagama (2018), Tansel (1998), Hussain et. al. (2012), and Kulatunga (2014). Therefore, the study assumes that;

H1: Ethnicity has an impact on married FLFP

Household Factors on Married FLFP: Horrell and Humphries (1995) stated that inside most narratives of women's expanding economic dependence on men, there's room to find pockets of change and freedom clearly related to industrial opportunities. Distinctive relationship between hitched women's employment and their husband's work-related status are discussed by Panda (2003). Al-Qudsi (1995) indicates that females show a lower participation rate in labour market when they have children of school-going age. Having children serves as a negative relationship with the FLFP. However, when they have children below two years, it increased the chance for women to join the labour market (Horrell and Humphries, 1995; Göksel, 2012).

Gunatilaka (2013) explains the female labour force participation in Sri Lanka and suggests that having domestic help seems to significantly permit a female to contribute to a job. Panda (2003) identifies the effect of six categories of dependants in the family on FLFP for married women. However, the number of same era men appears as a solid negative impact on single women's employment. Be that as it may, these factors are unimportant to the employment of hitched ladies.

Arellano and Meghir (1992) found that when males are educated, it reduces the chances of participation of women in the labor market. This is confirmed by Leibowitz and Klerman (1995) and Shah (1986) as well. Weerasinghe and Parr (2002) argue that after controlling other factors, higher levels of family riches were associated with lower income. There were too critical impacts in support of female labor force, ethnicity, age-at-marriage, and equality on current income. In any case, after controlling the wealth and other informative factors, the impact of female instruction was not noteworthy. In case the proof was to remain steady over time, rising levels of riches would diminish conjugal richness in Sri Lanka. Thus, the study can predict that;

H2: HH factors have an influence on married FLFP

Socio-Economic Factors on Married FLFP: According to Hussain et. al. (2012), there is a significant and positive connection between the age of the respondent and the contribution of females in paid jobs. It is confirmed by many research studies, such as Khan and Khan (2009); Ejaz (2007); Contreras et. al. (2005); Azid et. al. (2001); Naqvi and Shahnaz (2002). One of the main reasons for the frequent decrease in FLFP within the recent past is urbanization (Ilkkaracan, 1998). According to the findings of Göksel (2012), in-country regions ladies traditionally work, whereas this is usually not the case in cities because convention and men's higher bartering power play a negative part within the likelihood of ladies working in urban areas. Samarakoon and Mayadunne (2018) and Gunatilaka (2013) explain the provincial influences on female labour force participation in Sri Lanka. Sarvananthan et. al. (2017) mentioned that high unemployment prevailed in conflict-affected areas of Sri Lanka.

Education is positively related to female labour force participation (Samarakoon and Mayadunne, 2018). The importance of education for women has recently changed women's attitudes, including their higher education attainments, increasing labor force participation, and reducing the family size (Mason et al., 1976; Thornton and Freedman, 1979). Semasinghe (2017) identified disability as one of the reasons for the non-participations of females in the job market in Sri Lanka. The economic growth of a country highly depends on literacy and education (Barro, 1998) as well as women's education (Klasen, 2002). All individuals in any case of sex in our society must at least obtain fundamental ICT abilities to operate effectively and productively, to improve and succeed in their professional lives (Palma, 2001; Trauth, 2002; Wynarczyk et al., 2006). Burki and Fasih (1998) explain that vocational training serves as a notable and positive influence on paid work.

The least number of studies have used some unique and chronologically relevant drivers (eg. digital literacy, disability, vocational training) of female job contribution even to a lesser extent. This study hopes to generate meaningful findings to understand the ethno specific drivers of married female labor force participation in the country by filling these empirical gaps in the literature. Based on the above literature, the following hypothesis is presented for the study;

H3: Socio-economic factors have an influence on married FLFP

MATERIALS AND METHODS

According to the viewpoint of the objective of this study, this research is related to the exploratory type, since the study tries to explore what FLFP and its ethno and marital specific determinants are. In line with the viewpoint of the mode of inquiry, this research is based on the quantitative approach as it uses numerical measurements. When it comes to the mode of thinking, this research is categorized under the deductive mode as it uses the theory testing approach. Here, the mental assumption is considered for the selection of data collection and the way of accepting the assumption by the researcher. This research undertakes the positivism paradigm as it uses the quantitative approach to measure the selected variables. A similar approach has been used in previous studies by Samarakoon and Mayadunne (2018), Madurawala (2009), Gunatilaka (2013), and many others.

To achieve the hypotheses, the study uses secondary sources to collect needed data from the Annual Labor Force Survey 2018, which is one of the nationally accepted sources of collecting secondary data. The population for this study is married females in the working-age population; all married females of age 15 years and above in the country. The economically active populace at present (labor force) is typically recognized as the addition of the "employed" and "unemployed" populace.

The sample frame is prepared based on the 2012 Census of Population and Housing using the technique of two stages stratified sampling procedure for the total sample size of 14,533 married females living with their spouses of age 15 years and above, covering all provinces of the country in 2018, ethno-specific subsamples were created as Sinhalese = 10,196, SL and Indian Tamil = 2,788 and Moor = 1,404. Only married females who live with their husbands have been selected for the model to achieve efficient findings related to household factors.

$$Li = \ln\left[\frac{Pi}{1-Pi}\right] = Logit\,(Y)$$
$$= \beta_0 + \beta_1 D_{1-2} + \beta_2 X_{1-2} + \beta_3 D_{3-20}$$
$$+ \beta_4 X_{3-5} + \beta_5 D_{21-27} + \varepsilon$$

Pi = Probability of being participated in the labour force, $1-Pi$ = Probability of not being participated, β_0 = Intercept, D_{1-2} = Ethnicity, ε = Error term

Effect of household factors: Family Income (X_1), Household size (X_2), Employment sector of husband (D_{3-5}), Occupational sector of husband (D_{6-13}), Availability of children

(D14-16), Availability of domestic servant (D17), Education of husband (D18-20)

Effect of socio-economic factors: Age (X3), Age square (X4), Educational attainment (X5), Living sector (D21), Province (D22-24), Disability (D25), Digital literacy (D26), Technical Training (D27)

The 2018 LFS secondary microdata is analyzed using the STATA/MP 13(64-bit) statistical package software removing heteroscedasticity within the variables through the robust command and the Binary Logit Regression analysis is used to identify the influence of the factors that affect married female's labor force participation based on ethnicity. The Dependent variable: of this study is Labor force participation of married women (Y) which is a dummy variable to check whether a married woman participated or not in the job market. Independent variables (X) includes two categories as household factors: Household size, Family income, Employment and Occupational sector of the husband, Availability of children, Availability of domestic help and Education of husband, Socio-economic factors: Ethnicity, Age, Age square, Educational attainment, Living sector, Province, Disability, Digital literacy, and Technical Training.

Here, household size is a continuous variable, generated using the household indexes counting the number of members in a household. Family income means, the total income of a family including both labour and non-labour income coming from both primary as well as secondary income sources of the household head and his spouse. There are main 4 employment statuses included in the model; employee, employer, own-account worker, and unpaid family workers. Eight occupational sectors were considered in the study as service, managerial, professional, technician, clerical, service, agricultural, elementary, unidentified, and separate dummies were created each of the variables to know whether their husband belongs to that particular sector not. Children are defined as sons and daughters of household heads in the data set. This variable is categorized into 4 groups as do not have children, availability of children less than 6 years, availability of children between 6 and 15 years, availability of children more than 15 years old. Availability of domestic help is a dummy variable and Education of HH head consists of four dummy variables as Non-schooling (Not schooled), Primary (passed grade 1 to grade 5), Secondary (passed grade 6 to grade 13), and Tertiary (passed G.A.Q/G.S.Q, Degree, Post Graduate Degree/Diploma, Special educational institutions). Age, age squared and educational attainment are continuous variables. The residential sector included as a dummy whether the women belong to an urban sector or non-urban sector. The non-urban sector includes both rural and estate sectors. All nine provinces (Western Province, Central Province, Southern Province, Eastern Province Northern Province, North Western Province, North Central Province, Uva Province and Sabaragamuwa Province) are categorized into 4 major groups as, Western provinces, Agriculture and plantation-based provinces (Central Province, Sabaragamuwa Province, Uva Province and North Central Province), Industrial based provinces (Southern Province and North Western Province), Post-war provinces (Eastern Province and Northern Province). Separate dummies were generated for each of these categories. Finally, Disability, Digital literacy, Literacy- languages, and Vocational training are created as general dummy variables with dichotomous expressions.

RESULTS AND DISCUSSIONS

Labour force participation rates of married women by ethno specific subgroups (Sinhalese, SL and Indian Tamil, and Moor) are given in Figure 1. Sinhalese women associate with the highest rates of participation (39.03 per cent), as they have less cultural and social barriers against their participation. SL and Indian Tamil women contribute almost the same proportionate share as the second highest value. In general, Tamil women are highly specialized in performing plantation-based economic activities. Regarding Moor women, around 80% of married women are not participating in any employment opportunities because they are subjected to follow higher social and cultural restrictions that keep them away from the labour market, as found by Gunatilaka (2013) and Samarakoon and Mayadunne (2018).

Figure 1: Married Female Labour force participation by ethnic subgroups
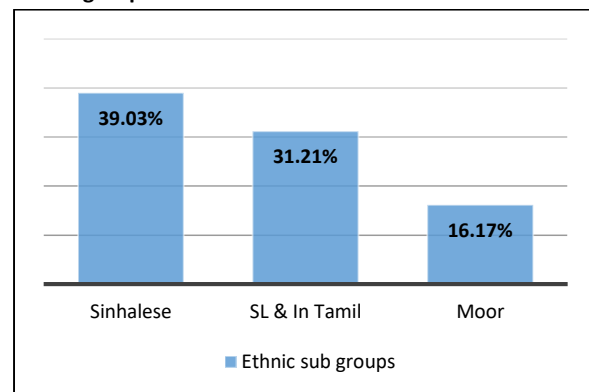
Source: Developed by the researcher using LFS 2018 data

Data analysis has been done through several steps as it includes four models as the overall model, ethno specific submodels (Sinhalese, SL and Indian Tamil and Moor). All the models are compared based on the determinants of Labour force participation of married women in 2018. Table 1 presents the marginal effects of binary logistic estimation and the p-value of the variables which presents the significance level of the results.

Before discussing the results of the probability analysis, it is important to bear in mind that, only the married spouses living with husbands are selected for the sample to observe the family context where the labour supply decisions are jointly taken based on the Household Model of Labour Supply.

Ethnicity is categorized as Sinhalese, Sri Lankan and Indian Tamil, and Moor; other ethnic groups are dropped due to insufficient cases and Sinhalese is considered as the base category. Both Tamil and Moors are highly significant with distinct responsiveness. Sri Lankan and Indian Tamil women are more likely to engage in the labour market compared to the base category by around 7.5 per cent. In general, the majority of the plantation and agricultural sectors operate with a higher participation rate of SL and Indian Tamil women who belong to the estate and rural sectors. Because of that, they have been accustomed and skilled culturally and traditionally in doing these plantation and agricultural-based employment activities for a long time as well as they are well specialized in these particular fields. Further, they are better encouraged by the incentives like accommodation and other childcare facilities provided by plantation employers. These aspects motivate them to better participate in the labour market. Nevertheless, regards to the Moors, the likelihood of participation is lower by around 14 per cent when compared to the reference category. The main reason

Table 1: Factors associated with the probabilities of participation in the labour force of married women who are Sinhalese, SL Tamil and Indian Tamil, and Moor 2018: Marginal effects of logistic estimations.

Factors and variables	Model 1 Overall Model Marg. Coef	P>z	Model 2 Sinhalese Marg. Coef	P>z	Model 3 SL and Indian Tamil Marg. Coef	P>z	Model 3 Moor Marg. Coef	P>z
No.obs	14533		10196		2788		1404	
Married women labour force participation (y)								
Ethnicity (D_{1-2})								
SL and Indian Tamil (D_1)	0.075***	0.000	N/A	N/A	N/A	N/A	N/A	N/A
Moor (D_2)	-0.140***	0.000	N/A	N/A	N/A	N/A	N/A	N/A
Household Factors								
Family Income (X_1)	-0.0001**	0.011	0.00003	0.237	-0.219*	0.062	0.112	0.321
Household size (X_2)	-0.017***	0.000	-0.013**	0.004	-0.029***	0.000	0.009	0.240
Employment sector of husband (D_{3-5})								
Employee (D_3)	0.048**	0.001	0.062**	0.001	0.012	0.711	0.024	0.467
Own account worker (D_4)	0.079***	0.000	0.110***	0.000	-0.015	0.653	0.061*	0.060
Unpaid family worker (D_5)	0.206***	0.000	0.244***	0.000	N/A	N/A	N/A	N/A
The occupational sector of husband (D_{6-13})								
Managerial sector (D_6)	0.056**	0.001	0.072**	0.001	0.024	0.565	-0.002	0.947
Professional (D_7)	0.105***	0.000	0.102**	0.002	0.036	0.499	0.095*	0.075
Technician (D_8)	0.046**	0.018	0.031	0.182	0.063	0.181	0.056	0.165
Clerical (D_9)	0.024	0.448	0.034	0.349	-0.033	0.679	N/A	N/A
Agricultural (D_{10})	0.099***	0.000	0.105***	0.000	0.027	0.453	0.102**	0.005
Production (D_{11})	-0.029**	0.044	-0.044**	0.014	-0.020	0.555	-0.002	0.962
Elementary (D_{12})	0.057***	0.000	0.022	0.258	0.064**	0.058	0.064*	0.054
Unidentified (D_{13})	-0.118**	0.049	-0.129*	0.058	N/A	N/A	N/A	N/A
Availability of children (D_{14-16})								
Having children less than 6 years (D_{14})	-0.067***	0.000	-0.078***	0.000	-0.047*	0.071	-0.015	0.595
Having children 6 to14years (D_{15})	0.007	0.462	-0.006	0.652	0.052**	0.010	0.011	0.646
Having children more than 15 years old (D_{16})	0.002	0.820	-0.003	0.813	-0.027	0.221	-0.029	0.262

Having a domestic servant (D$_{17}$)	0.088	0.154	0.075	0.311	N/A	N/A	N/A	N/A
Education of husband (D$_{18-20}$)								
Primary (D$_{18}$)	-0.051*	0.054	-0.056	0.137	-0.058	0.189	0.010	0.884
Secondary (D$_{19}$)	-0.113***	0.000	-0.120**	0.001	-0.124**	0.007	-0.033	0.644
Tertiary (D$_{20}$)	0.009	0.786	0.004	0.937	0.022	0.751	0.011	0.899
Socio Economic Factors								
Age (X$_3$)	0.044***	0.000	0.053***	0.000	0.038***	0.000	0.024**	0.003
Age square (X$_4$)	-0.0005***	0.000	-0.0006***	0.000	-0.0005***	0.000	-0.0003**	0.005
Educational attainment (X$_5$)	0.004**	0.006	0.002	0.410	0.012***	0.000	0.011**	0.005
Living sector								
Non-urban (D$_{21}$)	0.056***	0.000	0.041**	0.006	0.107***	0.000	0.063**	0.009
Province (D$_{22-24}$)								
Agriculture or Plantation base provinces (D$_{22}$)	0.090***	0.000	0.081***	0.000	0.153***	0.000	0.065*	0.060
Industrial base provinces (D$_{23}$)	0.050***	0.000	0.045**	0.001	0.101*	0.076	0.082**	0.021
Post war provinces (D$_{24}$)	-0.178***	0.000	-0.124***	0.000	-0.183***	0.000	0.009	0.782
Disability								
Having any Disability(D$_{25}$)	-0.036**	0.002	-0.029**	0.037	-0.045	0.108	-0.036	0.223
Digital literacy								
Having Digital literacy (D$_{26}$)	0.105***	0.000	0.109***	0.000	0.111***	0.000	0.078***	0.000
Technical Training								
Having technical training (D$_{27}$)	0.131***	0.000	0.131***	0.000	0.189***	0.000	0.147**	0.001

Notes:

1. (D) and (X) indicate the dummy and continuous variables respectively.

2. The omitted categories in the overall model (Model 1) are Sinhalese; Employer; Service sector worker; Not having children; Not having a domestic servant; Non-schooled husband; urban; Western province; Not disabled; Not digitally literate; Not technically trained.

2. The omitted categories in the Sinhalese model (Model 2) are: Employer; Service sector worker; Not having children; Not having a domestic servant; Non-schooled husband; urban; Western province; Not disabled; Not digitally literate; Not technically trained.

3. The omitted categories in SL and Indian Tamil model (Model 3) are Employers and unpaid family workers; service or unidentified sector worker; Not having children; Non-schooled husband; urban; Western province; Not disabled; Not digitally literate; Not technically trained.

4. The omitted categories in the Moor model (Model 4) are: Employer and unpaid family worker; worker in the Service sector, clerical or unidentified sector worker; Not having children; Non-schooled husband; urban; Western province; Not disabled; Not digitally literate; Not technically trained.

4. ***, **, and * designate statistical significance at one per cent, five per cent and ten per cent levels respectively.

5. N/A denotes that values are not applicable may be due to insufficient cases.

Source: Developed by the researcher using LFS 2018 data

for their negative responsiveness seems to be their cultural and traditional values and practices that they follow. Women are highly restricted by their husbands to be at home without going outside and this forces them to stay out from the job market. The implication is that even marriage is not a crutch that can change the cultural restrictions of Moor women. Göksel (2012) denoted that instead of their fathers, they had to comply with their spouses after marriage. Some similar findings have been presented by Samarakoon and Mayadunne (2018) as well.

The probability of participation of married women is significantly influenced by most of the HH factors selected in the study. Household size negatively impacts the married women's workforce participation decisions among Sinhalese and Tamil ethnic groups. When the number of dependents (children, elders) increases in a family, women have more responsibilities to look after them. Further, if there are many employed male members (employed children) in the family, then there is no need for married women to be employed as they enjoy considerable family incomes. Thus, married women are more likely to reduce their participation when the size of the household increases. The presence of one or more other seasoned relatives within the family includes a solid negative effect on hitched women's business. The older folks dwelling with a couple prevent hitched women's cooperation in paid work (Panda, 2003).

Increasing family income also seems to marginally lower the likelihood of married women's labour force participation. Here, family income includes the husbands' income which is a form of non-labour income to the wife. This would cause to reduce the participation of the wife as she engages in more leisure. Near findings have been suggested by Gunathilaka (2013) in her study.

When considering the influence of employment and occupational sector of the husband on labor force participation of their spouses in the overall model and the Sinhalese model; if the woman is a wife of an employee or unpaid family worker or an own-account worker, then she is more likely to participate in paid jobs, when comparing to a wife of an employer. It is important to note that the wives of Sinhalese unpaid family workers contribute by around 25 per cent of higher participation concerning the base category. Likewise, Moor women are more likely to participate if their husband is an own-account worker. It seems that when the husband does not earn or earns a lower income, their wives are forced to join in a paid job to fulfill their basic necessities.

Regarding the occupational sector of the husband, the majority of the variables are significant in the overall model. When it comes to ethnic differences, if the husband is in a managerial, professional, or agricultural sector, then Sinhalese women are more likely to participate than the reference group of the service sector. When the husband of a Moor married woman is in a professional sector, then her probability of participation is positive. These findings suggest that, when husbands are in higher positions, they marry a woman with equal social status as they like to maintain good social standards and better family backgrounds. Therefore, they do not hesitate to send their wives for better employments which adds dignity to their social status. Also, it helps their children to be a part of a non-competitive group within the labor market. Similarly, married women participate in the job market not only for social dignity but also to earn additional income for the family. This is because when the husbands are occupied in sectors like Elementary and Agriculture, there are more probabilities of their wives, within most

ethnic groups, participating in the labor market as insufficient income enables the higher participation of married women. In addition, the agricultural sector includes substitute work where husband, wife, and other family members work together. Contrastingly, Sinhalese married women are less likely to participate when their husbands work in the fields of production or other unidentified sectors. The production sector is one that always functions with tight and busy work schedules and long working hours. Thus, the husbands do not engage much in the family environment and they expect their wives to be at home taking care of other family dependents. Panda (2003) argues that there is a distinctive relationship between hitched women's employment and their husband's work-related status. Since skilled/professional spouses are superior associated with official and systematic channels of work procurement, their spouses will be in a better position to get occupations.

The availability of pre-school children seems to be a constraint for the participation of married women as it reduces the participation of Sinhalese and Tamil women by around 6.8 per cent in the overall model. Contrastingly, when the children are grown up (6 to 14 years), the career contribution of SL and Indian Tamil women increases. With preschool children, mothers should stay at home to engage in upbringing and caring activities by substituting the time of their market activities. When children have grown somewhat, they become capable of doing their work on their own. These consequences enable their mothers to be employed when they have young children. According to the fertility of the model of labor supply, the labor supply decisions of married women are significantly affected by fertility decisions. Fertility creates two main costs, namely direct and opportunity costs, and the husband and wife jointly take their labor market decisions while based on that. Al-Qudsi (1995) indicates that females show a lower participation rate in the labor market when they have children of school-going age. Göksel (2012) noted that, when the chances of having more children than women prefer increase, then it would reduce the opportunities for women to participate in the labor force.

Regarding the influence of the husband's level of education on the women's workforce participation; if the husband studies up to the primary level, then he is less likely to permit his wife to a paid job. In the Sinhalese and Tamil ethnic groups, if the husband studies up to the secondary level, then he is less likely to permit his wife to do a paid job. With higher educational qualifications, he would probably be able to find a better job with a higher salary which in turn leads to reducing his wife's participation. Leibowitz and Klerman (1995) documented in their examination of the dynamic effect of husbands' qualities on wives' work that, the husband's years of education too generally has a negative impact on the likelihood of a woman's employment. Further, Shah (1986) argues that there is a negative relationship between the husband's education and women's labor force participation decision.

Age increases the labor force participation of married women but at a decreasing rate as discussed by Gunathilaka (2013). There are no highlighted differences evident among ethnic groups since it is positive and highly significant in all the models. When people get older, they face many physical difficulties with some communicable and non-communicable diseases which hinder their physical and mental health and finally lead to reduce their participation.

As expected, education functions as a good predictor that supports labor force participation of everyone and even married women are not an exception. This statement is valid among most of the ethnic groups. In some cases, even with higher educational qualifications, married women may have to stay at home due to their unavoidable family responsibilities. However, education provides a better platform to married women to participate in the job market as reaching higher educational qualifications simply leads a person to a successful career path. Nowadays, women's attitudes are changing positively towards learning. These attitudinal changes among women cause noteworthy support to increase the women's educational attainments which indirectly motivate their labor force participation. Similar findings are discussed by Samarakoon and Mayadunne (2018), Gunatilaka (2013), Abdulai and Delgado (1999), and many others.

When dealing with the subject of the spatial factors included in the model, the likelihood of participation of non-urban women is higher compared to urban women. SL and Tamil women share the highest probability level of 11 per cent as the non-urban sector is mainly organized as the plantation and agricultural economy where the majority of women take part in those employment opportunities. Especially the plantation sector employers provide basic childcare and accommodation facilities for women who engage in those dead-end jobs (tea plucking, rubber tapping, paddy harvesting, etc.). Disparities in the distribution of female-targeted employment opportunities among residential sectors are likely to be the main reason for this lower participation. One of the main reasons for the frequent decrease in FLFP within the recent past is urbanization (Ilkkaracan, 1998). Moreover, most of the employment opportunities in the non-urban area are related to the agricultural and plantation fields. Generally, women are highly skilled and specialized to perform agricultural related employment activities as an inborn characteristic in Sri Lanka. This leads to higher participation in the non-urban living sector. Another reason is, as the number of sexual harassment of women continues to rise in urban sectors, women in such sectors find it less secure to leave their homes to make their career contribution. Siddique (2018) argues that the participation of urban women in the workforce in India has declined because of increasing media reporting of sexual assaults in a person's home zone. According to the findings of Göksel (2012), females traditionally work in country regions whereas this is usually not the case in cities. Further, Samarakoon and Mayadunne (2018) have presented similar findings.

All nine provinces are significant in the overall model but distinct findings are visible in the ethno specific sub-models. When considering the Western Province as the base category, all ethnic married women who are residents in agriculture or plantation-based provinces or industrial based provinces, show a higher probability of participation. The provinces which are dominated mainly by the estate and agricultural sectors generally provide some unique job opportunities while addressing females as discussed under the non-urban sector. Samarakoon and Mayadunne (2018) explain that women in Uva Province are less likely to stay at home. Similarly, many industries like garments or apparel industries provide much more female based employments. However, women who are residents in post-war provinces share a less likelihood of participation due to the pre-market discriminations they faced during the war period and also since at present they have diminished their career contributions

as a long-term impact. Samarakoon and Mayadunne (2018) too expressed similar findings.

Disabled women are less probable to participate because when women experience visual, hearing, limb, memory, communication-related difficulties and hence cannot perform their jobs effectively it tends to reduce their chances of recruitment in the job market. Further, disabled people face both market and pre-market discrimination in their personal as well as career lives as suggested by Gannon (2005). When a woman becomes vocationally trained or digitally literate, she is further strengthened, encouraged, and always welcomed to engage in the labor market by the employers and that has been proved through positive responses in the model as found by Burki and Fasih (1998).

CONCLUSION

The results of this study signify that both household and socio-economic factors have multiple positive and negative impacts on labor force participation of married women by their ethnicity. It is found that the most important reason for the lower career contribution of married women is their home environment. As the spouse of the main breadwinner of the family, they have a heavy domestic burden, family responsibilities, and obligations related to their children as well as other dependents. Their labor force contribution highly depends on their spouse's labor market behavior. However, career contribution choices are highly influenced by their ethnicity since Sri Lanka is a multi-ethnic country that follows considerable cultural beliefs and boundaries. So these cultural values and restrictions are soaked in the blood of women who live in such a country.

After a thorough investigation on marital and ethnic-specific drivers of women's labour force participation in Sri Lanka and existing policies and recommendations, some important policy recommendations are presented to manage the drivers of married FLFP in the country.

The government, as well as private sectors, can consider the complications of family arrangements (negative spillover effect from family to work), and the Ministry of Labour can introduce some part-time employment, 'working from home' or job-sharing opportunities for them. Each religion has its own set of unique merchants and business practices (Example: culinary arts, decorative products, tailoring, gardening, livestock, etc.). Ministry of Skills Development and Vocational Training can join with the Ministry of Buddhasasana, Religious and Cultural Affairs to introduce some ethno specific cultural skills development entrepreneurial programs in vocational training centers targeting each separate ethnic groups. Women should be provided with the knowledge of current digital market requirements via the Ministry of Science and Technology and Research and the Ministry of Industry and Commerce. This could facilitate such women to work from home. Micro Finance Institutions (MFIs) can join with Thrift and Credit Cooperative Services to provide micro-business credit schemes subject to the religious restrictions for those women.

Nowadays parents are reluctant to drop their children off at day-care centers due to lack of protection and poor quality. The National Child Protection Authority can suggest to the Government to allocate a considerable amount of funds from the annual budget to build free day-care centers and crèches with reliable and high standards as a social development infrastructure for the children of working mothers at the regional level with the support of the Department of Social Services to help the working mothers in managing their

careers. The National Child Protection Authority should form a regulatory body to ensure that the services provided by the day-care centers are of high standards and safety. The National Child Protection Authority can join with the Inland Revenue Department to provide tax concessions to the private sector organizations that provide reliable childcare services for working mothers.

Education has a positive impact on married women's career contributions and increasing educational enrolment would increase the tendency of their participation rate. The Ministry of Higher of Education can join with the Ministry of Skills Development and Vocational Training to conduct a curriculum reform to impart basic knowledge related to vocational training and entrepreneurship in the business fields from the school secondary level.

Urban sector women are less likely to participate in the workforce due to employment disparities among sectors. A similar reason is applicable to some particular provinces that could be identified as Post-War provinces. The Ministry of Skills Development and Vocational Training should consider developing courses that teach value-added productions within the existing traditional productions through vocational training centers. This would help women in creating business ideas. The Ministry of Labour can join with the Ministry of Industry and Commerce to create more female-targeted employment opportunities in the urban sector.

Disability reduces the likelihood of participation of women due to lower employment opportunities and market and pre-market discrimination. The Ministry of Skills Development and Vocational Training can introduce some disabled people to targeted course units to develop their job-related skills and attitudes. They should be taught to use their disability as an advantage. The Disability Organization Joint Front (DOJF) and Board of Investment of Sri Lanka (BOI) can join with the Ministry of Labour and the Department of Social Services to conduct awareness-raising and business advisory programmes and workshops addressing disabled people who are currently out of the labour market (beggars, those committing illegal activities, etc.). The Ministry of Skills Development and Vocational Training can join with the Ministry of Science Technology and Research and The Disability Organization Joint Front (DOJF) to introduce possible online earning course units and online career development opportunities.

Greater technical and vocational skills would increase the tendency of women's participation in the job market. The Ministry of Skills Development and Vocational Training can join with the Ministry of Science Technology and Research to introduce online earning course units and online career development opportunities (example: creating You-Tube channels, online surveys, online marketing, online investments, online graphic designing, etc.) to the vocational training centers. The Ministry of Education can join with the Ministry of Science Technology and Research in updating curriculum reforms to introduce digital literacy from the primary level of education. SMEs should be provided with the knowledge of current digital market requirements via the Ministry of Science Technology and Research and the Ministry of Industry and Commerce. The Ministry of Industry and Commerce can join with the Ministry of Science Technology and Research in creating groups and communities on social media networking sites to create links among product manufactures and product marketers.

When it comes to the knowledge contribution to the literature from this research, most of the economic theories discuss about women's labour force participation in a general context. Hardly any theories provide ethnic influence on FLFP, thus this study provides a further extension to the prevailing theories. Regarding the empirical contribution of this study, most of the recent studies have been used some common set of determinants to identify the women labour force participation in Sri Lanka. However, this study reveals some unique and chronologically relevant drivers of female job contribution that previous studies have used to a lesser extent. As an example, the influence of employment and occupational sector of the husband, current digital literacy of females, having a disabling condition, and how those factors impact on women labour force participation. Thus, this study generates a new empirical contribution to understand the ethno specific drivers of female labour force participation in the country. Further, this study uses separate binary logistic regression models for the major ethnic groups in the country on the basis of their marital status. Even though most scholars have used logit regression analysis to identify the determinants of FLFP, hardly any studies used separate models for each ethnic subgroup. Thereupon, this study satisfies this methodological gap by revealing such new methodological knowledge contribution.

This research was successfully and systematically completed using secondary microdata. However, it is subjected to some limitations which could be solved through future research directions.

The study has not derived separate econometric models for the other ethnic groups and marital statuses (divorced, separated, and widowed) due to insufficient data requirements in the survey data set. This research could be further developed using primary data for those dropped categories to have more appropriate findings.

There are some variables that should have been considered when examining the determinants of women's labour force participation, such as the impact of increasing trend of women's assaults on their career contribution, job satisfaction, quitting the career due to childbirth, and demand-side ethno specific factors' effect on women's career contribution and so on. This study did not consider those variables due to insufficient data requirements in the survey data set. However, these aspects could be explored using primary data by scholars in the future.

Further, in order to gain in-depth practical knowledge of cultural values and restrictions against women's labour force participation in their religion, a qualitative approach can be used through case studies while meeting women in each ethnic group to provide more suitable findings.

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Appendices

Appendix 1: Descriptive statistics for the sample of married women's labour force participation

Factors and variables	Model 1 Overall model		Model 2 Sinhalese		Model 3 SL and Ind Tamil		Model 4 Moor	
	Mean/ Proportion	Std. Dev	Mean/ Proportion	Std. Dev	Mean/ Proportion	Std. Dev	Mean/ Proportion	Std. Dev
No. obs:	14533		10196		2788		1404	
Married women labour force participation (Dy)	0.352	0.477	0.390	0.487	0.312	0.463	0.161	0.368
Ethnicity								
Sinhalese (Dref)	0.705	0.455	N/A	N/A	N/A	N/A	N/A	N/A
SL and Indian Tamil (D_1)	0.195	0.396	N/A	N/A	N/A	N/A	N/A	N/A
Moor (D_2)	0.097	0.296	N/A	N/A	N/A	N/A	N/A	N/A
Household Factors								
Household size (X1)	4.064	1.427	3.947	1.343	4.210	1.484	4.614	1.717
Family Income (X2)	33.53	152.2	33.16	138.4	0.031	0.188	35.50	73.29
Employment sector of husband								
Employer (Dref)	0.037	0.189	0.034	0.181	0.033	0.178	0.067	0.250
Employee (D_3)	0.419	0.493	0.404	0.490	0.470	0.499	0.411	0.492
Own account worker (D_4)	0.361	0.480	0.372	0.483	0.316	0.465	0.372	0.483
Non-paid family worker (D_5)	0.004	0.066	0.005	0.071	N/A	N/A	N/A	N/A
Occupational sector of husband								
Managerial sector (D_6)	0.078	0.268	0.073	0.260	0.067	0.250	0.137	0.344
Professional (D_7)	0.027	0.162	0.025	0.158	0.031	0.173	0.032	0.176
Technician (D_8)	0.056	0.230	0.059	0.236	0.040	0.196	0.064	0.246
Clerical (D_9)	0.015	0.122	0.015	0.125	0.012	0.111	N/A	N/A
Agricultural (D_{10})	0.179	0.384	0.196	0.397	0.168	0.374	0.091	0.288
Service (Dref)	0.066	0.249	0.063	0.243	0.054	0.227	0.111	0.314
Production (D_{11})	0.221	0.414	0.233	0.423	0.176	0.381	0.220	0.414
Elementary (D_{12})	0.173	0.378	0.143	0.350	0.270	0.444	0.183	0.386
Unidentified (D_{13})	0.004	0.065	0.005	0.075	N/A	N/A	N/A	N/A
Availability of Children								
Having children less than 6 years (D_{14})	0.188	0.390	0.171	0.377	0.196	0.397	0.274	0.446
Having children 6 to14years (D_{15})	0.388	0.487	0.371	0.483	0.404	0.490	0.475	0.499
Having children more than 15 years old (D_{16})	0.550	0.497	0.551	0.497	0.543	0.498	0.563	0.496
Having a domestic servant (D17)	0.003	0.058	0.003	0.060	N/A	N/A	N/A	N/A
Education of husband								
Primary (D_{18})	0.199	0.399	0.172	0.377	0.289	0.453	0.213	0.410
Secondary (D_{19})	0.746	0.435	0.776	0.416	0.645	0.478	0.733	0.442
Tertiary (D_{20})	0.033	0.178	0.035	0.184	0.031	0.173	0.026	0.160
Socio Economic Factors								
Age (X_3)	48.31	12.55	49.20	12.49	46.92	12.54	44.93	12.00
Age square (X_4)	2491	1253	2577	1268	2360	1223	2163	1106
Educational attainment (X_4)	9.159	3.650	9.644	3.459	7.994	3.908	8.034	3.679
Living sector (D_{21})								
Non-urban	0.838	0.367	0.866	0.339	0.822	0.382	0.683	0.465
Province								
Agriculture or plantation base provinces (D_{22})	0.342	0.474	0.393	0.488	0.214	0.410	0.225	0.418
Industrial base provinces (D_{23})	0.239	0.426	0.310	0.462	0.023	0.152	0.159	0.366
Post-war provinces (D_{24})	0.199	0.399	0.031	0.175	0.694	0.460	0.440	0.496
Disability (D_{25})	0.162	0.369	0.163	0.369	0.163	0.369	0.158	0.365
Digital literacy (D_{26})	0.232	0.422	0.239	0.426	0.202	0.401	0.237	0.425
Technical training (D_{27})	0.060	0.237	0.071	0.258	0.034	0.181	0.025	0.158

Notes:
1. (D), (Dref) and (X) indicate the dummy and reference category and continuous variables respectively.
2. For the dummy variables, proportions are presented only for the categories that equal to one.

Source: Developed by the researcher using LFS 2018 data

The Impacts of Cooperative Learning on Demoting Communication Anxiety: With Special Reference to Engineering Undergraduates

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Abstract

The English language is considered the lingua franca among speakers of different languages and it is predominantly a major subject in the world education system. Communication anxiety manipulates a dominant role in restricting communication among second language learners of English (ESL). ESL learners decline to converse in English since many scholars experience language anxiety in diverse forms. The main objective of the study was to investigate whether working in groups is effective to demote communication anxiety experienced by ESL learners and the sub-objective was to examine students' perceptions of group work in mitigating speaking anxiety. Nervousness and uneasiness are considered a complex and multi-faceted mental marvel by past analysts and they have proposed the utilization of diverse points of view and approaches to examine this phenomenon. Data were collected through quantitative data collection methods. 50 questionnaires were distributed at the pre-stage and the post-stage. Cooperative learning was adopted as a teaching strategy at the post-stage. The discoveries proposed that cooperative learning made a difference in easing and decreasing the communication anxiety felt by ESL learners and empowered them to utilize the second language. At the post-stage students portrayed incredible enhancements in their readiness to speak and take part in several errands and exercises in an English-speaking classroom. Through the discoveries, the analyst was able to suggest techniques to instructors that would offer assistance lighten communication anxiety felt by ESL learners by generating a difference to be less self-conscious and reinforce certainty.

Keywords: Communication anxiety, Cooperative learning, Second language, Teaching strategy

INTRODUCTION

The English language is considered the lingua franca among speakers of different languages and it is predominantly a major subject in the world education system. In the 20th century, a large number of researches were executed to identify the individual differences in second language acquisition. The outcome of the researches conducted highlighted the negative correspondence between motivation and anxiety. The abilities and capabilities of the learners vary from individual to individual. Some learners may not come across any difficulty when learning second language (L2) while some learners might face various difficulties. Thus, leads to language anxiety

Since the 1960s many researchers have looked into this phenomenon and how it has been related to the poor performance of so many learners. Foreign Language Anxiety (FLA) is due to the combination of many factors, such as motivation, learner's beliefs, learner's attitude, teacher's practice, and others. For the most part, remote dialect uneasiness contains a negative impact on learning a language and it can slow down the learner's abilities. However, a small amount of anxiety can be beneficial because it gives extra motivation to learners who make an effort to achieve their task. (Motoda, 2005)

Speech anxiety is feelings of nervousness, dread, and concern which is a pivotal issue that the larger part of students confront in learning and particularly in talking in L2. Most of these learners are knowledgeable and competent, and they may be great at learning other dialect aptitudes but when it comes to speaking in the second dialect they are self-conscious to undertake. Horwitz et al. (1986) state these learners claim to have a "mental block" during such situations. Theorists and researchers of Second Language Acquisition (SLA) have frequently communicated that sentiments of anxiety, uneasiness, or stress are stamped on speaking a second language. Consequently, L2 inclining is recognized from other subjects.

Reviews on the literature on anxiety illustrates an impressive sum of definitions for the term "anxiety". According to Simpson, anxiety is described as "a personality characteristic of responding to certain situations with a stress syndrome of responses" (Edelmann, 1992). On the other hand, Spielberger's (2013) definition of anxiety is "an unpleasant emotional state or condition which is characterized by subjective feelings of tension, apprehension, and worry, and by activation or arousal of the autonomic nervous system". In 1975, the American Psychiatric Association, the most respected organization in the field of psychology, defined anxiety as "apprehension, tension, or uneasiness which stems from the anticipation of danger, the source of which is largely unknown or unrecognized" (Edelmann, 1992). Therefore, by considering all these definitions it can be concluded that uneasiness is seen as a state in which an individual endures from a repulsive feeling, escorted by anxious conduct, stress, and, to its extraordinary, fear.

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The description of language anxiety is "a subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system" (McIntyre & Gardner, 1994: cited in Tanveer 2005). There have been several attempts to scrutinize the connection between anxiety and language learning, exist many conflicts. The reason for this is because anxiety is a complicated, multifaceted concept, and affects people in diverse approaches about dialect education and performance (Young, 1991: cited in Zhanibek, 2001). The difficulty of researching anxiety in Foreign Language Learning (FLL) or Second Language Learning (SLL) is partial since diverse types of anxieties have been identified, such as trait anxiety, state anxiety, facilitating and debilitating anxiety, social anxiety, etc. Psychologists draw up a delineation among three groups of anxiety: trait anxiety, state anxiety, and situation-specific anxiety. While anxiety has been found to be meddled with numerous sorts of learning, but when it is related to inclining a second or foreign dialect it is named as 'second/foreign dialect anxiety'.

Of the four language competencies, it is strongly deemed speaking competency is the most anxiety-provoking skill. Conversing in English before others are seen by students as one of the foremost anxiety-causing assignments. (Young, 1990). As second or foreign language teachers looking for more and more task-based activities that would allow students to practice speaking the language, students are pressurized to talk and therefore may feel more anxious to learn a foreign language and they are more prone to foreign language anxiety (FLA), both inside and outside the classroom.

Many Second Language Acquisition (SLA) analysts have attempted to explore the sources that produce dialect nervousness from inside both academically and in social settings (Tanveer: 2005) and have recommended a wide range of coping strategies. Although language anxiety can stem from many aspects of learning and using a second or foreign language it possibly originates from the learner's perception about 'self' as well as his/her perception of others like peers and teachers. It can also stem from the learner's beliefs about the target language and learning it.

Language anxiety can be a consequence of the dearth of fluency and competence in the target language i.e. the learners may be apprehensive in using the target language due to linguistic difficulties such as lack of knowledge of grammar and vocabulary.

The social and cultural environment second/foreign language learning takes place may also be a factor that causes language anxiety in students. As the target language represents another "higher" culture and social status in the eyes of the learner there may be a tendency for some learners to feel anxious about their performance in front of his/her classmates.

Considering uneasiness as an exceedingly compelling component in dialect learning, further study of these issues could help language teachers to find out factors that produce anxiety and thus reduce nervousness inside the classroom atmosphere and thereby improve the participation and performance of learners in the target language.

In the Sri Lankan education system the majority of the students follow their studies in Sinhala medium instruction. However, in university education, many degree programs are conducted in sole English medium instruction. Therefore, the students must follow their higher education in English. Students struggle to cope with writing exams, assignments in English. That is, they strive and improve theoretical knowledge in English yet pay very little attention to improve speaking abilities in English. Some students strongly desire to improve their English speaking abilities but they fear speaking in English in the classroom due to various factors. Therefore teachers have to adopt various strategies to assist students to overcome this situation and to improve students' English speaking abilities. Therefore, cooperative learning is a teaching strategy that can be adapted to minimize the students' fear to speak in English. Hence this foundation is the platform for the research problem of the study.

The main objective of the research is to investigate whether group work is an effective teaching strategy in reducing speaking anxiety. And the sub-objective is to examine students' perceptions of group work in mitigating speaking anxiety. Therefore the research questions of the study intend to investigate on:

1) Is group work a successful teaching strategy in mitigating speech anxiety?

2) What are the students' perceptions of group work in mitigating speaking anxiety?

L2 learners may confront different issues that can influence their learning capacity and accomplishment. Communication anxiety is one of the foremost common issues L2 learners confront in their L2 dialect classrooms. It can influence the L2 learners' eagerness to memorize the target dialect and anticipate them from obtaining it. Being L2 dialect learners and L2 teachers, the analyst herself confronted this issue as an undergraduate and observed its impact on her learners. For this reason. The analyst was curiously exploring the impact of utilizing anxiety-reducing instructing procedures on minimizing L2 learners' talking uneasiness.

One of the greatest challenges for English as a Second Language (ESL) or English as a foreign language (EFL) teachers in the recent teaching context have been to provide students with a student-centered and comfortable learning environment. With all the effort that has been made in this regard, anxiety still seems to consume a large portion in language classrooms. Although they are aware of the damaging effects it has on L2 learning but not having sufficient information poses a challenge to language teachers. Therefore raising awareness of the nature of language anxiety experienced by students, what causes such feelings, and how to effectively reduce learner anxiety and anxiety causing factors are of utmost importance.

LITERATURE REVIEW

Introduction

An increase in the requirement for foreign languages, especially English language studies can be evident primarily because every nation is extending their hands to the rest of the world and the vast increment of second language learners can also be observed to meet the demand. Learning a non-native dialect demarcates a multifaceted procedure and it includes both cognitive and sentimental factors that impact the procedure of learning. Cognitive psychologists observe dialect learning as an "internal mental process". The sentimental dynamic is "the emotional side of human behavior in the language learning process" (Brown, 1994). Equally these dynamics have an impact on the performance of the student in language learning.

What is Anxiety?

Several viewpoints on fretfulness, on the whole, have been set forth by various fields such as psychology, anthropology, and education and in most of these cases, it brings forth the

ideas of fear and risk to the person's physical security or mental prosperity in his/her intelligent with the environment. Within the nineteenth century, Darwin (1872) thought of uneasiness as an enthusiastic reaction that is stimulated when a living being feels physically beneath risk. "The emergence of fear (anxiety) as a scientific construct can be seen in the writings of Darwin (1872) who considered fear to be an inherent and adaptive characteristic of both humans and animals that had evolved over countless generations through a process of natural selection." (Spielberger & Rickman 1990)

Sigmund Freud (1895/1924) was one of the foremost scholars who interpreted anxiety from a psychological point of view. He defined anxiety as "something felt"; an unpleasant state or condition indicated by individual emotions of apprehension. Anxiety, in Freud's view, is of central significance in psychoanalysis theory observed as a motivating factor in certain situations while modern psychiatry defines the other extreme of anxiety as a neurological disorder that can lead to compulsive behavior or panic attacks.

Anxiety typically is a feeling of worry and uneasiness and is synonymous with apprehension, trepidation, and disquiet. Anxiety also accompanies self-doubt, insecurity, and fear and is interwoven with issues regarding self-esteem. "It is a psychological constraint, commonly described by psychologists as a state of apprehension, a vague fear that is only directly associated with an object" (Hilgard & Atikinson, 1997: cited in Scovel, 1991)

Spielberger (1976) made the refinement between uneasiness and fear. Whereas fear is caused by a genuine objective threat within the environment". The reasons that are behind uneasiness may not be known to him/her. A few investigate proposes that degrees of uneasiness alter concurring to the seen danger while others investigate proposes that the uneasiness response may dominate real risk that is, the "intensity of the emotional reaction is disproportionately greater than the magnitude of the objective danger" (Spielberger, 1976)

According to these definitions, anxiety is some kind of unease caused by an object or event. When people are anxious they tend to sweat, suffer from shortness of breath, palpitation, stomach aches, and muscle cramps, and they may perform badly and tend to make compulsive and often wrong decisions. This is true for Language Anxiety. Anxiety in a language classroom, especially a second or foreign language classroom gives rise to several difficulties such as the inability to complete tasks, solve problems, or give answers in a short time, have trouble concentrating all the while According to Horwitz et al (1986), dialect instructors have two choices when managing with on edge L2/FL learners: 1) making a difference, learn to manage with uneasiness inciting circumstances, and 2) making the learning setting less stressful (Horwitz et al, 1986).

Anxiety Reducing Strategies

Different considerations on dialect learning uneasiness have investigated the impact associated with anxiety-reducing techniques on learning a moment or an outside dialect and have proposed a few hones that can offer assistance to FL learners decrease their remote dialect uneasiness (Foss & Reitzel, 1988; Crookall & Oxford, 1991; Ellis & Sinclair, 1989; Gregersen, 2003; Tsiplakides & Keramida, 2009). In 1988, Foss and Reitzel displayed a few anxiety-reducing methods related to individual and interpersonal uneasiness. They contended that on the off chance that L2/FL learners were able to recognize their fear of outside dialect learning, they would be able to infer anxiety-provoking circumstances and practically bargain with that. Consequently, Foss and Reitzel (1988) endorsed that the teacher needs to ask the learners to verbalize their anxiousness and compose them on the board. Through this strategy, L2 learners will recognize the fact that they are not the only ones in the classroom who experience communication anxiety. (Young, 1991).

Crookall and Oxford (1991) advertised a few approaches to diminish uneasiness in dialect classrooms. Exercises such as cooperative learning in small groups, combine work, exercises based on enhancing stimulations, and structured tasks can offer assistance to move the communication design of the classroom absent from being a teacher-learner approach to a more collaborative one.

Amid the past decade, cooperative learning appeared to pull in a parcel of consideration and is a renowned concept. This conceptual approach is based on a hypothetical system that gives common standards on how to structure cooperative learning exercises in a particular subject region.

Cooperative learning is a renowned concept and a growing trend used in teaching a second language. According to Johnson & Johnson (2005) cooperative learning is an instructing method utilized in the arrangement of small teams that comprises students with blended capacities and each team member adapts with moving forward enhancing their subject awareness. Each team member endeavors not only in gathering information but also in generating and fortifying the group soul. Team members work collaboratively to the conclusion until each member effectively comprehend the assigned task and accomplished it. Cooperative learning is an effective tutoring methodology to propel and invigorate the students to gain knowledge and awareness, Moreover, the instructing methodology can be employed to generate interpersonal and group abilities. (Suwantarathip & Wichadee 2010).

In cooperative learning, the team members comprise members from different backgrounds and the ability for English knowledge may vary. Therefore the group members tackle each other's strengths and weaknesses to produce a successful outcome. For illustration, one learner might have a solid lexicon that can supply learners with a strong foundation in linguistic use. Besides, destitute learners will gain an advantage from collaboration with way better ones, and competent students will feel pleased that they play a critical part in making a difference in weaker colleagues. (Suwantarathip & Wichadee 2010 pp 2).

Johnson & Johnson (1995) delineates that performing collectively with classmates assist in the manipulation of an optimistic and steady environment. It upgrades openings to effectively develop and alter knowledge among learners and alleviate competitiveness and independence. Moreover, examining, generating, considering, and contemplating in groups instead of an entire class setting, can generate a low anxiety-provoking classroom setting.((Suwantarathip & Wichadee 2010 pp 2). In such an environment learners have the opportunity to feel quite comfortable to undertake out unused thoughts. Subsequently, a cooperative learning backdrop is acceptable to diminish uneasiness and enhance more openings for learners' to fabricate dialect. (Krashen, 1985).

METHODOLOGY

Research design

The main objective of the study was conducted to investigate the effectiveness of using group work in mitigating

communication anxiety and the sub-objective was to examine students' perceptions of group work in mitigating speaking anxiety. The research questions grounded were

1) Is group work a successful teaching strategy in mitigating speech anxiety?

2) What are the students' perceptions of group work in mitigating speaking anxiety?

The questionnaire was developed by the researcher based on the Foreign Language Classroom Anxiety Scale by Horwitz, Horwitz & Cope (1986). The questionnaire was designed specifically for this study.

The study was executed at the Faculty of Engineering in the University of Ruhuna in the year 2020. To investigate the research questions the questionnaires were distributed to students at two stages. Pre-stage, at the commencement of the semester, before the application of the teaching strategy, and at the post-stage, after the application of the teaching strategy.

Instruments

Questionnaires were used to gather data for the study

Questionnaires

A randomly selected sample of 50 first-year undergraduates was selected from a population of 225 undergraduates. The participants followed an English program for 10 weeks under the Development Program initiated by the university soon after their entrance to the university. The participants' ages vary between 18 years to 20 years. Henceforth undergraduates studied English for three hours during the first semester taught by the researcher herself.

The questionnaire has two parts as mentioned below.

Part I- General Information

This section included five questions regarding the participants' general information. The questions were as follows:

    I.   Respondent's Gender

    II. Respondent's Age

    III. Respondent's District

    IV. Years of learning English

These questions were included in the questionnaire so that the researcher would be able to discern precise details about the participants accurately. All five questions were open-ended.

Part II – Anxiety-related questions

This section consists of forty questions, thirty-nine of which were on a five-point Likert scale. The following scales were used to indicate the frequency of the given occurrences:

    I.   Strongly Disagree

    II. Disagree

    III. Neutral/Neither Agree or Disagree

    IV. Agree

    V. Strongly Agree

The statements included students' opinions on group work particularly concerning their oral performance and reduction of speaking anxiety.

The final question was open-ended where the researcher asked the participants to write comments if there are any.

The questionnaire was prepared in English language and was constructed and revised under the guidance of the supervisor. A translation was deemed unnecessary as the questionnaire was distributed among English medium students.

Anxiety reducing teaching strategy

The study was conducted in six sessions. To initiate the sessions, learners were assigned to teams of five and were inquired to do a role play. The learners had autonomy in choosing an interesting topic. Bunches were of blended capacities and were given similarly challenging errands so the members would feel less self-pressured and rise to each other. The members ought to comprehend that this was not a competition in which they were required to work collaboratively to attain the given errand.

In the second session of the study groups of seven were formed by Number counting. The task was to do an interview. Students were asked to create their own manuscripts.

The third session was peer review, a movement requiring learners to perused each other's draft discourses and allow comments on them. Peer survey allows learners to memorize how to supply and get helpful input. The most objective of utilizing peer audit is to assist both journalists and commentators to progress their composing and talking. The peer audit in this inquire was conducted in sets. The learners were prepared on the standards of peer rectification and how to provide criticism so that they would not experience any challenges when giving comments. Peer audit preparation was accessible sometime recently the lesson officially started. This implies they were instructed how to take after the audit method step-by-step, how to allude to the lexicon when in question, how to compose up a comment.

Giving criticism centered on the taking after issues: 1) clear proposition articulation, 2) important and satisfactory scope of subject centering on a central thought, 3) great supporting subtle elements, 4) coherence (move utilize), 5) passing on meaning clearly and viably, and 6) botches on linguistic focuses.

For the fourth session, a teamwork movement utilized "Numbered Heads Together." A group of four was built up. Each part is given numbers of 1, 2, 3, 4. Questions were inquired from the team. Teams worked together to reply to the questions so that all can verbally reply to them. The instructor called out a number which number in each group was inquired to reply. This action was conducted to upgrade students' talking aptitudes.

In the fifth and sixth sessions group activities on debates and presentations were allotted respectively.

After the application of group work at the13th week of the semester, the questionnaires at the Post stage were administered.

After collecting the surveys, the analyst employments SPSS to calculate the answers utilizing clear insights. The percentage, mean, and the standard derivation were calculated to decide the variables that made learners nervous about talking within the foreign dialect. After the semester and after applying the anxiety-reducing procedures, the information drawn from both the pre and post-surveys is compared to decide whether the participants' level of uneasiness got diminished after utilizing the anxiety-reducing educating methodologies.

RESULTS AND DISCUSSION

Introduction

A vast amount of researches conducted on L2 anxiety states L2 anxiety affects successful learning especially the oral competencies of students. This anxiety that the students experience is a hindrance to not only their learning but also to the teacher who is teaching. Hence, the major reason for the

study was to discover the effectiveness of using group work in teaching which in turn assists the students to evade anxiety particularly while engaged in speaking activities and to recommend certain methodologies' to manage it. This chapter discusses the analysis of the results of the student's perception of how far the selected teaching strategies are effective in mitigating speaking anxiety.

Quantitative data analysis

Table 01: Responses for statement 01

| Statement 01: I feel confident speaking in English in the classroom	Pre-stage				
	SD	D	N	A	SA
No. of responses	14	22	2	11	1
As a percentage	28	44	4	22	2
Post Stage					
No. of responses	2	6	0	17	25
As a percentage	4	12	0	34	50

Source: Researcher's survey results, 2020.

Table 01 shows that at the pre-stage majority of the participants disagreed with statement 01. It indicates that 44% have no confidence in speaking English in the classroom. Nevertheless, at the post-stage majority of the respondents strongly agreed with statement 01. This improvement of percentage indicates that the confidence of L2 speakers was strengthened after the application of the teaching device. An increase in confidence indicates that the anxiety for speaking in English is reduced. Through the reduction of anxiety, it conveys that, group work facilitate to boost confidence in students to communicate in L2. Confidence in speaking English is a dominant factor that facilitates successful teaching and learning for ESL learners. The improvement in the results in the post-stage shows that students' cooperative learning had led to minimize students' speaking anxiety. Besides this positive transformation of results display that students have a favorable attitude towards the application of the teaching strategy.

Responses for statement 02 at the pre-stage: I would feel better doing speaking activities in English collaborating with peers.

The responses for statements 2 in pre-stage is given in figure 01 below.

Figure 01: Responses for statement 02 at the pre-stag
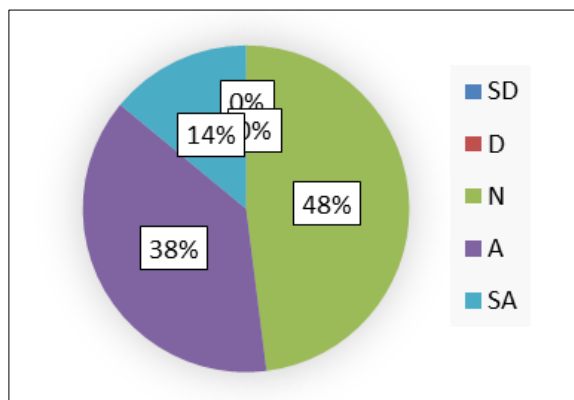
Source: Researcher's survey results, 2020.

As displayed in figure 01, it indicates clearly that the majority of the responses that is, 8% held a neutral response before the application of teaching strategies. The second highest results are, 38% agreed to the statement. After the usage of group activities in tasks, a massive transformation in the opinions of students can be observed as demonstrated in figure 02 below.

Figure 02: Responses for statement 02 at the post-stage

Source: Researcher's survey results, 2020.

Here 58% of the majority of the students strongly agreed with the statement. This indicates the students are extroverts and prefer working in groups which helps minimize anxiety in speaking. Engaged in speaking activities creates a motivating environment which in turn enhances oral practice. The positive transformation on the pre-stage and post-stage results depict that students are positive about the application of this teaching strategy. Moreover, when students are among peers they feel less anxious as a consequence they are not tense and nervous to speak in the target language. Hence cooperative learning-based activities assist students to minimize communication anxiety and students do have positive perceptions in indulging themselves in group-based tasks.

Table 02 below shows the mean and standard deviation of the above data presented in table 01 and figure 01 and 02.

Table 02 displays that at the pre-stage the majority mean for statement 01 is 2.2 which reports that the students feel less confident speaking in English in the classroom however at the post-stage after the use of teaching devices a massive transformation is evident. This is illustrated by the mean of 4.1 indicating the boost of self-confidence.

In considering statement 02 the mean in the initial stage is 1.9 which means the majority of the students do not prefer to do speaking activities in the classroom the main reason behind this is anxiety in speaking L2.

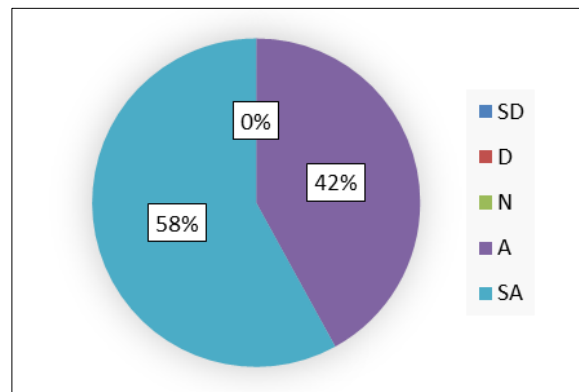### Data Analysis of the pre-study and post-study

After regulating the survey to the members, a factual investigation was conducted to discover out the percentage, mean, and standard for each articulation within the survey.

Responses for statement 01

The responses for statements 01 is given in table 01 below

Table 02: Mean and standard deviation of statement 01 and 02

Statement 01 and 02	Pre-stage		Post-stage	
	Mean	Standard deviation	Mean	Standard deviation
1.I feel confident speaking in English in the classroom	2.2600	1.15723	4.1400	1.16075
2. I like speaking activities in Class-room	1.9600	1.08722	3.8400	1.01740

Source: Researcher's survey results, 2020.

Nevertheless, in the post-stage, the mean is 3.8 which means the majority prefer to do speaking activities after the application of teaching strategies. This exposes the effectiveness of using teaching strategies in reducing anxiety. This proliferation of mean for statement 01 and 02 illustrates that the student's confidence and preference towards oral L2 performance after the application of teaching strategies have led to reduce speaking anxiety.

Responses for statement 03

Table 03: Responses for statement 03

Statement 03: I enjoy the class when we do role plays.	Pre-stage				
	SD	D	N	A	SA
No. of responses	5	11	13	15	6
As a percentage	10	22	26	30	12
Post Stage					
No. of responses	0	3	0	18	29
As a percentage	0	6	0	36	58

Source: Researcher's survey results, 2020.

As demonstrated by Table 03, 30% of the majority agreed that they enjoy doing role plays while 12% strongly agreed. This indicates that rather than individual tasks students prefer to work collaboratively and entertain themselves while learning. Moreover, 26% had a neutral response. Whereas 22% disagreed with the statement and 10% strongly disagreed at the pre-stage. After the application of teaching strategies at the post-stage majority of the students that is 58% strongly agreed while 36% agreed to the statement. Only 6% of the participants disagreed. Few students (3 students) only did not prefer doing role plays. Hence in correspondence with the majority, it is evident that students are interested in learning when the assigned tasks are practical and enjoyable, which in turn reduces the stress, tension, and fear to speak in L2. Moreover, teacher assigning activities such as role-plays led to manipulation of a safe and informal ESL classroom generates a comfort zone for the students. Students gain the opportunity to discuss with peers, generate a creative script, and improve verbal language and non-verbal language also develop the students' personality. Nevertheless, it is of utmost importance to monitor the students on whether they are using the target language in group discussions. Otherwise, the final objective of improving students' L2 speaking abilities will not be achieved. In parallel, this further advocates the students' positive perceptions of students engage in cooperative learning and how cooperative learning-based activities have led to mitigate speaking anxiety.

Responses for statement 04

Table 04: Responses for statement 04

Statement 04: I am more willing to speak in class when we have a debate scheduled.	Pre-stage				
	SD	D	N	A	SA
No. of responses	12	12	7	17	2
As a percentage	24	24	14	34	4
Post Stage					
No. of responses	3	12	0	23	12
As a percentage	6	24	0	46	24

Source: Researcher's survey results, 2020.

Statement 04 at the pre-stage indicates that 34% of the majority prefer to speak in class when they had a debate schedule. Which is a favorable indication and suggest that the students are extroverts. This may be mainly since the majority are males in the sample, besides, the field of study is engineering therefore, the students are straightforward. Simultaneously it can also be observed that 24% of the students disagreed and strongly disagreed. While 14% had a neutral response. After assigning group work, 46% of the majority agreed and 24% strongly agreed. Whereas 6% strongly disagreed and 24% disagreed. Therefore, teachers can include debates in lesson plans since they desire to do debates which in turn will minimize anxiety and boost confidence. Debates will also be led to enhance students' L2 speaking abilities. Each member of the group will get an opportunity to speak. The competitive nature of debates will encourage the students to use the language more to come up with points and to defend. As a consequence students will be motivated and would be keen in participating in the activity with much team spirit, power, and energy. Therefore it would manipulate a positive stance among students and would lead to speaking out the language forgetting their nervousness.

Table 05: Mean and standard deviation of statement 03 and 04

	Pre-stage		Post-stage	
	Mean	Standard deviation	Mean	Standard deviation
I enjoy the class when we do role plays	3.1200	1.18907	4.4600	.78792
I am more willing to speak in class when we have a debate scheduled.	2.7000	1.28174	3.5800	1.26314

Source: Researcher's survey results, 2020.

According to the above table 05, it can be observed that the majority mean at the initial stage is 3.1 for statement 03 which means most of the students moderately agreed that they enjoy doing role plays. And at the post-stage, the mean is 4.6 which also refers to their preference which is more than the earlier situation. Hence in both situations, students desire in doing role plays.

Further, the mean for statement 04 at the pre-stage is 2.7 which means the majority of students felt that debates are stressful. Nevertheless, after the application of the teaching device, the mean is 3.5 which means students felt that doing debates reduces their speaking anxiety. But the students do not fully desire and enjoy doing debates in comparison with role plays.

Responses for statement 05

Table 06: Responses for statement 05

Statement 05: I enjoy the class when we do comics	Pre-stage				
	SD	D	N	A	SA
No. of responses	0	6	13	27	4
As a percentage	0	12	26	54	8
Post Stage					
No. of responses	0	5	3	25	17
As a percentage	0	10	6	50	34

Source: Researcher's survey results, 2020.

As conveyed through the results of statement 05, 54% of the majority agreed that they enjoy the class when doing comics while 8% strongly agreed. 26% had a neutral response. Whereas 12% disagreed with the statement and none of the students strongly disagreed at the pre-stage. After the application of teaching strategies at the post-stage majority of the students that is, 50% agreed while 34% strongly agreed to the statement. Only 10% of the participants disagreed. Through the outcome of the results, it can be deduced cooperative learning is more adorable when the assigned tasks are interesting. As a consequence unknowingly anxiety can be automatically evaded. Moreover, students would learn to use the language without being dependant only on theoretical knowledge. Comics based group work task also encourage students more positively to reduce anxiety. Interesting activities as such assist in the manipulation of a motivating and positive environment in the ESL classroom so that students would be encouraged and will be eager to speak in L2 without fear. Further being engaged in such activities students would enjoy doing the lesson which will break the boredom and the monotonous nature of the lesson. And students will be motivated to speak in English thus resulting in positive perceptions among students and cooperative learning being an effective teaching strategy in minimizing the speaking anxiety among students.

Responses for statement 06

Table 07: Responses for statement 06

Statement 06: I feel fluent speakers are dominating in the group	Pre-stage				
	SD	D	N	A	SA
No. of responses	0	4	14	23	9
As a percentage	0	8	28	46	18
Post Stage					
No. of responses	9	23	0	14	4
As a percentage	18	46	0	28	8

Source: Researcher's survey results, 2020.

According to table 07 displayed above at the pre-stage, 46% of the majority agreed and 18% strongly agreed on the domination by fluent speakers. Therefore, teachers should supervise the students while students are working in groups and motivate each member to produce his/her share in the assigned tasks. While 28% had a neutral response and 8% disagreed with the statement at the pre-stage. In contrary to the results obtained at the pre-stage, the outcome at the post-stage depicts that, 46% of the majority disagreed with the statement while 18% strongly disagreed. Moreover, 28% agreed and 8% strongly agreed while none of the respondents had a neutral response. This illustrates that the weak students also can be benefited from working with fluent speakers which is positive feedback. Through assigning mixed ability the low proficiency students can profit.

Responses for statement 07

Table 08: Responses for statement 07

Statement 07: I am afraid that my group members will laugh at me when I speak in English.	Pre-stage				
	SD	D	N	A	SA
No. of responses	4	10	23	12	1
As a percentage	8	20	46	24	2
Post Stage					
No. of responses	10	25	0	11	4
As a percentage	20	50	0	22	8

Source: Researcher's survey results, 2020.

According to statement 07 more than half of the students that is, 46% had a neutral response to the statement and 24% agreed that the students feel afraid that the group members will laugh at the moment they speak. Most frequently understudies stress around others giggling at them when they talk English. In this way, typically another source of their anxiety is fear of negative assessment that's the stress around how others see the speaker. Nevertheless, after the application of the teaching strategies 50% disagreed with the statement. This conveys that, fear and reluctance to speak in the target language was evaded through the application of the teaching strategy. Through the outcome of the results, it is evident that the students have favorable and positive attitudes towards cooperative based activities. Through such group activities, it had led to a positive transformation among the students. And had led students to reduce speaking anxiety.

Responses for statement 08 at pre-stage: I am less self-conscious when doing speaking activities with my group members

Figure 03: Responses for statement 08 at pre-stage
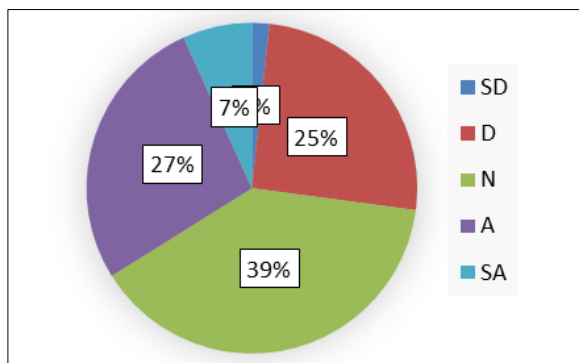
Source: Researcher's survey results, 2020.

According to figure 03 at the pre-stage, 39% had a neutral response to the statement, which means the students did not have any clue whether group activities will have any impact on speaking anxiety. While 27% of the students agreed. Whereas 7% of the students strongly agreed with the statement. Moreover, a total of 25% of the students disagreed with the fact.

Figure 04: Responses for statement 08 at the post-stage
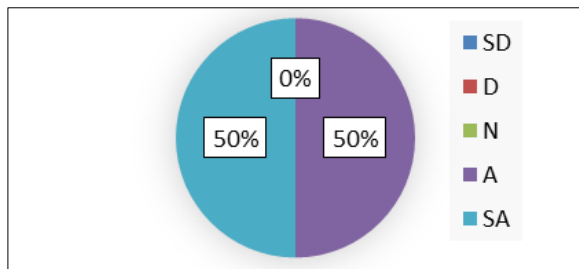
Source: Researcher's survey results, 2020.

At the post-stage, a clear difference can be observed through the above chart when compared with the initial situation. All most all the participants in the sample desire and agreed in doing speaking activities like group work as the students do not fear speaking in English among peers. Therefore, group work is a good teaching strategy that can be utilized by ESL teachers to make the students practice speaking and using the language. And students have positive perceptions of such activities.

Responses for statement 09

Figure 05: Responses for statement 09
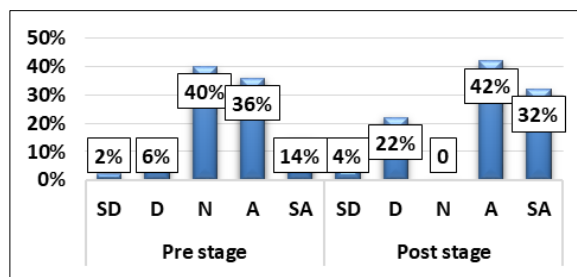
Source: Researcher's survey results, 2020.

As indicated by figure 05 clearly illustrates that at the pre-stage 40% of the majority had a neutral response. But at the post-stage majority of 42% agreed while 32% strongly agreed that cooperative learning is effective in mitigating L2 speaking anxiety.

DISCUSSION

The study found out that, group activities assisted the students to build up confidence by minimizing speaking anxiety. Before the application of teaching devices at the pre-stage most of the students in the class remained silent and were reluctant to speak. This illustrates the students were insecure. But after the application of teaching strategies a positive stance could be observed. (Table 01) In response to this, Tsui cited Nunan (1999) states that learners who need certainty around themselves and English essentially endure from communication dread. To achieve a successful learning outcome the teacher needs to build up confidence within the student. A teacher should know to build confidence within the student either through practical experience or following a teaching theory or philosophy. According to Tanveer (2007), the root cause of the dearth of confidence in students is due to their weak speaking abilities in English. Further, they added students are reluctant to speak in L2 since they strongly adhere to the fact that, their English is weak hence they avoid speaking in L2 by remaining silent. Another cause for the lack of confidence as Brown (1994) suggested is due to lack of encouragement by teachers. Browns further adds teachers do not realize the importance of convincing the students and provide them with motiva-

tion and encouragement by emphasizing the utmost importance of learning English. As a consequence L2 learners find the situation demotivating. Therefore it highlights the key importance of encouragement that assists to boost up confidence among students.

Speaking is the most anxiety proven skill in L2 learning. Anxiety in speaking can be minimized through the selected teaching strategy. Almost all of the respondents at the initial stage acknowledged that students are afraid that others will laugh at them when they speak in English. This advocates the fact that students do feel nervous and anxious when they are expected to speak in English in the classroom in front of others. Nevertheless, after the application of the teaching strategy, this situation was minimized. (Table 08) Thus speaking anxiety here illustrates the fear for public speaking. This sets a risk to the learners' self-concept and self-esteem in which students have created as competent and intelligent in their first language. (Horwitz et al., 1986). Any situation that generates a possibility or increases the possibilities of revealing their defects and deficiencies or incompetence in the target language, especially in front of others, tends to cause language anxiety. (Tanveer, 2005). In the language class, this could occur when students are asked to answer a question orally, during individual presentations or class presentations or when they are expected to give a short speech where it challenges the communicative abilities of the learner. This is also true when learners perceive the language classroom as a place of performance rather than a place of learning. Further reduction of anxiety and higher language proficiency was achieved as the learning environment provided opportunities for students to support, encourage, and develop patience and team spirit and further providing students with equal chances to speak. (Refer to table 03, 04, and 06) Students' anxiety reduction and higher language proficiency were achieved through the use of group work as a part of the language learning method. In such an atmosphere, students may feel more comfortable trying out new ideas.

It was also found out that group work was preferred by a majority of students in both pre and post-stage. Yet a majority of the students in the pre-stage were not aware of whether group work is stressful or not. Then after students by experience realized in the post-stage that group work as low anxiety activity. (Figure 03 and Figure 04) The result was in line with Young (1999) who found that pair and group work may contribute to a low-anxiety classroom circumstance. From the discoveries, it was decided that the charming environment can be made by the teacher and L2 learning anxiety is not something to be disregarded or considered as an issue for the students to handle or manage on their own. It is the teacher's duty and responsibility to discover procedures or strategies that do not cause any uneasiness in class, in turn, to assist the students to accomplish their learning objectives. The effectiveness of group work (Figure 05) demonstrates that most of the students have a strong preference for language classrooms being student-centered rather than being teacher-centered. Moreover, the classroom being a safe informal friendly comfortable zone assist students to overcome and reduce anxiety and to get themselves more involved in activities.

CONCLUSION

Summation of the findings

The main purpose of the study was to investigate students' perceptions of cooperative learning and the effectiveness of group work to mitigate speaking anxiety. By using pre and post questionnaires with the subjects, the effectiveness of the teaching strategy in reducing their anxiety was revealed.

In the seventh week, learners at the post-stage were confined into ten clusters with five individuals in each cluster. The members were inquired to do an errand among their groups and examine any given address together to assist each other accomplish an incredible understanding of what had been said or inquired. This methodology made a difference in making a collaborative environment within the dialect learning classroom, which leads to the lessening of learners' fear of making mistakes in English. Besides, the subjects within the exploratory bunch appeared extraordinary enhancement. Nearly all the learners have begun to take part and allow answers to the diverse assignments, as they were energized to grant their conclusions on any given subject. Students being engaged in speaking activities group-wise has led to reducing the learners' speaking anxiety as students are more comfortable and familiar among classmates which in turn creates a less anxious classroom environment where learners can succeed in utilizing the target dialect. This was clear within the post-survey, outlined by explanation 08 in figure 03 which demonstrates that learners' uneasiness was diminished when the students are among their peers.

Furthermore, the majority of the participants emphasize the fact doing speaking activities collaboratively with peers helps to evade anxiety. (Figure 02) Concurring to Johnson & Johnson (2005), cooperative learning is an instructing technique in which small teams comprising leaners with diverse levels of capacity, utilize an assortment of learning exercises to move forward along with their comprehending a subject. Each team member yields the capacity for learning limiting to what is being instructed nevertheless for making difference partners learn, hence generating an environment of accomplishment. Students work through the task until all gather individuals effectively get it and total it. Instructors can utilize this approach to fortify learners to obtain the necessary knowledge and awareness, as well as make interpersonal and group abilities. Each leaner features a distinctive foundation and capacity in English, which he or she can execute to the team. So that team members can complement each other's qualities and shortcomings in English. For illustration, one understudy might have a solid lexicon that can supply understudies with a strong foundation in linguistic use. Besides, destitute learners will gain an advantage from collaboration with way better ones, and competent students will feel pleased that they play a critical part in making a difference in weaker colleagues. Johnson, & Johnson (1995) delineates that performing collectively with classmates assist in the manipulation of an optimistic and steady environment. It upgrades openings to effectively develop and alter knowledge among learners and alleviate competitiveness and independence

Further, through the study, it was found out that creating a positive environment in the classroom aids in reducing speaking anxiety. The positive environment is created by applying teaching techniques rather than being glued to traditional methods which focus only on proving the book knowledge to students. Hence, it can be deduced that cooperative learning is successful in mitigating the speaking anxiety of L2 learners.

However, group work has its own drawbacks. Some participants stated that group activities generated an opportunity for the weakest students while allowing fluent speakers in

handling tasks. Therefore it is the responsibility of the lecturer to supervise whether each participant is engaged with the provided task. Moreover, some students do panic at the time of oral presentation even after the application of the teaching strategy. With the comments stated by the students, it was further excavated that though the students practice the language still they insist on the phobia of public speaking which is a natural phenomenon. Further, it was found out through quantitative that group work provides a chance for the students to idle. Therefore it is the responsibility of the teacher to monitor the students while they are engaged in group activities and supervise whether each member is participating.

Finally, by comparing the two stages (pre and post), it is obvious that the subjects at the pre-stage appeared extraordinary advancements and more certainty when talking within the target dialect due to the utilize of the anxiety-reducing instructing procedures.

Finally, this consider has illustrated solid prove that the learners within the pre-stage who endured a high level of uneasiness at the starting of the semester, were more willing to partake in any conversation task by the conclusion of the semester, they felt that they were more loosen and empowered to utilize the target dialect in speaking exercises. Utilizing the two instructing procedures made a difference in building less formal L2 classrooms where learners communicated their capacity to utilize the target dialect without any fear or tension.

Pedagogical implications

As discussed in section 5.1 speaking anxiety can anticipate L2 learners from accomplishing their objective of securing and utilizing the target dialect effectively in communicating with others. Hence, it is fundamental that L2 instructors address this issue and give everything they can to assist their students to overcome these sentiments of stress and inconvenience when conversing in English

As stated in the outcome of this consider, the L2 teachers' demeanors and the way they control their classrooms can cause or diminish their learners' speaking uneasiness. Therefore, the L2 educator ought to recognize the existing issue of her/his students' uneasiness while conversing in the second language. The instructor ought to distinguish the individuals with signs of stress and uneasiness and attempt to discover ways or strategies to assist them in accord with it. In this way, recognizing the issue can offer assistance within the handle of finding the sources and causes of L2 talking uneasiness. Besides, by examining the components causing this issue for the learners, L2 instructors can discover arrangements to speaking uneasiness by utilizing distinctive successful educating methodologies.

Based on the discoveries, L2 instructors ought to make a secure and strong environment that can energize learners to take part and express their conclusions on any given subject. This could be achieved by making a difference for the learners to induce to know their classmates, giving break even with chances to talk, and empower them to work agreeably with one another. This might offer assistance lessening the social weight which can cause sentiments of uneasiness and stretch to the learners in the L2 classroom.

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Role of Perceived Career Development Opportunities in Predicting Employee Commitment and Subjective Career Satisfaction of Middle Managers in Commercial Banks in Sri Lanka

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Abstract

In today's dynamic and uncertain employment climate, both employers and employees must play an active role in the development of employee careers. This research fills a gap in the existing literature by evaluating the role of organizational career development opportunities in predicting subjective career satisfaction and commitment of employees in a developing country context. Understanding the impact of career development opportunities provided by the employer and their effects on subjective career satisfaction and commitment is important to both the organization and the individual in the current uncertain and unpredictable employment climate. Data were collected, via an online survey, from 224 middle managers of commercial banks in Sri Lanka, and evaluated using multiple hierarchical regression analysis. The findings, which have important implications for policymakers, indicate that the employee's perception of the provision of career development opportunities by the organization promotes them to develop their subjective career satisfaction and commitment. These outcomes provide implications to the extended model of social cognitive career theory and Meyer and Allen's model of commitment. In terms of policy implications, the organizations should create a supportive career development culture to build a belief in employees that the organization they work for cares about their career needs. This belief can be built by considering individual employees' personal career goals in the implementation of career development programs and informing employees about available career development opportunities within the organization. The limitations of the study and the directions for future research are also discussed.

Keywords: Career development opportunities, Subjective career satisfaction, Affective commitment, Normative commitment, Sri Lanka

INTRODUCTION

In today's world of global connectedness and the dynamic, social, economic, and technological changes, the role of career development programs such as career counselling services is very crucial for both employers and employees (Kononiuka et al., 2020; Peila-Shuster et al., 2019). The contemporary concept of career is different from the traditional concept, in that the responsibility for managing careers has shifted from the employer to the employee and to a greater focus on career self-management (Arthur et al., 2005; De Vos et al., 2009; Stickland, 1996; Sullivan, 1999). Despite the growing importance of career self-management, organizational career management remains an integral responsibility of firms, since it forms the context in which career development takes place (Baruch, 1999; Eby, Allen, & Brinley, 2005).

Despite the declining importance of organizational career development in the current context, the extant literature reports some empirical gaps in the relationship between organizational career development opportunities and employee commitment and career satisfaction outcomes. Most of the studies report that the employee perceptions of or-

ganizational career development opportunities lead to career satisfaction (Allen, Eby, Poteet, Lentz, & Lima, 2004; Barnett & Bradley, 2007; Guan et al., 2015; Price & Reichert, 2017). However, Ng et al. (2005), in their meta-analysis, claimed that there is mixed evidence regarding the amount of variance in career satisfaction explained by organizational career development opportunities. This variability could be partly explained by the lack of empirical research that uniquely predicts subjective career satisfaction (Ng et al., 2005). In line with commitment related theories, Bambacas (2010, p. 821) suggests that "given the changing organizational circumstances in managing careers, there is a need for continued research into career management practices that elicit components of organizational commitment to the organization." More specifically, normative commitment is a little researched area in this relationship (Bambacas, 2010). As most of the prior studies in these areas have been conducted in developed countries, these findings may not be representative of other parts of the world. For example, some country-specific studies have found that there are dif-

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ferences between countries in terms of attitudes and behaviours (Chen & Francesco, 2000; Kickul et al., 2004; Yu & Egri, 2005) there is a necessity of implementing culturally sensitive career development practices (Storlie et al., 2016). Therefore, there is a necessity to conduct country-specific studies in the area of career development. While national culture is not explicitly treated as a relevant factor in this study, the fact that it is one of the very few studies of the relationship between organisational career development opportunities and commitment that was conducted in developing countries makes it significant in testing the generalizability of previous results (Kumar & Krishnaveni, 2008; Paul & Anantharam, 2004). More studies are likely needed in other regions to verify if these findings can be generalized to other countries.

RESEARCH OBJECTIVES

Based on the afore discussed gaps in the extant literature, the overarching problem of this study was to determine whether the organizational career development opportunities offered by organizations have a positive effect on employee level outcomes of commitment and subjective career satisfaction. The study established three specific objectives as given below to address the overarching problem of the study.

1. To study the effect of organizational career development opportunities on affective commitment.

2. To find out the impact of organizational career development opportunities on normative commitment.

3. To examine the role of organizational career development opportunities on subjective career satisfaction.

The study made four main significant contributions. First, the western findings were verified by conducting the study in a developing country context. Second, the study addressed the claim of prior studies about the necessity of conducting more studies in this area of study (e.g., Bambacas, 2010; Bambacas and Bordia, 2009). Third, the findings provided implications to the policymakers and HR practitioners. Finally, the study provided implications to the theories and models such as the extended model of social cognitive career theory (Lent and Brown, 2006) and the commitment model of Meyer and Allen (1997).

LITERATURE REVIEW

Role of Organizational Support in Influencing Employee Outcomes

In order to better understand the relationship between perceived career development opportunities and the employee outcomes of commitment and career satisfaction, the tenets of the extended model of social cognitive career theory of Lent and Brown (2006) and the proactive behaviour model as applied to the career domain (Crant, 2000) were consulted. These models unpack how organizational career development opportunities and employee outcomes of career satisfaction and commitment are related. The extended model of social cognitive career theory (Lent & Brown, 2006) proposes that people are more likely to take actions to achieve their goals if they have access to environmental (organizational) support and resources relevant to the pursuit of these goals. The extended model of social cognitive career theory (Lent & Brown, 2006) suggests that the organizational career development opportunities belong to a class of environmental support and resource variables that are specifically relevant to the pursuit of an individual's career

goals. Therefore, organizational career development opportunities provide social and material supports for one's personal goals are likely to be significant predictors of employee outcomes such as career satisfaction (Barnett & Bradley, 2007; Lent & Brown, 2006, Ng et al; 2005) and employee commitment (Bashir & Ramay, 2008; Crant, 2000; Paul & Anantharaman, 2004).

Organizational Career Development Opportunities (OCDO) and Commitment

As suggested by the theory of proactive behaviour (Crant, 2000), contextual/environmental support such as organizational career development opportunities, positively affects job attitudes such as employee commitment. Moreover, research suggests that the receipt of organizational support for career development will contribute to the fulfillment of the psychological contract between employer and employee. Consequently, as a means of reciprocation, the employees feel committed to the organization (Sturges et al., 2005). In line with the prediction of the theory of proactive behaviour, together with Meyer and Allen's (1997) model of commitment and social exchange theory (Blau, 1964), HRM practices, including those that focus on career development, are the most frequently examined predictors of organizational commitment (Paul & Anantharaman, 2004). The literature suggests that career development enhances employee career opportunities within the organization and ultimately contributes to employee commitment (Paul & Anantharaman, 2004). More importantly, employee career development opportunities that are managed by the organization are important factors in the management literature, since they have a strong relationship to positive organizational outcomes such as commitment. OCDO has been shown to result in higher levels of commitment among employees (Bashir & Ramay, 2008; Paul & Anantharaman, 2004).

Prior studies have found that the employee perceptions of OCDO are positively related to affective attachment to the organization (Bambacas, 2010; Bambacas & Bordia, 2009; De Vos et al., Jongseok, Youngbae, & Tae-Yeol, 2009; Kumar & Krishnaveni, 2008; Paul & Anantharaman, 2004; Sturges et al., 2005; Sturges, Guest, Conway, & Davey, 2002). For example, Sturges et al. (2005) collected data through a survey of 151 employees of a new media company in the UK and revealed that informal career development help, such as being given career advice when needed, is positively associated with the affective commitment of employees. In a previous longitudinal study of 212 graduates - in the first ten years of their career - sampled from five large UK organizations, Sturges et al. (2002) found that the career management help is given to employees through formal interventions, such as training, orientations, and personal development plans are positively related to their affective commitment. However, this study did not find a significant relationship between informal help for career development (impartial career advice and introduction by the organization to people who might help with career development) and affective commitment.

Bambacas and Bordia (2009) surveyed 196 managers who were members of a professional association of general managers, the Australian Institute of Management, in South Australia. Organizational career development was measured by the type of assistance organizations offered individuals in their career development, and investigated career development practices, such as the provision of challenging assign-

ments, career counselling, and support for career development. This study found that these career development opportunities were positively associated with affective commitment. The other studies mentioned above have also used similar types of "assistance" to operationalise the OCDO, whereas the affective commitment was measured with the affective commitment scale of Meyer and Allen (1991). These studies were based on a diverse set of organizations: large corporations, auto component manufacturing firms, and software companies.

Previous research also suggests that individuals tend to feel an obligation to stay with the organization (normative commitment) when they are provided with career development opportunities (Bambacas, 2010; Kumar & Krishnaveni, 2008; Meyer & Allen, 1997). Bambacas (2010) measured organizational career development opportunities in terms of career development assistance such as work assignments, career counselling, and being provided with information about the organization and the industry. Kumar and Krishnaveni (2008) found that career planning is positively associated with the normative commitment of employees. Meyer and Allen (1997) based on a review of literature, claimed that HRM practices such as career management are positively associated with normative commitment. The theoretical predictions and empirical findings discussed in this section led to establish the following hypotheses.

Hypothesis 1: Organizational career development opportunities have positive effects on affective commitment.

Hypothesis 2: Organizational career development opportunities have positive effects on normative commitment.

Organizational Career Development Opportunities and Subjective Career Satisfaction

Career satisfaction measures the extent to which individuals believe their career progress is consistent with their own goals, values, and performances (Erdogan et al., 2004; Heslin, 2003; Ng et al., 2005; Seibert & Kraimer, 2001). Career satisfaction is often measured using the career satisfaction scale developed by Greenhaus et al. (1990). The vast majority of studies measuring career satisfaction have used this scale (e.g. Arthur et al., 2005; Aryee & Chang, 1994; Barnett & Bradley, 2007).

In relation to the direct link between OCDO and career satisfaction, as predicted by the extended model of social cognitive career theory (Lent & Brown, 2006) and the theory of proactive behaviour (Crant, 1983), career literature provides evidence for a positive relationship between OCDO and the career satisfaction of employees (Allen, Eby, Poteet, Lentz, & Lima, 2004; Barnett & Bradley, 2007; Guan et al., 2015; Guan et al., 2014; Lent & Brown, 2006; Ng et al., 2005; Orpen, 1994; Pazy, 1988).

Orpen (1994) surveyed 129 employees working in a variety of organizations in the UK, in both the private and public sectors. This study was based on the supervisory and middle managerial positions and found that the career development policies and practices (feedback, provision of information, career plans, and job rotation) are jointly related to career satisfaction. This study developed a 35 item career development questionnaire based on a workshop conducted with 10 randomly selected personnel managers. Pazy (1988) operationalized organizational career development in terms of formal career policies and procedures in the organization (selection, admission, assessment, promotion, training, and development), and found that these policies and procedures together impact career satisfaction.

This finding is related to a survey conducted based on the employees of a variety of US organizations.

Lent and Brown (2006), based on a review of literature relating to work satisfaction in a vocational and educational setting, suggest that goal-specific environmental supports and resources, such as social and material support, promote work satisfaction. This study operationally defined career satisfaction as overall feeling about one's job.

Based on a survey of 90 private and public sector employees in Australia, Barnett and Bradley (2007) found that there is a positive relationship between different kinds of organizational career development help, formal interventions such as career training, orientation, and being given a personal development plan as well as informal help provided by the organization, such as impartial career advice and introduction to people who might help with career development and employees' subjective career satisfaction. That is, goal-specific environmental support and resources that provide social and material provision for employees' personal goals have been identified as major predictors of career satisfaction (Barnett & Bradley, 2007). Barnett and Bradley (2007) measured OCDO by using the scale of organizational support for career development developed by Sturges et al. (2002). Therefore, the organizational support for the career development of this study includes the programs, processes, and assistance provided by the organizations to support and enhance their employees' career success. The career satisfaction was measured with the subjective career satisfaction scale of Greenhaus et al. (1990). Two recent surveys of employees in China, (Guan et al., 2014; Guan et al., 2015) also have found that the OCDOs are positively related to the career satisfaction of employees.

Furthermore, support for a positive relationship between OCDO and career satisfaction was found in two meta-analyses (Allen et al., 2004; Ng et al., 2005). Allen et al. (2004) found that individuals who participated in career mentoring were more satisfied with their careers than non-mentored individuals. Similarly, Ng et al. (2005) revealed that career development opportunities are positively associated with the career satisfaction of employees. Career development in this study refers to career planning, career sponsorship (career assistance received from senior employees), supervisor support, training and skill development, and organizational resources.

In addition to these studies, the career literature provides evidence for a positive relationship between individual career development practices and subjective career satisfaction (Arthur et al., 2005; Aryee & Chay, 1994). Based on a review of the literature, Arthur et al. (2005) found that there is a positive relationship between mentoring, or social support, and subjective career satisfaction. Aryee and Chay (1994) administered a structured survey to 164 professional and managerial employees in a range of private and public sector organizations in Singapore. This study found that organizational career development opportunities, in terms of career-oriented mentoring (coaching, sponsorship, protection, challenging assignments, and exposure), were positively associated with subjective career satisfaction of employees. Several observations are made about these studies. First, Ng et al. (2005), in their meta-analysis, claimed that there is mixed evidence regarding the amount of variance in career satisfaction explained by OCDO. This variability could be partly explained by the lack of empirical research that uniquely predicts subjective career satisfaction (Ng et al.,

2005). This may be due to the confounding of objective career success and subjective career success. Career success is defined as the accumulated positive work and psychological outcomes resulting from one's work experiences (Seibert & Kraimer, 2001). Researchers often operationalize career success in one of two ways. The first includes variables that measure objective or extrinsic career success (e.g., Gutteridge, 1973). These include indicators of career success that can be seen and therefore evaluated objectively by others, such as salary attainment and the number of promotions in one's career (Judge et al., 1995). The second way that career success is operationalized is by variables that measure subjective or intrinsic career success (e.g., Judge et al., 1995). Such variables capture individuals' subjective judgments about their career attainments, such as job and career satisfaction (e.g., Burke, 2007; Judge et al., 1999). Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from an appraisal of one's job or job experiences" (Loke, 1976, p.1300). Conversely, career satisfaction is derived from an individual's appraisal of his/her career development and advancement across many jobs (Greenhaus, Parasuraman, &Wormley, 1990). For example, Joo and Park (2010) defined career satisfaction as an indicator of subjective career success and further measured career satisfaction by using a scale developed by Greenhaus, Parasuraman, and Wormley (1990). Some of the items included in this scale are: "I am satisfied with the progress I have made towards meeting my goals for income" and "I am satisfied with the progress I have made for advancement" (Greenhaus et al., 1990). The vast majority of career studies have also used the Greenhaus et al. (1990) scale for measuring subjective career satisfaction (e.g. Arthur et al., 2005; Aryee & Chang, 1994; Barnett & Bradley, 2007). Numerous studies have operationally defined subjective career success either as job satisfaction or career satisfaction (Erdogan et al., 2004; Heslin, 2003; Ngo, Lau, & Foley, 2008; Seibert & Kraimer, 2001). In a review of 49 career success studies, Arthur et al. (2005) identified 20 studies that included measures of career satisfaction, while 11 studies included measures of job satisfaction to measure subjective career success. Heslin (2005) argued that job satisfaction does not cover satisfaction over a longer period, including a wide range of outcomes, such as sense of purpose and work-life balance, and is therefore not an appropriate proxy for career success.

Career satisfaction is commonly considered to be the subjective version of career success, defining individuals' satisfaction with their career accomplishments (Judge, Cable, Boudreau, & Bretz, 1995). When career satisfaction has been operationalised, it measures the extent to which employees believe that their career progress is in agreement with their own goals, values, and preferences (Erdogan et al., 2004). These limitations can be dealt with by defining and measuring objective career success by using supplementary measures of subjective career success (Barnett & Bradley, 2007).

Gattiker and Larwood (1988) argued that traditional career studies are focused on objective measures of career success, i.e. outcomes of the work experience such as status, promotion, and salary, all of which are objectively observable. Some objective career success measures are not relevant today because of constraints imposed by firms in providing these opportunities (Heslin, 2005). Measures of subjective career satisfaction may be a more appropriate indicator of career outcomes in the contemporary environment. The

change in focus, from objective career satisfaction to subjective career satisfaction, is that career satisfaction is internal rather than external in the new career context of career self-management (Hall & Chandler, 2005).

Second, most of the studies to date have been conducted in developed countries such as the USA, UK, Australia, and Singapore. As discussed previously, there are differences between countries in terms of attitudes and behaviours, limiting the generalizability of prior literature outcomes to other country contexts.

Overall, this theoretical discussion indicates that "subjective career satisfaction" is the most suited dimension for subjective career success. A lack of studies in developing economies, mixed results about the amount of variance in the relationship between OCDO and career satisfaction, and limited studies of the relationship between OCDO and subjective career satisfaction were the research gaps in the extant literature. Based on the prediction of the extended model of the social cognitive career theory and the prior empirical findings, the following hypothesis was established.

Hypothesis 3: Organizational career development opportunities have a positive effect on subjective career satisfaction.

Based on the literature reviewed in this section the hypothetical relationships were established between the variables, and the following conceptual framework was presented which guided the study. According to the conceptual framework, the variable 'organizational career development opportunities' is the predictor variable whereas affective commitment, normative commitment, and subjective career satisfaction are the outcome variables.

Figure 1: Conceptual Framework
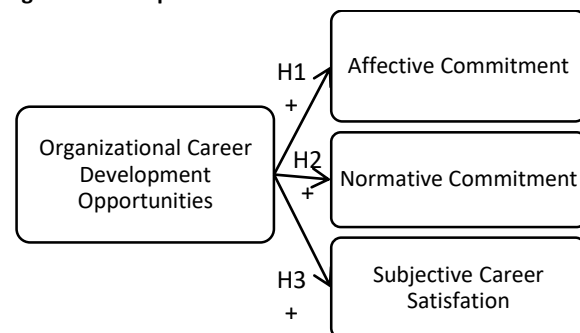
METHOD

Sample and data collection procedure

The current study was based on the middle-level managers of licensed commercial banks in Sri Lanka. Commercial banks in Sri Lanka were selected given that the financial sector is an important contributor to Sri Lanka's economy contributing 9.6% to the Gross Domestic Product and 1.9% to national employment (Central Bank of Sri Lanka, Annual Report, 2019). The sampling frame of this study refers to all of the middle-level managers in licensed commercial banks. 300 surveys were distributed among middle managers in local banks whereas 100 surveys were distributed among middle managers in foreign banks. Out of 400 surveys, only 224 completed surveys were returned.

All the survey measures were chosen from prior research based on their established validity and prior application within the area of career development. Measurement scales relating to affective commitment and normative commitment were measured with a seven-point scale with 7, representing strongly agree and 1, representing strongly disagree.

All other scales used a five-point scale where 5, represented strongly agree and 1, represented strongly disagree.

Operationalization of Variables

This section provides operational definitions and measurement information for the variables in the study.

Perceived organizational career development opportunities. Employee perceptions of career development opportunities were defined as the opportunities that organizations provide to advance an individual employee's career prospects within the organization (King, 2003). Employees were asked about the extent to which they have experienced different kinds of organizational career development opportunities available within the organization. The dimensions of career development opportunities included career-oriented training, provision of a personal development plan, supervisor feedback, and support from other employees (Sturges et al., 2002). A scale previously used and validated by Sturges et al. (2002) was used to measure the employee perceptions of organizational career development opportunities and included items such as "I have received training to help develop my career" and "I have been given a personal development plan". This scale includes dimensions such as

Career satisfaction. Career satisfaction was operationally defined as the extent to which individuals believe that their career progression is consistent with their own goals, values, and preferences (Erdogan et al., 2004; Heslin, 2003; Seibert & Kraimer, 2001). The dimensions of subjective career satisfaction included satisfaction with own success, satisfaction with achieved career goals, satisfaction with income, and the satisfaction with new skills developed (Greenhaus et al., 1990). Most of the prior studies have used the career satisfaction scale developed and validated by Greenhaus et al. (1990) to measure career satisfaction (∞=.88). This scale was used in this study. The scale included items such as: "I am satisfied with the success I have achieved in my career," and "I am satisfied with the progress I have made towards meeting my overall career goals."

Affective commitment and normative commitment. Meyer and Allen's (1997) definitions for affective and normative commitment were adhered to in this study. An affective commitment was measured in terms of willingness to stay with the firm because of emotional attachment to it and identification with it as well as involvement in the organization, whereas normative commitment was measured in terms of the employees' feeling of a moral obligation to stay

with the organization. Thus, 'the extent of emotional attachment to the organization' was the dimension of affective commitment whereas 'the extent of moral obligation to stay with the current employee' was the dimension of normative commitment (Meyer & Allen, 1997). Many career studies to date (e.g., Joo & Park, 2010; Maurer & Lippstreu, 2008; Sturges et al, 2002) have utilized the affective commitment scale developed by Meyer, Allen, and Smith (1993). Consistent with prior research, this study adopted Meyer et al. (1993) six-item questionnaire to measure affective commitment (∞=.86); it included items such as: "I would be very happy to spend the rest of my career life with this organization." and "this organization has a great deal of personal meaning for me".

Similarly, prior studies (e.g. Bambacas, 2010; Bambacas& Bordia, 2009) have measured normative commitment with the six-item normative commitment scale (∞=89) developed by Meyer et al., (1993). The current study has adopted this scale to measure normative commitment; it included items such as: "I would feel guilty if I left my organization now." and "I would not leave my organisation right now because I have a sense of obligation to the people in it."

DATA ANALYSIS PROCEDURE

The first step of the data analysis was a confirmatory factor analysis to verify whether the survey responses fall into the pre-determined factor structure. This step was followed since the study employed questionnaires developed and validated by the other researchers. The second step of the data analysis involved a hierarchical regression analysis to test the hypotheses of the study. Hierarchical regression analysis allowed controlling the effects of demographic variables on the proposed relationships between variables.

RESULTS AND DISCUSSION

Demographics of Respondents

After dealing with missing data, 224 responses out of 408 surveys distributed were retained for the analysis, which resulted in a 56% response rate. The demographic profile of respondents, such as age and tenure, are presented in Table 1. Out of the 224 responses retained for the analysis, 167 employees (76%) were male who represented middle management level employees.

Table 1: Respondents Age and Employment Period

Age		Employment Period	
Years	Percentage of Employees	Years	Percentage of Employees
18-25	3.2	<1	2.7
26-33	38.0	1-5	23.8
34-41	33.5	6-10	30.2
42-49	14.9	11-15	21.2
50-55	8.4	16-20	12.2
55<	2.0	21<	9.9

Source: Survey data, 2020.

Results of the Factor Analysis

As the conceptual structure of the study was derived from work in prior studies and utilised previously validated measurement scales, the study used the confirmatory factor analysis (CFA). The purpose of CFA was to test whether the collected data fit with the hypothesized measurement model. The following measures which were proposed by Hair et al.,

(2018) were used to interpret the correlation matrix relating to the factor analysis.

➤ Visual inspection of correlations in the component correlation matrix shows that the factors are interrelated to some degree. The fact that these correlations exist tells us that the constructs measured are interrelated.

> Bartlett's test of sphericity was used to test the presence of correlations among variables. A statistically significant Bartlett's test of sphericity (sig.<.05) indicates that sufficient correlations exist among variables. The overall measure of sampling adequacy (MSA) for the set of variables included in the analysis was 0.869, which exceeds the minimum requirement of 0.50 for overall MSA. The probability associated with Bartlett's Test of Sphericity was <0.001which was less than 0.05. Therefore, the overall measure of sampling adequacy is acceptable.

Using a CFA with oblique rotation (Costello & Osborne, 2005; Hair et al., 2018; Tabachnick & Fidell, 2013), four factors with Eigenvalues greater than 1 were identified. The cumulative proportion of variance criteria met with eight components to satisfy the criterion of explaining 60% or more of the total variance. A four components solution explained 65.37% of the total variance.

The communality value for each variable was higher than 0.50. Consequently, all of the items were retained in the analysis, since factor solutions represent a significant proportion of variance in the original variables. As suggested by Hair et al. (2018) all loadings above ± .40 were considered as factor loadings with practical significance. The strong conceptual foundation for the anticipated structure and its rationale provided the basis for the interpretation of the factor structure (Hair et al., 2010). The factor solution is given in Table 2. The factors indicated in this table were named based on underlying conceptual dimensions and results from previous studies.

Table: 2: Rotated Factor Loading Matrix

	CS	AC	NC	OCDO
I have received training to help develop my career				.709
My supervisor has made sure that I get the right training needed to develop my career.				.768
I have been taught the things I need to know in order to advance in this organization.				.595
I have been given a personal development plan.				.609
I have been given work that has developed my skills for the future.				.622
My supervisor has given me clear feedback on my performance.				.570
I have been given impartial career advice when I needed it.				.662
I have been introduced to people at work who are prepared to help me develop my career.				.621
I have been given a mentor to help with my career development.				.584
My supervisor has introduced me to people who will help my career.				.641
I am satisfied with the success I have achieved in my career.	.786			
I am satisfied with the progress I have made towards meeting my overall career goals.	.838			
I am satisfied with the progress I have made towards achieving my income target.	.553			
I am satisfied with the progress I have made towards meeting my goals for career advancement.	.872			
I am satisfied with the progress I have made towards meeting my goals for the development of new skills.	.852			
I would be very happy to spend the rest of my career life with this organization.		.433		
I feel as if this organization's problems are my own.		.520		
I do not feel a strong sense of "belonging" to my organization. (R)		.918		
I do not feel "emotionally attached" to this organization. (R)		.905		
I do not feel like "part of the family" at my organization. (R)		.926		
This organization has a great deal of personal meaning/importance for me.		.948		
I do not feel any obligation to remain with my current employer. (R)			-.661	
Even if it were to my advantage, I do not feel it would be right to leave my organization right now.			-.792	
I would feel guilty if I left my organization now.			-.756	
This organization deserves my loyalty.			-.728	
I would not leave my organization right now because I have a sense of obligation to the people in it.			-.772	
I owe a great deal to my organization.			-.674	

Notes:
  a. *Factor loadings <.4 are suppressed d. CS= Creer satisfaction*
  b. *AC= Affective commitment e. NC= Normative commitment*
  c. *OCDO= Organisational career development opportunities*

Source: Survey data, 2020.

Correlations

The mean values, standard deviations, correlations, and Cronbach's alpha coefficients are presented in Table 3. The mean age of respondents was 42.5 years and the average number of years individuals had been with their organization was eight. Values on the diagonal represent Cronbach's alpha coefficients, which are above the generally agreed upon lower limit of 0.80. Therefore, each scale measures study variables with consistency.

Table-3: Correlation Matrix of Variables

	Mean	S.D.	1	2	3	4	5	6
1. Age (Years)	42.5	15.7						
2. Gender	N/A	NA	-.198**					
3. Tenure (Years)	8	3.1	.587**	.051				
4. OCDO	3.71	.68	-.082	.074	.068	.897		
5. Affective Commitment	3.6	.74	.129	.120	.211**	.357**	.835	
6. Normative Commitment	3.64	.82	.104	.148*	.157*	.424**	.603**	.857
7. Career Satisfaction	3.86	.64	-.036	-.021	-.061	.403**	.383**	.452**	.878

Notes: *$p<.05$, **$p<.01$, Alpha scores are presented on the diagonal

Source: Survey data, 2020.

Testing Hypotheses

Hypothesis 1 of the study predicts that employee perception of OCDO has a positive effect on affective commitment whereas Hypothesis 2 of the study predicts that the employee perception of OCDO has a positive effect on normative commitment. Table 4 shows that OCDO has a significant positive relationship with affective commitment (β =.352, $p < .05$) and normative commitment (β =.429, $p < .05$) when the effects of the demographic variables were controlled in Step 1 of the hierarchical regression. In accordance with the R Square values, 16% of the variance of affective commitment, and 22% of the normative commitment is explained by the OCDO. Therefore, the first two hypotheses were supported by this study.

Hypothesis 3 of the study predicted that employee perceptions of OCDO have a positive effect on subjective career satisfaction. As shown in Table 3, there is a significant positive relationship between OCDO and subjective career satisfaction (β =.386, $p < .05$). 19.8% variance of subjective career satisfaction is explained by the OCDO (Adjusted R Square=0.198). Therefore, Hypothesis-3 of the study is accepted.

Table 4: Hierarchical Regression Examining the Impact of OCDO on Affective Commitment, Normative Commitment and Subjective Career Satisfaction

	Affective Commitment		Affective Commitment		Subjective Career Satisfaction	
Predictors (Beta Coefficients):	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Gender			.139*	.109	-.021	.013
Tenure	.211*	.187*	.160*	.134*	-.061	.027*
OCDO		.352*		.429*		.386*
F	10.217*	22.078*	5.355*	21.360*	3.731*	16.382*
Adj. R-Square	.040	.160	.038	.219	.052	.198
R-Square change		.120		.183		.145

Note: *=$p<.05$

Source: Source: Survey data, 2020.

As expected, the organization's provision of career development opportunities has a positive effect on both the employees' emotional attachment (affective commitment) to the organization and their feelings of obligation to the organization (normative commitment). The significant positive effect of OCDO on affective commitment found in this study supports prior literature (Bambacas, 2010; Bambacas & Bordia, 2009; De Vos et al., Jongseok, Youngbae, & Tae-Yeol, 2009; Kumar & Krishnaveni, 2008; Paul & Ananntharaman, 2004; Sturges et al., 2005; Sturges, Guest, Conway, & Davey, 2002). This study also supports the previous literature, which suggests that individuals tend to feel an obligation to stay with the organization when they are provided with career development opportunities (Bambacas, 2010; Kumar and Krishnaveni, 2008; Meyer & Allen, 1997). As expected, the organization's provision of career development opportunities has a positive effect on subjective career satisfaction. The finding here is that it enhances satisfaction in addition to creating commitment. The positive relationship between OCDO and subjective career satisfaction implies that the employees believe that their career progression is consistent with their own goals, values, and preferences as a result of receiving opportunities for their career development. This outcome of the study supports the prior literature (Allen, Eby, Poteet, Lentz, & Lima, 2004; Barnett & Bradley, 2007; Guan et al., 2015; Guan et al., 2014; Lent & Brown, 2006; Ng et al., 2005; Orpen, 1994; Pazy, 1988). Two recent studies also support this research outcome (Guan et al., 2014; Guan et al., 2015). Furthermore, this outcome provides support for a positive relationship between OCDO and career satisfaction found in two meta-analyses (Allen et al., 2004; Ng et al., 2005). Also, the current study provides general support for a positive relationship between individual career development practices and subjective career satisfaction found in prior studies (Arthur et al., 2005; Aryee & Chay, 1994). However, the current study contributes by addressing some deficiencies in extant literature. First, Ng et al. (2005), in their meta-analysis, claimed that there is mixed evidence regarding the amount of variance in career satisfaction explained by OCDO. This variability could partly be explained by the lack of empirical research that uniquely predicts subjective career satisfaction (Ng et al., 2005). In response to this gap, the current finding broadened the knowledge in this area of inquiry. Second, most of the studies to date have been conducted in developed countries such as the USA, UK, Australia, and Singapore. As discussed previously, there are differences between countries in terms of attitudes and behaviours, limiting the generalizability of prior literature outcomes to other country contexts. Though this deficiency was addressed, it was found that the finding is consistent with what was found in developed countries.

Theoretical implications

The results of the study provide implications to the extended model of social cognitive career theory (Lent & Brown, 2006) and the theory of proactive behaviour (Crant, 2000). That is, referring to the extended model of social cognitive career theory (Lent & Brown, 2006), organisational support for career development needs to be specifically relevant to an individual's career goals. Therefore, organisational career development opportunities, which provide social and material support for personal career goals, are likely to be significant predictors of career satisfaction (Barnett & Bradley, 2007; Lent & Brown, 2006). As suggested by the theory of proactive behaviour (Crant, 2000), contextual/environmental support such as organisational career development opportunities, positively affects job attitudes such as employee commitment (Cicekli and Kabasakal, 2017). Moreover, the research outcomes suggest that the receipt of organisational support for career development will contribute to the fulfilment of the psychological contract between employer and employee binding both parties with some reciprocal obligations. Consequently, as a means of reciprocation, the employees feel committed to the organisation (Sturges et al., 2005).

Policy implications

The results of the study highlight the importance of building a supportive culture for employee career development. That is, in a career development culture, employees are expected to grow, are supported, and are rewarded for their success (Simonsen, 1997). One way of creating such a supportive career development culture is to build a belief in employees that the organization they work for cares about their career needs (Kraimer & Wayne, 2004). This belief can be built by considering individual employees' personal career goals in the implementation of career development programs and informing employees about available career development opportunities within the organization (Sturges et al., 2005, Sturges et al., 2000). Moreover, just the provision of career development opportunities is not enough. The managers should convince employees that they take an interest in their employees' career development. For this, supervisors should always make sure that their employees get the right training, that employees get impartial career advice, and introduce employees to other organizational members who can assist with their careers (Sturges et al., 2005, Sturges et al., 2000).

On a policy level, budgetary allocations for networking and recognition events may be made by the organization. Also, many companies have moved to web-based training in the interest of increased cost-effectiveness. But this is a solitary process. Therefore, group training, particularly off-site, may cost more, but it provides networking opportunities, and may also be seen as recognition. These sorts of policy changes may be implemented via HR managers and through other managers. The managers who implement these policies should be rewarded for providing opportunities for their staff. Also, the employees would feel a reciprocal obligation (Rousseau, 1989) towards the organization because of receiving these types of support. That is, motivationally focused organizational actions such as career-oriented organizational support, will enhance employees' willingness to fully invest themselves physically, cognitively, and emotionally into their work roles (employee engagement) (Barrick et al., 2015). The outcome would be an emotional attachment to the organization, the feeling of an obligation to stay with the organization (Allen & Meyer, 1997), and a belief that their career progression is consistent with their career goals and preferences (Barnett & Bradley, 2007; Crant, 2000; Lent

& Brown, 2006). Overall, policymakers can learn from the study that they should build reciprocal obligations in employees by considering employee career goals in making career decisions and by regularly informing employees of all available career development opportunities within the organization so that the employees will have reasons to believe that the organization cares about their career needs. The other way that the organization can build a supportive career culture is to provide actual career development opportunities and practices, such as career training, provision of personal career development plans, provision of performance feedback by supervisors, career advice, provision of work that enhances skills for the future, and mentoring (Sturges et al., 2005; Sturges et al., 2000).

Study limitations and directions for future research

Although this study has made some important contributions to the theory and practice of career development and career self-management, it has some minor limitations. The selected sample of employees consisted mainly of middle managers of commercial banks in Sri Lanka. These managers usually have more opportunities for career development, so their expectations may be quite different from employees at different levels in the organization. Therefore, there is a need to investigate employees at different levels of the organization and to see how the provision of career development opportunities, or lack thereof, influences their perceptions of commitment and career satisfaction. This limitation may affect the generalizability of the findings to other managerial and non-managerial levels within the same industry. The study addresses this limitation to a certain extent with a broad definition given for the middle manager. That is middle managers of this study consist of employment categories such as branch manager, assistant manager, manager, and sectional head.

Because of the time factor, the research was limited to a cross-sectional study, which means that it is not possible to conclude cause and effect among items based on employee responses. The research was also limited to a random sample of middle-level managers in commercial banks in Sri Lanka, and data were gathered only via a survey. Therefore, results are subject to common method bias and common source. However, to reduce this effect, the item ambiguity was minimized through minor modifications in the questionnaire. Moreover, prior research suggests that showing significant correlations in previous studies may enhance confidence in the study's results (Craig, Dunn, & Hult, 2012). In line with this argument, the results of the current study show significant correlations between variables confirming the validity of the results. Furthermore, steps were taken to minimize or eliminate potential effects from self-report bias by collecting data independently of respondents' employers to reduce motives to respond favorably. That is, data were collected over the internet so that respondents could complete them in private and had control over their progress through the instruments (Richman et al., 1999).

The use of a career satisfaction scale to measure subjective career satisfaction may be another limitation of the study. While the standardized scale is used widely and obtains acceptable levels of internal consistency (Greenhaus et al., 1990), it may be a deficient measure of the subjective career satisfaction construct. The career satisfaction scale includes items, such as satisfaction with income and advancement goals, which may not be the most important criteria used by individuals to assess their career satisfaction (Heslin, 2005).

Since this empirical model was tested in a developing country, future studies should investigate the same in different country contexts. In addition to the need for exploring these findings, in different country contexts, there should be continued research into the relationship between organizational career development opportunities and normative commitment, since limited studies have investigated this relationship. Also, future studies could be conducted with a greater representation of different levels of employees in an organizational hierarchy to improve the generalizability of findings to other contexts. In addition, to increase the generalizability, more studies in various industries representing diverse employee groups are needed. To avoid bias due to a common source, future studies should be conducted based on information from various sources, such as employees and their seniors and juniors. Moreover, a qualitative study is worthwhile to provide further support for the findings of this study. Affective commitment, normative commitment, and subjective career satisfaction are not the only employee outcomes affected by organizational career interventions and individual career self-management behaviours. Therefore, this study could be expanded by the inclusion of other outcome variables such as continuance commitment and subjective motivation. Future studies could also replace organizational commitment with career commitment since the literature provides indications of a direct relationship between career development and career commitment (Colarelli & Bishop, 1990). "Career commitment means the strength of one's motivation to work in a chosen career role" (Hall, 1971, p.59). Chang (1999) found that career commitment mediates the relationship between employee perceptions of supervisor support and affective commitment. A further interesting area for future research is to incorporate cultural values, beliefs, and attitudes as antecedents of organizational career development, since cross-cultural studies have identified differences between cultures in behaviour and attitudes (Kickul et al., 2004; Yu & Egri, 2005).

CONCLUSION

The results revealed that the organizational career development opportunities have a positive effect on employee outcomes of affective and normative commitment and career satisfaction. While addressing the theoretical gaps in the extant literature, this study is one of the first investigations conducted in a developing economy to find whether the organizational career development opportunities lead to enhanced employee commitment and career satisfaction. Thus, the current study makes significant contributions to the theory, identifies avenues for further research, and will be of interest to policymakers in management practice.

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The Effects of Public Debt on Economic Growth in Sri Lanka

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Abstract

The substantial literature has observed the relationship between public debt and economic growth in different countries and the performances of public debt on economic growth differed from country to country. Therefore, it is essential to have unique researches for each country. Hence, this study aims to identify the relationship between public debt and economic growth in Sri Lanka using four decades' latest data. This was examined using econometrics techniques and annual time series data from 1980 to 2019 aiming to fulfill the objective of the effects of public debt on economic growth in Sri Lanka. The Jacque Bera (JB) and Augmented Dickey-Fuller (ADF) tests are used to investigate the properties of the macroeconomic time series of normality and unit-roots respectively. The Engel-Ganger residual-based model used to investigate the long-run relationship between variables and the short-run relationship of variables investigated using the Error Correlation Model (ECM). The study shows that both public domestic debt and public external debt have expanded in Sri Lanka in the studying period. Further, public external debt became closer to the public domestic debt during that period. Public domestic debt, public external debt, and public debt servicing have a negative and significant relationship with economic growth. Domestic debt has a powerful adverse effect on economic growth in the long run with comparing external debt. Further, the negative effect of external debt is stronger than domestic debt on economic growth in the short run. This study recommends that the Sri Lankan government needs to have some limitations regarding the level of borrowing due to adverse effects on economic growth and effective usage of public debt is essential for Sri Lanka.

Keywords: Economic growth, Public debt servicing, Public domestic debt, Public external debt

INTRODUCTION

Economies of all countries require a level of capital to generate production and to achieve sustainable economic development. In such a situation, when government spending is higher than its tax collection, it occurs budget deficit (Lee and Ng, 2015). The government can expand its revenue by printing money, increasing taxes, using previous budget surplus and domestic or/and external borrowing. When the government decides to fulfill the budget deficit using borrowings without introducing additional taxes, it creates a liability that is called public debt (Moki, 2012). That public debt can be classified as productive debt and unproductive debt. When that debt uses for development purposes as examples for infrastructure, acquiring factories, refineries, etc, it is called productive debt. That debt supports to generate capital and economic development. However, unproductive debt is taken over to finance wars and expenses on current expenditure. This would not imply a production and losses with the consumption (Chowdhury, 2001). The debt structure of any country affects individual citizens, institutions of government, private companies like banks as well as the whole economy at large. The debt structure is the magnitude of the domestic debt and external debt (Obademi, 2012). Further, CBSL (2004) expresses that a government has many domestic alternatives to borrow to finance the budget deficit. Such as borrowing from the central bank directly by printing money, borrowing from domestic banks and the domestic non-bank sector as well as government can finance budget deficit borrowing from external sources. The government usually follows mix strategy and utilizes a number of options that are more advantageous for the present situation of the country at the same time (Rais and Anwar, 2012).

Sri Lanka is the one of less developed countries that continually has a budget deficit since 1956. Central Bank of Sri Lanka (2019) stated that the overall budget deficit as a percentage of GDP increased to 6.8 percent (Rs.1016.5 billion) in 2019 from 5.3 percent (Rs.760.8 billion) in 2018. To fulfill that budget deficit, the government borrowed from both domestic and external sources. In such a situation, public debt servicing is also heavily highlighted in Sri Lanka. The debt servicing payments are the combination of amortization payments and interest payments. Public debt plays a major role in economic performance in Sri Lanka. Therefore it is essential to identify the effects of public debt on economic performance using economic growth as the better variable that can measure the economic performance in Sri Lanka. Economic growth expresses that changing material production during a relatively short period (usually one year). In such a situation, the Central Bank of Sri Lanka (2019) further expressed Sri Lankan economic growth grew slowly at 2.3 percent in 2019 compared with 3.3 percent in 2018 generating from the domestic and external challenges. Therefore this situation creates a problem for researchers to have new analysis regarding the relationship between public debt and economic growth in Sri Lanka.

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PROBLEM STATEMENT

Economists do not consider public debt as a major problem. But they identified problems as mismanagement and un-sustainability of the public debt. The stagy increase of public debt in less developed countries has increased concerns as to whether the borrowings would help to improve economic growth or whether it would become a burden of responsibility that future generations would have to pay (Lee and Ng, 2015). The analysis of the public debt in less developed countries has traditionally focused on external debt. Past research has paid attention to external debt because of two reasons. The first one is external debt can expand the access of a country to resources and domestic debt only transfers resources within the country from one place to another. Hence, only external debt generates a transfer problem (Rueff, 1929). The second one is central banks in less developed counties cannot print the hard currency necessary to repay external debt. Because external borrowing is usually related to vulnerabilities that may lead to debt crises (Panizza, 2009).

Over the last few decades, the factors affecting economic growth in less developed countries have been a topic of debate. Most researchers concluded that economic growth in a country was associated with levels of investment, government expenditure, life expectancy, levels of schooling, public debt, inflation rate, foreign direct investment, the productivity of factors of production, level of natural resources, the openness of trade and level of democracy, etc (Barro, 1996; Sachs and Warner, 1995; Kumar and Woo, 2010; Cervellati and Sunde, 2011 and Caves, 1971). Among them, this research attempts to identify the effects of public debt on economic growth in Sri Lanka. In early mixed findings, there is no much clearance of the impact of debt on economic growth. Furthermore, there is even less evidence on discussing which debt affects growth. Geiger (1990) and Chowdhury (1994) studied different countries' preface of foreign debt on economic growth. They concluded that the effectiveness of debt on economic growth differs from country-to-country because their findings showed various results. Therefore international findings regarding public debt on economic growth cannot apply to the Sri Lankan context.

Sri Lanka is recognized as a middle-income country, and therefore the country is forced to finance public investment more from borrowing rather than from grants which will result in high public debt (Kumara and Cooray, 2013). The questions remain whether the government can achieve high economic growth by public investment through heavy debt, what is the relationship of public domestic debt, public external debt, and public debt servicing on economic growth in Sri Lanka. Those are some issues that this study attempt to discuss. There are many studies considered about debt-growth nexus and they mainly focus on the countries that have vast access to the international capital market. Therefore presumptions based on those studies limited relevance to the Sri Lankan context. There are some studies regarding Sri Lankan public debt (Jha and Schatan, 2001; Kappagoda, 2004; Fonseka and Ranasinghe, 2007; Ekanayake, 2011). But few studies have addressed the relationship between public debt and economic growth. Kumara and Cooray (2013) studied the effects of public debt on economic growth in Sri Lanka and the above issues. But they did not pay attention to studying the effects of domestic and external debt separately on economic growth in Sri Lanka. Therefore, this study aims to fill this gap by including the following.

(a) To find the relationship between public debt and economic growth in Sri Lanka (b) To find the relationship between domestic and external debt separately on economic growth in Sri Lanka. (c) To find out the relationship between public debt servicing and GDP growth in Sri Lanka. And most studies engaged with the effects of external debt on economic growth instead of studying domestic debt in other countries (Malik, Hayat, & Hayat, 2010). Even in Sri Lanka, most research papers studied about effects of external debt on economic growth (Wijeweera et al., 2005).

RESEARCH OBJECTIVES

This study investigates the effects of public debt on economic growth in Sri Lanka as the main objective. Further, it studies the relationship between public domestic debt and economic growth in Sri Lanka, the relationship between public external debt and economic growth in Sri Lanka, and the relationship between public debt service payment and economic growth in Sri Lanka as specific objectives.

LITERATURE REVIEW

There are some theories related to the relationship between public debt and economic growth. Such as the neo-classical theory, Buchanan theories, the Debt overhang theory, and Keynesian theory of public debt. Among them, this paper discusses the Keynesian theory of public debt as one of the major theories related to public debt and economic growth. The Keynesian theory of public debt shows an expansion of government debt is a burden and an increase in government spending is an expansionary fiscal shock to the economy. If the revenue of the country is lower than the spending which in results an enhance in demand for goods and services, an increase in government spending results in the public debt contraction. The demand for goods and services is due to the situation that there will be more money chasing few goods and services in the economy and the view of sticky prices in the short run, increased demand will raise output and employment. When the marginal propensity to save is lower than the marginal propensity to consume, the increase in private savings reduces short of the government de-saving. As a result of this, the real interest rate would increase in the economy to encourage capital inflow from abroad. An enhance of capital inflows implies the attraction of foreign direct investment and it affects to rise in investment level. An increase in investment level affects the rise of savings and increase aggregate demand and GDP (Ntshakala, 2015).

Panizza and Presbitero (2013) investigated the recent literature on the relationship between public debt and economic growth in advanced economies. They concluded that theoretical models create ambiguous results. Further, they stated that there is a very limited paper that can build a strong case for a causal relationship between public debt and economic growth. However, empirical findings regarding the impact of domestic debt and external debt on economic growth had found by Atique and Malik (2012) separately in Pakistan from 1980 to 2010 using GDP growth rate, debt servicing, inflation, investment, and labour force. Their findings suggested that the negative impact of both domestic and external debt on economic growth and those relationships were significant as well while Stylianou (2014) shows the no causality that going from debt to economic growth in Greece after studying the variables of public debt and economic growth from 1980 to 2010. However, the majority of empirical findings regarding public debt and economic growth show negative and no causality mixed results.

Further, Geiger (1990) and Chowdhury (1994) studied the role of foreign debt on economic growth in different countries. They concluded that the effectiveness of debt on economic growth differs from country-to-country because their findings showed various results. Therefore, findings of the effects of public debt on economic growth in Sri Lanka need to be unique. Sri Lanka paid high attention to finance public investment through borrowing rather than through grants which will result in high public debt (Kumara and Cooray, 2013). In such a situation, some issues occur such as whether the government can achieve high economic growth through public investment through heavy debt. Does debt reduction increase growth? There are some studies available regarding the Sri Lankan public debt (Jha, 2001; Kappagoda, 2004; Fonseka and Ranasinghe, 2007; Ekanayake, 2011). But few studies have addressed the relationship between public debt and economic growth and the issues mentioned above. Kumara and Cooray (2013) studied about above issues but they did not pay attention to studying domestic and external debt separately. Therefore, this study aims to fill this gap by using the latest data to analyze the impact of domestic debt, external debt, and debt servicing on the Sri Lankan economy separately and to address the above issues that have mentioned.

Many studies support a non-linear effect of external debt on growth including Smyth and Hsing (1995). On the other hand, the linear negative relationship between external debt and per-capita growth was found by Schclarek (2004) using 59 less developed countries from 1970 to 2002. Shah and Pervin (2012) tried to review and analyze the behavior of public debt burden on the economic growth of Bangladesh using a vector autoregression model for a study period of 1974–2010 and finally, they found that external debt service and economic growth are negatively affected while external public debt and economic growth are positively related in long run. In the short run, there is no effect of external public debt on economic growth and only external debt service has a negative effect on economic growth. Since this is a secondary data analysis, the majority of research papers follow the same tools for analyzing data (Unit root test, Cointegration test, Error correction model, etc). But the majority of Sri Lankan studies did not pay attention to multicollinearity, heteroscedasticity, and normality test with the other tests (Kumara and Cooray (2013). But this research attempts to have all related tests and to have more accruable findings with proofs.

CONCEPTUAL FRAMEWORK

Most researchers concluded that economic growth in a country is associated with levels of investment, government expenditure, life expectancy, levels of schooling, public debt, inflation rate, foreign direct investment, the productivity of factors of production, level of natural resources, the openness of trade and level of democracy, etc (Barro, 1996; Sachs and Warner, 1995; Kumar and Woo, 2010; Cervellati and Sunde, 2009 and Caves, 1971). Among them, this research attempts to identify the effects of public debt on economic growth in Sri Lanka. Therefore, public debt considers as the major independent variable that influences economic growth in this study.

This study focuses on the Keynesian theory of public debt that considers large public debt as a national asset instead of taking it as a liability. Further, this theory states that a steady deficit spending normally joins with a country's economic progress and assumes public debt is fully employed.

According to Keynes's view, if there were unemployed resources, those can be used by budget deficit while neoclassical states that the economy is always at the full employment level. Keynes further clarified that national income can be expanded multiple times by increasing public debt and he states that public debt is necessary to fulfill all purposes of government and it will have resulted in increasing effective demand, employment, and output. Keynes did not classify public debt in a productive and unproductive manner as classical economists. But he paid attention to borrowing for consumption same as borrowings for investment because consumption expenditure also affects to expand investment through increasing demand for goods and services. Therefore, this study follows Keynesian growth theory with some modifications and the specialized model can be shown as follows.

$$Y = C + I + G + NX \quad (1)$$

Where, Y = Income (Real Gross Domestic Product considers as proxy), C = Private Consumption, I = Private Investment, G = Government Expenditure and NX = Net Export

Since this study investigates the effects of public debt on economic growth in Sri Lanka, the Real Gross Domestic Product growth rate (RGDPgr) has taken as the proxy for the dependent variable, and public debt is separated as domestic debt and external debt because public debt consists two parts as public and publically guaranteed external debt and domestic debt (Akram, 2015). And Internal debt and external debt are the same in the aspect that debt burden should be borne in the future when forcible taxation is levied to service and release the debt (Cohen, 1993). But they are two concepts of public debt and those are affected by economic growth in different aspects. As an example, Atique and Malik (2012) argued that there was a significant negative effect of domestic and as well as external debt on economic growth. They further concluded that the negative effect of external debt on GDP is stronger than the negative effect of domestic debt. According to Akram (2011), the indicators of public debt are categorized as (1) Stock Variables: this implies the value of debt burden to different key indicators. Ex. External debt GDP ratio, domestic debt GDP ratio, debt export ratio. The most used indicator to judge the stock of public debt is its ratio to GDP. (2) Flow Variables: this focuses on debt service payment. Therefore, this study adds domestic and external debt as independent variables separately, further including public debt servicing.

Figure 1: Conceptual Framework
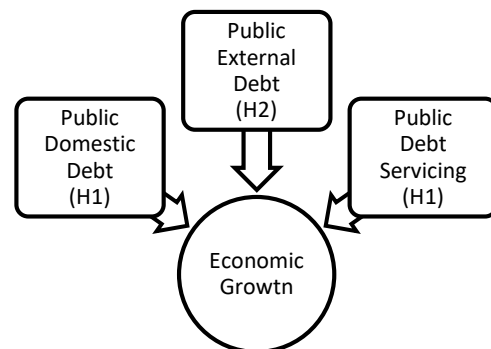
DEVELOPING HYPOTHESIS

The empirical studies regarding the relationship between domestic debt and economic growth are showed mixed findings as positive and negative relationships. However, the majority of studies concluded that there is a negative relationship between domestic debt and economic growth. As

an example, Jebran, Hayat, and Iqbal (2016) showed a negative relationship going from domestic debt to economic growth after studying the behavior of external debt, domestic debt, debt service, and inflation on GDP in Pakistan from 1972 to 2012. Further, Anyanwu and Erhijakpor (2004) studied the effects between current domestic debt outstanding as a ratio of GDP and growth in Nigeria for the period of 1970 to 2003. Their results show that current domestic debt outstanding as a ratio of GDP has a significantly negative effect on economic growth. And also Adofu and Abula (2010) investigated the empirical relationship between domestic debt and economic growth again for Nigeria using time series data from 1986 to 2005. They concluded that domestic debt and economic growth have a negative relationship and it is better to discourage domestic debt and encourage public revenue. Therefore this study is also proposed to have a negative relationship between domestic debt and economic growth.

H1: There is a negative relationship between domestic debt and economic growth

The empirical studies regarding the relationship between external debt and economic growth are showed mixed findings as positive and negative relationships. However, the majority of studies concluded that there is a negative relationship between external debt and economic growth. As an example, Yeasmin, Chowdhury, and Hossian (2015) investigated the behavior of external debt on economic growth in Bangladesh from 1972 to 2012 using variables of GDP, external debt, investment, and employment and the results showed that significant adverse effect of external debt to economic growth. Further, Schclarek (2005) studied the behavior of per capita GDP growth rate, total debt to GDP ratio, public debt to export ratio, public external debt to export ratio, private external debt to GDP ratio, etc. using panel data of 24 industrial countries and 59 developing countries from 1970 to 2002 and concluded that public external debt and per capita GDP have a negative relationship in developing countries. Further, he stated that public external debt and per capita GDP are not interrelated in industrial countries. Besides, Safadari and Mehrizi investigated the relationship between external debt and economic growth in Iran for the period of 1974 to 2007 using five variables (gross domestic product, private investment, public investment, external debt, and imports. The results show that external debt had a negative relationship with economic growth. Therefore this study is also proposed to have a negative relationship going from external debt to economic growth.

H2: There is a negative relationship between external debt and economic growth

The empirical studies regarding the relationship between debt servicing and economic growth showed mixed findings as negative and no relationships. However, the majority of studies concluded that there is a negative relationship between debt servicing and economic growth. As an example, Afonso and Alves (2014) studied the role of government debt in economic growth in 14 European countries from 1970 to 2012 using domestic debt and real per capita GDP. They concluded that debt servicing has a 10 times worst effect on growth. Further, Jebran, Hayat, and Iqbal (2016) studied the effects of public debt on economic growth in Pakistan using GDP, domestic debt, external debt, and debt servicing from 1972 to 2012. They found out that debt servicing is inversely related to GDP in the short-run. And also Sheikh, Faridiand Tariq (2010) investigated the relationship between domestic debt and economic growth in Pakistan

for the period of 1972 to 2009. The study concluded that domestic debt and economic growth have a positive relationship and it observes that there is an adverse effect of public debt servicing on economic growth. Therefore this study is also proposed to have a negative relationship going from debt servicing to economic growth.

H3: There is a negative relationship between debt servicing and economic growth

RESEARCH METHODOLOGY

Data collection: This study used annual time series data from 1980 to 2019 which translates to 40 observations. Data for public domestic debt, public external debt, public debt servicing were obtained from the Central Bank of Sri Lanka (2019).

Analytical model: After the adoption of Keynesian growth model, mathematical equation number 2 has been derived after transforming equation 1 as follows.

RGDP = f (DoD, ExD, DSer)   (2)

The following econometric equation 3 has been derived using the above equation 2.

$RGDP_t = \beta0 + \beta1DoD_t + \beta2ExD_t + \beta3DSer_t$ (3)

The majority of research papers followed non-linear regression model to investigate the relationship between public debt and economic growth (Checherita and Rother, 2010; Yeasmin, Chowdhury and Hossain, 2015; Eberhardt and Presbitero, 2015 and Schclarek, 2005) while Kumara and Cooray (2013) estimate the linear regression model to have the relationship between public debt and economic growth using OLS and then model is estimated with non-overlapping averages for two years. But logarithm of the public debt to GDP ratio is no significant in both cases. This implies that there is no evidence to have a linear relationship going from public debt to GDP per capita in Sri Lanka. Because of that they also followed nonlinear regression for their study. Therefore, this study also proposes a non-linear regression model to estimate the following relationship.

$LNGDP_{grt} = \beta0 + \beta1LNDoD_t + \beta2LNExD_t + \beta3LNDSer_t + \varepsilon_t$ (4)

Where, $LNGDP_{grt}$ = Natural log of Real Gross Domestic Product Growth Rate at time t, $LNDoD_t$ = Natural log of Public Domestic Debt as a % of GDP at time t, $LNExD_t$ = Natural log of Public External Debt as a % of GDP at time t, $LNDSer_t$ = Natural Log of Public Debt Servicing Ratio at time t, t = time, ε_t = the error term assumed to be normally and independently distributed with mean zero and constant variance, $\beta0$ = captures all other independent variables which affect growth, but are not captured in the model and $\beta1$, $\beta2$ and $\beta3$ are the coefficients of economic growth respect to LNDoD, LNExD, and LNDSer respectively. Here public debt servicing is the combination of principal repayments and interest payments.

Preliminary data analysis: Before running the regression model for the specified data set using Eviews 7.0 version, descriptive statistics used to show the behavior of the selected independent and dependent variables to have the general idea of those variables and the Jacque Bera coefficient has selected to investigate the normality of the data set. This model assumes that Ordinary Least Square (OLS) and time-series models are based on the assumption of normality, linearity, homoscedasticity, no multicollinearity, and stationarity.

The stationarity test and Augmented Dickey-Fuller (ADF) test that have specified the order of integration will be used

here because this study follows the time series data set. Further, this expects to show the long-run relationship among selected variables using the two-step Engle-Granger test for cointegration and this study shows the short-run relationship using cointegration and an error correlation model.

RESULTS AND DISCUSSION

Descriptive statistics and normality test: When analyzing time series data, the initial step is to investigate whether the

variables under study are normally distributed. Descriptive statistics were checked putting keen interest on the Jargue-Bera probability to test for normality of the variables.

H_0: JB = 0 (normally distributed) and H_1: JB ≠ 0 (not normally distributed)

When the null hypothesis rejects, it implies that the variable is not normally distributed and a logarithmic transformation is necessary.

Table 01: Descriptive statistics

	LNGDPGR	LNDOD	LNEXD	LNDSER
Mean	1.5685	3.8014	3.7290	2.8712
Median	1.6094	3.7762	3.7376	2.8506
Maximum	2.2083	4.0943	4.1271	3.3911
Minimum	0.4055	3.5145	3.4078	2.0669
Std.Dev.	0.3730	0.1245	0.2072	0.3186
Skewness	-0.9542	0.4424	0.1653	-0.0779
Kurtosis	4.2130	3.0465	1.8358	2.3827
Jarque-Bera	8.3094	1.3082	2.4411	0.6756
Probability	0.0157	0.5199	0.2951	0.7133
Sum	61.1704	528.1889	525.3029	506.2586
Sum Sq. Dev.	5.2874	0.6046	1.6748	3.9572
Observations	39	40	40	40

Source: Made by Author, 2020.

Table 1 presents the results of descriptive statistics of all the variables from 1980 to 2019. It shows that the distribution JB probabilities for LNGDPGR are 0.0157, LNDOD is 0.52, LNEXD is 0.30 and LNDSER is 0.71 (for a normal distribution, the probability should be greater than 0.05). Therefore, we conclude that all the independent variables (i.e LNDOD, LNEXD, and LNDSER) in our study are normally distributed and LNGDPGR is not normally distributed. Further, the reason for having 39 observations for LNGDPGR is the difficulty of converting a negative growth rate (-1.5) in 2001 into natural log form.

Unit Root test of the variables: When a study uses non-stationary series as stationary, it will bias the Ordinary Least

Squares (OLS) and finally the results would be misleading. For that reason, when estimating a model that includes time series variables, there is a want to make sure that all-time series variables in the model are stationary or are cointegrated. It means that they are integrated of the same order and the error term or residual is stationary in which case the model expresses a long-run equilibrium relationship among the cointegrated variables.

This study uses ADF (Augmented Dickey-Fuller) test to check the unit root of the time series data by EViews 7. The hypothesis can develop as follows.

H_0: Time series is non-stationary and H_1: Time series is stationary

Table 02: Unit Root Test at Level

ADF Unit root for sample period 1980-2019						
At Level with intercept						
Variable	ADF: tstatistic	1%	5%	10%	Probability	Remarks
LNGDPGR	-3.5662	-3.6210	-2.9434	-2.6103	0.0115	Stationary (0)
LNDOD	-1.9958	-3.6105	-2.9390	-2.6079	0.2874	Non-stationary (0)
LNEXD	-1.5055	-3.6105	-2.9390	-2.6079	0.5203	Non-stationary (0)
LNDSER	-1.9077	-3.6105	-2.9390	-2.6079	0.3255	Non-stationary (0)

Source: Made by Author, 2020.

Table 03: Unit Root Test at 1st deference

ADF Unit root for sample period 1980-2019						
At 1st deference with intercept						
Variable	ADF: tstatistic	1%	5%	10%	Probability	Remarks
LNDOD	-6.0197	-3.6159	-2.9411	-2.6091	0.2874	Stationary (1)
LNEXD	-6.0010	-3.6159	-2.9411	-2.6091	0.5203	Stationary (1)
LNDSER	-6.7320	-3.6159	-2.9411	-2.6091	0.3255	Stationary (1)

Source: Made by Author, 2020.

Above table 2 and 3 above show that the dependent variable (LNGDPGR) is stationary at I(0) while all independent variables (LNDOD, LNEXD, and LNDSER) non-stationary at I(0) but stationary at I(1). When there are non-stationary variables, their regression leads to produce a spurious regression. But spurious regression may not occur if independent variables are co-integrated with the dependent variable. So, it needs to have co-integration among the variable.

Co-integration test: Co-integration is the statistical tool that uses to find the long-run relationship between independent and dependent variables (Granger and Newbold, 1974). If the residuals obtained from the co-integrated equation are stationary I(0), the linear relationship of non-stationary variables becomes co-integrated. This study follows Engle-Granger two steps co-integration test and it is a residual base test. The first step is to have the regression model and secondly, residual series needs to generate using Eviews software with relevance to the ADF test. The error term is expected to be stationary at the level and it will be co-integrated.

H_0: Residual series is non-stationary and H_1: Residual series is stationary

Table 04: Co-integration

Dependent Variable: LNGDPGR
Method: Least Squares
Date: 08/22/20   Time: 02.18
Sample: 1980 2019
Included Observations: 39

Variable	Coefficient	Std. Error	t-statistic	Prob.
LNDOD	-0.8345	0.3542	-2.3564	0.0242
LNEXD	-0.7156	0.1818	-3.9364	0.0004
LNDSER	-0.8838	0.1310	-6.7491	0.0000
C	9.9454	1.6191	6.1433	0.0000
R-squared	0.6402	Mean dependent var.		1.568
Adjusted R-squared	0.6094	S.D dependent var.		0.3730
S.E of regression	0.2331	Akaike info criterion		0.0225
Sum squared resid	1.9023	Schwarz criterion		0.1932
Log likelihood	3.5607	Hannan-Quinn criterion		0.0837
F-statistic	20.7601	Durbin-Watson stat		2.4213
Prob(F-statistic)	0.0000			

Source: Made by Author, 2020.

Table 05: Co-integration

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 08/22/20   Time: 04.23
Sample: 1980 2019
Included Observations: 37 after adjustment

Variable	Coefficient	Std. Error	t-statistic	Prob.
RESID01(-1)	-1.2598	0.1622	-7.7676	0.0000
R-squared	0.6259	Mean dependent var.		0.0107
Adjusted R-squared	0.6259	S.D dependent var.		0.3529
S.E of regression	0.2158	Akaike info criterion		-0.2019
Sum squared resid	1.6771	Schwarz criterion		-0.1583
Log likelihood	4.7352	Hannan-Quinn criterion		-0.1866
Durbin-Watson stat	2.0389			

Source: Made by Author, 2020.

The Engle-Granger 5 percent test critical value is -1.9501 and the ADF test statistic is -7.7676. Since the ADF test statistic is more negative than the test critical value, residuals of the regression have not the unit root. That is they are stationary at level. It concludes that independent variables are co-integrated with the dependent variable. Therefore, regression may not spurious.

The regression coefficient regarding the public domestic debt is -0.8345 means that when public domestic debt increases by 1 percent, the GDP growth rate decreases by 0.8345 percent. When external debt increases by 1 percent, economic growth decreases by 0.7156 percent while GDP growth reduces by 0.8838 percent concerning a 1 percent increment of public debt servicing. Economic growth expands by 9.9464 percent due to the percentage changing of other variables instead of selected independent variables. Above all results are statistically significant.

Error correlation model (ECM): The error correlation model uses to capture the short-run relationship between selected variables (Granger and Newbold, 1974). Variables are used in the first difference to construct this model. The ECM consists of the lagged error term derived from the cointegrating equation. This is termed as the rate of adjustment per quarter of negative coefficient and the error correction. The required lag length was determined by using Schwarz Information Criterion (SIC).

Table 5 expresses the error correction model and it indicates the negative behavior of coefficient of error term with GDP growth as theoretically expected. Further, it is statistically significant at a 5 percent confidence level. Then any deviation from the equilibrium that occurs by a variable will be corrected in near future because of that negative sign. The error coefficient shows that 123% of any disequilibrium that is included in the cointegrating model will be corrected next

Table 06: Error Correlation Model (ECM)

Dependent Variable: D(LNGDPGR)
Method: Least Squares
Date: 02/1/6   Time: 00.06
Sample: 1980 2019
Included Observations: 37 after adjustment

Variable	Coefficient	Std. Error	t-statistic	Prob.
C	0.0051	0.0366	0.1382	0.8910
D(LNDOD)	-1.1080	0.5307	-2.0877	0.0449
D(LNEXD)	-1.1162	0.4852	-2.3005	0.0281
D(LNDSER)	-0.5839	0.1990	-2.9341	0.0061
RESID1(-1)	-1.2387	0.1677	-7.3860	0.0000
R-squared	0.7424	Mean dependent var.		-0.0140
Adjusted R-squared	0.7102	S.D dependent var.		0.4086
S.E of regression	0.2180	Akaike info criterion		-0.0655
Sum squared resid	1.5486	Schwarz criterion		0.1522
Log likelihood	6.2108	Hannan-Quinn criterion		0.0113
F-statistic	23.0515	Durbin-Watson stat		1.8995
Prob(F-statistic)	0.0000			

Source: Made by Author, 2020.

year. This states that the GDP equilibrium is maintaining by explanatory variables throughout time.

The results reveal that when domestic debt increases by 1 percent, the GDP growth rate decreases by 1 percent. The external debt is also negatively related and when it increases by 1 percent, the GDP growth rate reduces by 1.1 percent. When debt servicing increases by 1 percent, the GDP growth rate decreases by 0.5 percent. All independent variables are negatively related to GDP growth rate and all are significant at a 5 percent confidence level. When domestic debt, external debt, and debt servicing become zero, the GDP growth rate is 0.005 (effect on other variables without explanatory variables). The probability of the F statistic in the model is equal to zero. It means that regression is overall significant. Finally, the adjusted R squared shows as 0.71. This stated that 71 percent of the variation of GDP growth rate expresses by the regression.

Multicollinearity test: Simply, multicollinearity implies that the linear relationship between all independent variables of a regression model. There are several methods of identifying multicollinearity in a regression model. This study follows the Variance Inflation Factor (VIF) as one of the methods among them to identify the multicollinearity. VIF expresses that if the VIF value of a regression model is less than 10, there is no multicollinearity. But if that value exceeds 10, that regression model consists of severe multicollinearity. Then the results will be misleading. Here this study has two regression models as the short-run model and the long-run model. Therefore, I expect to identify multicollinearity for both short-run and long-run period separately.

Table 07: Multicollinearity for Long run regression

Variance Inflation Factor
Date: 02/10/06   Time: 05.42
Sample: 1980 2019
Included Observations: 39

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.6214	1880.950	NA
LNDOD	0.1254	1297.196	1.2364
LNEXD	0.0330	330.3427	1.0138
LNDSER	0.0171	103.1960	1.2211

Source: Made by Author, 2020.

Table 08: Multicollinearity Test for short run

Variance Inflation Factor
Date: 02/10/06   Time: 05.52
Sample: 1980 2019
Included Observations: 37

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.0013	1.0258	NA
D(LNDOD)	0.2816	1.3237	1.3222
D(LNEXD)	0.2354	1.3695	1.3651
D(LNDSER)	0.0396	1.3179	1.2966

Source: Made by Author, 2020.

Since all VIF values in both short-run and long-run regression models are below 10, it can conclude that there is no multicollinearity and results may not spurious.

Heteroscedasticity test: Heteroscedasticity shows that the variance of disturbance term or error term is not equal. But when we regress a model, we assume that there is homoscedasticity or no heteroscedasticity in the regression model. This study shows that the situations of heteroscedasticity for both short-run and long-run regression models. The hypothesis can develop as follows related to heteroscedasticity.

H0: There is no heteroscedasticity in the model.

H1: There is heteroscedasticity in the model.

Table 09: Heteroscedasticity for Long run regression

Heterocadasticity Test: Breush-Pagan-Godfrey

F-statistic	0.9992	Prob. F(3.35)	0.4047
Obs*R-Squared	3.0767	Prob. Chi-Square(3)	0.3800
Scaled explained SS	2.7980	Prob. Chi-Square(3)	0.4238

Source: Made by Author, 2020.

Table 10: Heteroscedasticity for short-run regression

Heterocadasticity Test: Breush-Pagan-Godfrey

F-statistic	0.7481	Prob. F(4.32)	0.5666
Obs*R-Squared	3.1641	Prob. Chi-Square(4)	0.5308
Scaled explained SS	2.0987	Prob. Chi-Square(4)	0.7176

Source: Made by Author, 2020.

The probability of Chi-Square in both short-run and long-run model are not significant at 0.05 confident level. Therefore we can accept the null hypothesis means that both models consist of homoscedasticity or no heteroscedasticity. That means the variance of the error term in both models is equally distributed.

Since the probability value for the domestic debt variable is less than 0.05 in both the short-run (0.0449) and long-run (0.0242), this study has a piece of evidence to accept alternative hypothesis (H1) that implies an adverse relationship between public domestic debt and economic growth. In addition to that, the probability value for the external debt variable was 0.0281 in the short run and 0.0004 in long run. Since those values are less than 0.05 confidence level, this study has evidence to accept alternative hypothesis (H2) that shows a negative relationship between public external debt and economic growth. Further, this study has evidence to reject the null hypothesis and accept the alternative hypothesis (H3) due to the probability value for the debt servicing variable is less than 0.05 in both the short-run (0.0062) and long-run (0.0000).

CONCLUSION

The main objective of this study to investigate the relationship between public debt and economic growth in Sri Lanka for the period of 1980 to 2019. This paper uses econometric tools that normally uses in time series analysis using GDP growth rate as the dependent variable and public domestic debt, public external debt, and public debt servicing as explanatory variables. As a result, all independent variables (Domestic debt, External Debt, and Debt servicing) are adversely related to economic growth. Therefore this study reached the objectives that express the negative relationship between all independent variables and economic growth. That means the public debt level in Sri Lanka exceeds the optimal level of public debt. Therefore, this study concludes that overall public debt has a negative effect on economic growth in Sri Lanka. When the results compare with similar studies, the majority had concluded that public debt has a negative effect on economic growth such as Panizza and Presbitero (2014), Lee and Ng (2015), Ahlborn and Schweickert (2018), etc. Debt is very important to the development and growth of Sri Lanka. In such a situation, there is not support of public debt on economic growth in Sri Lanka according to this analysis. And also that public debt cost is heavily for low-income people as tax. This paper implies that if Sri Lanka arranges more public debt, it will be led to huge failure in the country.

This study ensures Keynsian theoretical model that expresses the negative relationship between public debt and economic growth after the threshold level.

According to the findings of the present study, it can suggest a few policy implications such as effective usage of public debt on development activities, divisibility of export would be supported to reduce the budget deficit, avoiding corruptions, handling savings in an effective way for development activities instead of depending high debt, avoiding high imports of non-essential products, reducing wasting or unnecessary expenses of government, encouraging private sector for huge investment inside the country and ensuring effectiveness among government institutions to have a high income.

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Economic Valuation of the Taj Mahal in India: The Contingent Valuation Method

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Abstract

India has a lot of historical places. Among them one of the most precious is the Taj Mahal. Due to fewer threats to conservation, Taj is placed on the1996 watch list of the 100 most endangered sites by the World Monument Fund. In this study, an attempt was made to calculate the economic value of Taj Mahal in India in relation to the conservation issues. This study assesses households' WTP for Taj Mahal conservation through a CVM study. Single Bounded Dichotomous Choice with an open-ended format was used to elicit households' willingness to pay from 200 households. Out of 200 sample respondents, 70.50 percent were found to be willing to pay the proposed bid prices for Taj Mahal conservation, whereas the remaining 29.50 percent rejected the proposed bid prices. Logit model was employed to assess the determinate of willingness to pay and probit model was also applied to estimate mean willingness to pay (WTP), and the study shows that the mean willingness to pay estimated from the Single Bounded Dichotomous Choice model was Rs. 109.92(US$1.50)per month per household. The results of the study have found the socioeconomic and demographic characteristics; awareness and attitude of the households are responsible for households WTP for Taj conservation. Therefore, policy and program intervention designed to address the issue of conserving the Taj Mahal in India needs to take into account these factors to make it more effective.

Keywords: Conservation, Contingent Valuation Method, Economic Valuation, Historical Place, Willingness to pay

INTRODUCTION

The historical monument is a matter of pride for any country. It presents countries' culture and traditional identity. Every country has its own historical monument which is treated as a valuable asset for that country. Historical creation or places are not only related to the culture but also it is considered an important element for economic development (Safiullin et al., 2015). India is a country that has plenty of several historical sites but having historical places is also invoked for the conservation and better management of these places. Several famous historical sites are now in danger due to environmental pollution (air, water), natural disasters (floods, precipitation, earthquakes, landscapes) different human activities (farming, irrigation, unplanned industrialization, constructions), etc. To solve this problem not only the government initiative but also individual awareness is essential. Also, people's active participation and contribution to the conservation of the historical monument has been strongly taught as an unplanned management technique all over the world.

The main aim of this study was to find out the economic benefits of historical monuments to find out their economic value in relation to conservation issues. The work focuses on a very special historical monument and one of the seven wonders of this world. Taking into account its historical significance and tourism value this study finds an economic (conservation) value of this site using a contingent valuation method.

Taj Mahal was created by the Mughal emperor Shah Jahan in 1632 as a grave of his beloved wife, Mumtaz Mahal. Later it was also used as the tomb of Emperor Shah Jahan (Pandey.

G., 2014). Taj Mahal was denominated as a UNESCO world heritage site in the year 1983 for being one of the universally extolled precious arts of India. Moreover, the Taj Mahal, which is the symbol of India's rich history, was announced as a winner of the new Seven Wonders of the World (2000-2007) initiative. But unfortunately, this iconic monument is now in danger due to dug poop and industrial pollution. The fabulous white marbles have turned into green, black, brown, and yellow. Moreover, cracks have been found at different places in the marble slabs. This is to attract different International Media like the Art Newspaper; BBC etc. published different reports on this issue.Primarily this problem relates to the establishment of nearby industries and oil refineries.After that, the government of India appointed a scientific expert committee to find out the real scenario.The finding of this expert group represents that atmospheric pollution plays a minimal role and their different other factors are responsible for the changes in Taj Mahal (Agrawal. O.P., 2014). After that the Times of India reported that the government is preparing a 100-year plan for the Taj Mahal conservation. The plan includes stopping industries near Taj, impeding pollution discharge into the Yamuna River, and also cleaning up this river (Dash and Mohan, 2018). This plan also mentioned a rubber dam, which will be set up downstream of Taj and introducing a green mass transport system for Agra and so on. Further, there is a need to involve an international expert to make a complete conservation plan of the Taj Mahal.

The Taj Mahal is considered as a symbol of love, but due to different conservation threats the Taj Mahal is mentioned in the 1996 watch list of the 100 most endangered sites by the

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world monuments fund world monument fund 1996 and still, it is listed as an endangered monument (World Monuments Fund, 1996). Moreover, not only in terms of the cultural or historical but also this monument have a high economic significance for the Indian economy. According to the Indian statistical data in the FY 2019, the Taj Mahal was the highest visited ticketed monument by domestic visitors at nearly 5.6 million (Keelery. S.,2020). To highlight the economic importance of the Taj it is also mentionable that revenue earned by the Taj Mahal was 77 crores. According to the Lok Sabha data total annual average revenue generated from the monument in the last three years is nearly 61.4 crores. Therefore, the conservation of the Taj Mahal is a very essential issue for Indian cultural and economic perspectives. It has been identified that there is still a knowledge gap on Taj Mahal conservation issues.The main goal of this study is to estimate the economic value of the Taj Mahal related to the conservation issue in India to help formulate a long-term policy of conservation program.

LITERATURE REVIEW

Conservation of endangered monuments is a matter of value. Several techniques exist to measure the economic value placed by people on conserving historical sites. These include the hedonic pricing approach (HPA), the travel cost method (TCM), and the contingent valuation method (CVM) (Carson et al., 1996). The CVM is one of the best techniques to measure such values by using survey questions to elicit people's started preference for public goods, such as the preservation of historical sites, wildlife species, and outdoor recreational amenities (Jakobsson &Dragun, 1996).

Kabir & Islam (2014) conducted a study to determine the households' willingness to pay as an existing value for the Royal Bengal Tiger conservation in the Sundarbans. They used a contingent valuation survey to find out the households' willingness to pay. They used ten potential explanatory variables in the model. They used the Logit model to assess the determinants of willingness to pay. Findings from the Logit model used to assess determinants of respondents' WTP behaviors revealed that their socio-economic characteristics, awareness, and attitude were the most important determining factors in this regard.

Dutta et al., (2007) conducted a study and find that urban planner in developing countries takes their initiative to reserve heritage sites for getting more visitors attraction. The paper mainly focuses on the very ancient and important historical place the Prinsep Ghat, in India. Thispaper used the stated preference method to identify the total economic value in Prin Sep Ghat in Calcutta, India. This survey strictly follows the NOAA panel guideline, for the interview they followed face to face interview method. This study uses lifetime willingness to pay (LWTP) rather than WTP. This study used the two most important regression models, the TOBIT model, and the truncated model. The finding of the study presents that the huge demand for the site can be used for effective marketing sites without changing its historical identity.

World Bank Group (1998) conducted a CVM survey of the urban World Heritage site in Morocco. The survey created a hypothetical situation that the government and experts had a plan to preserve the Fes medina historical site. They interviewed a total of 600 visitors to Morocco. They chose randomly the respondent and asked about WTP for the preservation fee. The finding showed that the average WTP among visitors and non-visitors to Fes is $ 2.15 among European households of the preservation of the Fes Medina.

Chambers et al., (1998) conducted a study about the preservation of a historic school building. This work reports on a mailed survey using the payment format. Among the respondents, 151 residents were from urban St. Louis and 154 residents of rural Warrensburg, Mo. They found a mean WTP of $ 6 and total value excess of $ 500000 about ten times the market value of the site.

Garrod et al., (1996) completed a survey about the non-priced benefits of renovating historic buildings of Newcastle's Grainger Town. It mainly reports of an interview survey of 202 Newcastle taxpayers. They asked the taxpayers whether respondents were willing to pay extra tax for restoring historical buildings. They were also asked an open-ended WTP question. They estimate a median WTP of $10.00. They also asked respondents to collect more spending on different areas within Grainger Town. Respondents show more interest in more areas.

Powe et al., (1996) undertook a study on the benefits received by visitors to heritage sites in Warkworth Castle. The authors wanted to measure the use benefits received by visitors and their conservation values. They choose 201 respondents as their sample size and asked about their WTP to enter the heritage site. The result shows that all visitors mean WTP is $ 2.53 and median WTP $ 2.34. Over 90percent of the respondents thought that some of their admission fees were paid for the preservation of the site when asked that none of the fees were to be used for preservation, mean and median WTP for all respondents dropped to $ 1.62 and $ 1.50 respectively.

Beltra et al., (1996) conducted a study using CVM interviews at three archeological sites in Mexico and seven Mexican cities. They asked the respondent to get two WTP values one for visiting Mexican archaeological sites and another for a monthly contribution to preserving sites. Three sample sizes were 900 respondents for all three sites and for each site 300 respondents were interviewed and 5603 respondents in cities around Mexico. Over 60percent of the observation was dropped because they do not claim to have visited a site in the past year. The mean WTP for the preservation of the seven cities from 3.43 to 16.5 and WTP for preservation ranged among the site from 8.4 to 24.4 new pesos.

Grosclaude et al., (1994) conducted a study to find the value of damage to 16 historical buildings in Nevehatel, Switzerland. This study used CVM to find out the value. The survey asked WTP questions for contributing annually to a fund to maintain the buildings, among the 200 residents. Then they asked an open-ended question to know about the annual the WTP of the respondent for maintaining the buildings. Among the 200 respondents, only 22 respondents were not agreeing to pay. The mean WTP was 14.3 and the median WTP was 5.0 Swiss Francs but when the indifferent respondents have dropped the amount Increase to 16.0 and 7.5 respectively. The result shows that the average damage per building per year was 283000 Swiss France.

Navrud et al., (1992) did a study to find out the preservation value of the Nidaros cathedral in Trondheim, Norway. They asked 163 Norwegian and foreigners who were visiting the cathedral to find their WTP for the preservation of the responding original parts of the cathedral. Almost two-thirds of the visitors do not exhibit a positive WTP for preserving original paths rather than simply restoring the building. The survey asked a subsample for WTP values for preserving all historical buildings in Norway. No significant difference was

found between these two samples. WTP for all historical buildings in Norway was higher than for only the cathedral.

Observations and research gaps

Observations and research gaps identified from the review

- The Taj Mahal is the 100 most endangered sites (WMF, 1996) and under threat to many sources;

- Economic valuation is the most effective tool for valuation of the endangered monuments;

- CVM is a highly applied and more reliable monetary evaluation method for measuring the economic value of the endangered historical monument like the Taj Mahal;

- It can be argued that more than 70 percent of the study, which used CVM is followed the dichotomous-choice method to ask the WTP question;

- A Large number of the study follows the open-ended question format and few studies follow payment card question format; and

- There is a knowledge gap on the Taj Mahal economic value-no study has been conducted in connection with the economic value related to conservation using CVM.

MATERIALS AND METHODS

This study explores how the households of Agra City value the conservation of the historic site, Taj Mahal, which can be used to ensure the sustainable management of the most iconic historical sites.

Research Design

The study undertook an exploratory cross-sectional survey. Households were selected using simple random sampling to avoid selection bias.

Sample, Sampling Technique, and Data Sources

The sample has been selected from residents of Agra city. The city is chosen based on the fact that the Taj Mahal is situated in Agra and hence more people may be shown their interest to preserve the Taj Mahal. Azizpur area of Agra city was randomly selected. There are 1727 households in the study area Azizpur of Agra. For selecting residents for the survey of the Azizpur area, again a simple random sampling technique has been employed. A total of 200 households wereused for the analysis. The respondents were generally above 18 years old who are well known about family expenditures and income. A hypothetical market scenario was developed to assess the city residents' willingness to pay (WTP) for the conservation of the Taj Mahal. The respondents were presented with the latest information about the present condition, the polity, and institutional issues that need to be addressed in conserving the Taj Mahal in India.

Method of Data Collection

Primary data were collected from sample respondents through a structured questionnaire via face to face interview as suggested for the CV survey. Data on social, demographic, institutional, economic, awareness, and willingness to pay for the Taj Mahal conservation were collected through this survey. This study employs the Single Bounded Dichotomous (SBD) choice format with an open-ended follow-up question to elicit respondents' WTP as an economic value for Taj Mahal conservation in the study area.

Designing the Questionnaire and Administering the Interview

According to Mitchell and Carson (1989), the questionnaire was divided into three parts. The first part of the survey questionnaire discussed some socio-economic variables of the selected households. The socio-economic information part includes questions about age, education, income, number of family members, etc. The second part of the questionnaire presents respondents' cultural awareness, attitude, and knowledge towards the Taj Mahal conservation. The last part of the questionnaire presents a detailed description of the Taj Mahal conservation to be undertaken.

In line with Then the dichotomous choice elicitation format a respondent was asked about his/her WTP to assess the existence value of conserving the Taj Mahal. From the six alternative bid values, one bid value was randomly assigned to each respondent. After that, this survey asked an open-ended follow-up valuation question and the reasons for inconsistencies if any. At the end of the respondents who refused the bid value offered in the survey were asked the reason why they were not willing to pay for the conservation of the Taj Mahal in India.

Designing the Bid Values

Bid design is important from the point of view of the efficiency of the estimators because they determine the variance-covariance matrix when they are the only repressor. For this reason, in this study before the final survey was implemented a pilot survey was conducted to come up with starting bid values. A total of 30 households were selected for the pilot survey purpose. The main objective of the pilot survey was to elicit the payment vehicles and to set up bid prices. This study used six alternative bid values to elicit household's willingness to pay as a support Taj Mahal conservation practices which were 10, 20, 50, 80, 100, and 200 Rs. An increase in bid value may have a negative impact on the household's willingness to pay support of Taj Mahal conservation practices if it is considered as a normal good.

Methods of Data Analysis

The data collected from the CV study will analyze in two ways

- Using descriptive statistics and
- Using economic model

Logit and Pobit were used in this study. A logit model will be applied to the respondent's response to the WTP elicitation question. On the other hand, the purpose of the Pobit model is to estimate mean WTP for the closed-ended format as stated by Haneman et al. (1991). Sophisticated statistical data analysis software, STATA, and SPSS was used for analyzing the collected data.

Theoretical Framework

In the dichotomous choice method, individuals are assumed to have utility function, U, income (I), and a set of conditioning factors (S)

U (I; S)

With the conservation of the Taj Mahal, each individual is confronted with a specified bid value, BID, which she/he could contribute towards the conservation initiative. It is assumed that the individual would accept a suggested BID to maximize his or her utility under the following conditions and reject it otherwise (Hanemann, 1984):

U (1, I -BID; S) + ε_1 ≥U (0, I; S) + ε_0

Here, ε_1 and ε_0 are independently distributed random variables with zero means. Therefore, the probability that a household will decide to pay for the conservation of the Taj Mahal is the probability that the conditional indirect utility

function for the proposed intervention is greater than the conditional indirect utility function for the status quo. Our dependent variable is dichotomous and equals 1 if the household is willing to pay a bid amount as economic value to the conservation of the Taj Mahal, and 0 otherwise.

The general form of the estimation form is:

The general form of the estimation form is:

$$Y_i^* = X_i\beta' + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Where,

Y_i = Is the dependent variable

X_i = Is a vector of independent variables

β' = is a vector of parameters to be estimated and

ε = is the error term

In practice, Y_i^* is unobservable. What we observe is a dummy variable Y_i defined by

$$Y_i = \begin{cases} 1 \, if \, Y_i^* > 0 \, or \, U(1, I - BID; S) + \varepsilon_0 \geq U(0, I: S) + \varepsilon_1 \\ 0 \, otherwise \end{cases}$$

The probability that a household is willing to pay to for the conservation of the Taj Mahal is:

$$Prob(Y = 1|X) = Prob(Y^* > 0)$$
$$= Prob(X_i B' + \varepsilon > 0|X)$$
$$= Prob(\varepsilon > -X_i B'|X)$$

If the distribution is symmetric,

$$Prob(Y = 1|X) = Prob(\epsilon < X_i B'|X)$$
$$= (X_i, B') \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where F is a cumulative distribution function (cdf).

Empirical Model Specification

Estimating Factors Affecting Willingness to Pay

By choosing the logistic cdf in equation (2) for the logit model, the probability that the ith household is willing to pay for the maintenance of the Taj Mahal is:

$$Prob(Y = 1|X) = F(X_i, B') = P_i = \frac{e^{z_i}}{1 + e^{z_i}} \ldots\ldots\ldots\ldots (3)$$

Z_i is a linear function of n explanatory variables (X_i), and expressed as:

$$Z_i = \beta_0 + X_{1i}\beta_1 + X_{2i}\beta_2 + X_{3i}\beta_3 + \cdots + X_{ni}\beta_n$$

If P_i is the probability that the ith household is willing to pay for the conservation of the Taj Mahal, then $(1 - P_i)$, the probability of not willing to pay, is

$$1 - P_i = \frac{1}{1 + e^{z_i}}$$

So, we can write

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{z_i}}{1 + e^{-z_i}} = e^{Z_i}$$

Where $P_i/(1 - P_i)$ is the odds ratio or the ratio of the probability that a household is willing to pay for the conservation of the Taj Mahal to the probability that a household is not.

Taking the natural logarithm, we get the log of the odds ratio, which is known as the logit model:

$$L_i = \ln\left(\frac{P_i}{1 - P_i}\right) = \ln(e^{z_i}) = Z_i \ldots\ldots\ldots\ldots\ldots (4)$$

If the error term (ε) is taken into account the logit model becomes:

$$Z_i = \beta_0 + X_{1i}\beta_1 + X_{2i}\beta_2 + X_{3i}\beta_3 + \cdots + X_{ni}\beta_n + \varepsilon \ldots\ldots\ldots\ldots (5)$$

Where β_0 is an intercept which tells us the log-odds in favor of paying for the conservation of the Taj Mahal when the coefficients of all included explanatory variable are assumed to be zero. $\beta_{1 \to k,}$ are slope parameters to be estimated in the

model, respectively. The slope tells how the log-odds in favor of paying for the conservation of Taj Mahal change as each independent variable changes. Z_i is also referred to as the log of the odds ratio in favor of paying for the conservation of the Taj Mahal above econometric model (equation 5) is used to identify factors affecting the WTP of a household by using the iterative maximum likelihood estimation procedure. To test the reliability and overall fitness of the discrete choice model, we also have applied the likelihood ratio chi-square test (Mukherjee, et al., 1998).

WTP Sensitivity Test Equations

For the derivative approach (marginal effect)

$$\frac{\delta Prob(Y = 1|X)}{\delta X_k} = \left[\frac{1}{1 + e^{z_i}}\right]\left[1 - \frac{1}{1 + e^{z_i}}\right]\beta_k$$
$$= P_i(1 - P_i)\beta_k \ldots\ldots\ldots (6)$$

This calculation is applied when δX_k is small; in other words, this can be applied when we are interested in knowing the elasticity of willingness to pay at a point concerning unit changes in a continuous variable δX_k. For the case of a dummy variable – e.g., a change from 0 to 1 – the formula is:

$$\frac{\Delta P_i}{\delta X_{Pi}} = Prob\big((Y = 1|X), (X_k = 1)\big) - Prob\big((Y = 1|X), (X_k = 0)\big) \ldots\ldots\ldots\ldots (7)$$

The above two equations are used to explain how a change in the variable of interest affects willingness to pay for the conservation of the Taj Mahal.

Estimating of the mean and aggregate willingness to pay

Assuming the error term is distributed with mean zero and variance equal to one, equation (2) takes the form of a probit model. Then, divide the intercept (α) by the coefficient associated with the bid value (β). Assuming the probability of a household's willingness to pay for the conservation of the Taj Mahal is a linear function of bid value, the following probit model is specified to calculate the mean WTP:

Then, mean WTP (μ) using the probit model as follows:

$$\mu = \frac{\alpha}{\beta} \ldots\ldots\ldots\ldots\ldots\ldots (8)$$

Where, α is the constant term, and β is the bid coefficient. Then, the aggregate willingness to pay (AWTP) is obtained by multiplying MWTP by the total households in the study area (TH) measured in *Taka; this gives:*

$$AWTP = MWTP * TH \ldots\ldots\ldots\ldots\ldots\ldots (9)$$

Measurement of Variables and Hypotheses

The dependent variable in our WTP estimation was households' willingness to pay to support conservation practices for the Taj Mahal is ready to contribute (Willing to pay).

One consideration is whether the variables that influence WTP are policy-relevant, that is, whether WTP can be influenced by various interventions. The explanatory variables have been chosen based on the literature. Kabir and Islam (2014) did work to determine the household's willingness to pay as an existing value for the Royal Bengal Tiger conservation in the Sundarbans. They used a contingent valuation survey to find out people's willingness to pay. They used ten potential explanatory variables in the model. After doing slight modifications a total of ten explanatory variables have been selected for this study. Thus, the following 10 potential explanatory variables, which are hypothesized to influence households' willingness to pay as the existing value to support the Taj Mahal conservation, were selected.

Table 1: Description of variables

	Variables	Description	Type	Expected Sign
Dependent Variable	WTP	Ready to contribute the proposed bid	Dichotomous	
Explanatory Variables	AGE	Age of the Household Head	Continuous	Positive/ Negative
	GENDER	Sex of Households	Nominal	Negative
	FAMILY	Number of Family Member of Household	Continuous	Negative
	EDUCATION	Education Level of the Household Head	Continuous	Positive
	INCOME	Total Monthly Income of the Family	Ordinal	Positive
	IDENTITY	Important for cultural identity	Dummy	Positive
	THREAT	Taj Mahal is under threat	Dummy	Positive
	CONSERVATION	Like to see the Taj Mahal Conservation program	Dummy	Positive
	CITIZEN	Citizen's involvement important for conservation fund	Dummy	Positive
	BID	Bid Value	Continuous	Negative

Source: Compiled by the author, 2020.

RESULTS AND DISCUSSION

Descriptive Statistics

This study analysisanalyses's how much economic value household places on the Taj Mahal conservation and how socioeconomic and demographic factors affect this value. Out of 200 sample respondents, 70.50 percent were found to be willing to pay the proposed bid prices for the Taj Mahal conservation, whereas the remaining 29.50 percent rejected the proposed bid prices. (Table 2). The mean of the bid values for non-willing households are found to be 149.02 with a minimum of 10 and a maximum value of 200 on the other hand, the bid value of disposed households is 38.95 which much lower than the bid offered to the non-willing group. The result shows that the variable is statistically significant at a 1 percent probability level. The maximum willingness to pay for a non-willing household is lower than that of the willing household, which is estimated to be 18.83 and 55.68 taka respectively.

Table2: Household Willingness to Pay, Bid Value, and Maximum Willingness to Pay

Variable	percent for 1 dummy variable	Mean (n=200)	non-willing (n=59)			Willing (n=141)			Mean Diff (t-test)
			Mean	*Min*	*Max*	*Mean*	*Min*	*Max*	
WTP	70.20								
BID		76.33	149.02	10	500	38.95	10	200	8.54***
MWTP		37.49	18.83	0	200	55.68	10	100	

*** Statistically significant at 1percent
Source: Compiled from the Primary Survey, 2020.

Above presents the distribution of "yes" and "no" responses along the bid prices explain argument and hypothesis that states the probability of 'yes' responses decline with higher bid values. It also explores the relationship between bid values to average maximum willingness to pay to support Taj Mahal conservation in India.

Table 3 shows the sex composition of sample households from the total sample size of 200, out of which only 30 or 15.00 percent of the respondents were found to be female-headed households and the remaining 170 or 85.00 percent were male-headed households. Out of the total sample households taken, 141 (70.50 percent) were willing to take part in the conservation process and contribute the randomly offered bids and the other 59 (29.50 percent) of the households were not willing to pay. Out of all the 59 non-willing households, female-headed households contribute 59.32 percent while male-headed households were the other 40.67 percent.

Table 3: Sex Composition of the Sample Households

	Willing to pay existence value for the conservation of Taj Mahal						
	Not Willing		Willing		Total		
Sex	No	Percentage	No	Percentage	No	Percentage	χ2
Female	35	59.32	51	36.17	86	41.50	.13
Male	24	40.67	90	63.82	114	62.50	
Total	59	100	141	100	200	100	

Source: Compiled from the Primary Survey, 2020.

On the other hand, the total 141 willing households, 51.00 (36.17) percent were female-headed and the rest 90 (63.82 percent) were male-headed households. *Table 3* indicates that there is no significant relationship between the sex of the household head and willingness status to accept the offered bid. This table presents that, sex difference is not an important component in WTP decision but male-headed households are more ready to pay for conservation of the Taj.

Table 4 shows the relationship of willingness to pay and age, education, number of family members, and income of households in the study area. The average age of the household heads of the respondents was estimated to be 40.02 years with a minimum of 24 and a maximum of 72 years. The willing households had a sample mean age of 39.25 years, while the counterfactual had a sample mean of 38.22 years. There is no significant difference between the non-willing and willing households of different age groups. This underlines that age difference is not an important component in WTP decision.

The sample households had a total of 200 family members with a minimum of 3 and a maximum of 11 members. The mean household sizes of the non-willing and willing households were 5.33 and 4.53, respectively, and this difference is statistically significant at 1per cent probability level; showing that there was a significant difference between the non-willing and willing households in their family sizes. This is might be the higher number of family members requires more amounts of money as living expenses and fewer surpluses are available to make such voluntary payments as like Taj Mahal conservation.

The mean of the number of years that the household head spent on the school was also computed and the result represents that the mean of years that the sampled household heads spent in school for the willing and non-willing households is 15.37 and 12.96 years, respectively. The total sample means education level of the sampled household was 16.01 years. Similar to family size, the mean education level of the household heads of the willing and non-willing groups had a statistically significant difference at 1per cent probability level. The significance of the variable indicates the importance of education in influencing household willingness to pay for the conservation of the Taj Mahal.

Table 4: Age, Education, Number of Family Members and Income of the Households

	Willing to pay for the conservation of the Taj Mahal					
	Not Willing (N=59)		Willing(N=141)			
Variable	Mean	St.Err	Mean	St.Err	t test	Mean (N=200)
AGE	38.22	1.27	39.25	.855	0.16	40.02
EDUCATION	12.96	.490	15.37	.309	-4.78***	16.01
FAMILY	5.33	.132	4.53	.068	4.69***	4.65
INCOME	7.30	.181	5.55	.129	0.30***	5.38

*** statistically significant at 1percent
Source: Compiled from the Primary Survey

Table 4shows that there is no statistically significant difference between the two groups in terms of total income at less than 1 percent probability level. Monthly family incomes (from all sources) of the household head were divided into ten different groups in the survey questionnaire. Among them, it is found those respondents, who are willing to pay for the Taj Mahal conservation belonging to the lower-income group (Rs. 30,000-40,000) than the respondents who are not willing to pay for the Taj Mahal conservation. The average respondents who are not willing to pay for the Taj Mahal conservation were in the higher income group

(Rs. 50,000-75,000). Thus, income plays a very less important role in the WTP decision of the residents of Agra city.

Table 5shows the relationship of willingness to pay and respondent awareness and thought about cultural importance. 90 percent of the respondents perceived that the Taj Mahal is important for cultural identity and the respondents who were willing to contribute the offered bids in Taj Mahal conservation are found to be as high as 99 percent. Table 5 also shows that 82 percent of households considered that the Taj Mahal is under threat and 18 percent were not in the same thinking.

Table 5: Important for cultural identity, under threat for any source, conservation program, and citizen' involvement to the Taj Mahal conservation fund.

	Ready to contribute to the conservation					
	Non-Willing (N=59)		Willing (N=141)			
Variable	Mean	St.Err	Mean	St.Err	t test	Mean (N=200)
IDENTITY	.58	.04	.99	.007	-4.56***	.90
THREAT	.70	.05	.95	.02	-4.27***	.82
CONSERVATION	.67	.05	.96	.01	-5.25***	.89
CITIZEN	.59	.05	.94	.01	-7.29***	.82

*** Statistically significant at 1per cent
Source: Compiled from the Primary Survey, 2020

Sadia, 2021

Moreover, 89 percent of the respondents likes to see the conservation of the Taj Mahal and 12 percent thought otherwise. The result also presents that the variable Conservation (Like to see Taj Mahal conservation) is statistically significant at 1per cent probability level.

This table also presents that 82 percent of households considered that citizen involvement is important for running the Taj Mahal conservation program and 18 percent were not in the same thinking. The result shows that there is a statistically significant relationship among willingness status importance of the Taj Mahal, Taj is under threat, like to see Taj conservation and perception on the citizen involvement are important for running Taj Mahal conservation program at 1per cent probability level; showing that these all of the four variables are important for running Taj Mahal conservation program increases respondents willingness to pay.

A total of 10 explanatory variables were considered in the econometric model used in this case, out of which only 7 variables were found to be significantly influencing the probability of willingness to pay among the selected households.

Analysis of the Determinants of Households Willingness to pay

Table 6 indicated that the logit estimate, out of total 7 significant explanatory variables hypothesized 4 explanatory variables have positive and significant effects on the probability of respondents accepting the offered initial bid and 2 have a negative and significant effect on the other hand, the rest only 1 explanatory variable were found to be not significant at 5percent probability level.

Table 6: Logit Model Estimates of WTP

Rtc	Coef.	Std. Err.	P>|z|
Family	-0.577***	0.331	0.01
Education	0.131**	0.046	0.03
Identity	3.420***	1.759	0.00
Threat	0.727	0.547	0.59
Conservation	0.113**	0.054	0.03
Citizen	3.340***	1.161	0.00
Bid	-0.036***	0.005	0.00
_cons	-0.101		0.95
Observations	200		
Log-likelihood	-64.033579		
LR chi2(7)	134.26		
Pseudo R2	0.5087		
Prob > chi2	0.000		

*** and ** statistically significant at 1 percent and 5 percent respectively
Source: Compiled from the Primary Survey, 2020

People's perception of the Importance of Taj Mahal conservation has an expected positive effect related to the likelihood of saying "Yes" to the offered bid. Households with higher family sizes are expected to pay less than those who have a smaller family size. This is precise because payment to Taj Mahal conservation largely depends on household expenditure and surplus money. Hence, households with small family sizes may tend to pay more for conservation. The negative sign implies that an increase in household family size decreases the probability of a respondent to support the proposed voluntary contributions to the Taj Mahal at a 1 percent significant level.

The coefficient of this education variable was significant at a 5 percent probability level, which shows that an increase in the household head about the importance of the conservation of Taj Mahal increases its WTP. Education is considered as a measure of cultural awareness and considered that more educated people are having more consciousness for the Taj Mahal conservation which makes WTP more feasible.

Taj Mahal is important for cultural identity (identity) variable has an expected positive effect related to the likelihood of saying "yes" to the offered bid. The coefficient of this variable was found to be significant at a 1 percent probability level which shows that households who consider the Taj Mahal is important for cultural identity to have a higher probability to pay for the conservation of the Taj Mahal.

The conservation variable has an expected positive effect related to the likelihood of saying "yes" to the offered bid. The coefficient of this variable was found to be significant at a 5 percent probability level which shows that households who like to see the Taj Mahal conservation program have a higher probability to pay for the conservation of the Taj Mahal.

The citizen variable has an expected positive effect related to the likelihood of saying "yes" to the offered bid. The coefficient of this variable was found to be significant at a 5 percent probability level which shows that households who consider citizens' involvement is important for the conservation program to have a higher probability to pay for the conservation of the Taj Mahal. This is because people who consider that citizen involvement is important for the Taj Mahal conservation program to have higher cultural awareness.

The initial bid offered is negative and significantly related at a 5 percent significance level with a willingness to pay for the conservation of the Taj Mahal. This implies the probability of a 'yes' response to the bid increases with a decrease in the offered bid which indicates that the likelihood of accepting an offered bid amount increases as the bid amount goes down and vice versa which is consistent with the economic theory. In general, in the logit model, it is considered that the Taj Mahal is under threat (Threat) variable has expected sigh, but it is statistically not significant.

Table 7: Marginal Effects of the Explanatory Variables

Variable	dy/dx	Std.Err.	Z	P>z
family	-0.113***	0.050	-2.86	0.00
education	0.161**	0.013	2.16	0.03
identity º	0.673***	0.113	5.95	0.00
threat º	0.196	0.209	0.7	0.48
conservation º	0.401**	0.209	-0.97	0.33
citizen º	0.564***	0.113	5.95	0.00
bid	-0.005***	0.001	-4.59	0.00

*** and ** statistically significant at 1per cent and 5per cent respectively
Source: Compiled from the Primary Survey, 2020

(º) dy/dx is for discrete change of dummy variable from 0 to 1

The result in Table 7show that keeping the effect of the other factors constant at their mean value, a one-person increase in the total family size decreases the probability of willingness to pay by 11.3 percent. This is because households with higher family size need more money for the household expenses. Hence they are willing to pay less of the existing value in this conservation initiative. The marginal effect estimates of the logit model showed the education level of the household for each additional increment of education from one year level to another. The probability of the willingness by the household to pay for the Taj Mahal conservation will increase by 16.1 percent at less than 5 percent probability level one possible reason could be the respondent with higher income might have a higher perception of historical resource conservation that influences the decision to participate in the Taj Mahal conservation.

Taj Mahal is important for cultural identity (identity) variable is statistically significant at 1 percent probability level. Holding another thing constant, the probability of a household willingness for the conservation of the Taj Mahal increased by 67.3 percent for perceived respondents than the other counter factual ones.

Moreover, variable conservation (like to see the Taj Mahal conservation program) is statistically significant at a 5 percent probability level. Similarly, variable citizen (citizen involvement for the Taj Mahal conservation) is statistically significant at 1 percent probability level. Holding another thing constant, the probability of a household willingness for the conservation of the Taj Mahal increased by 56.4 percent for perceived respondents than the other counter factual ones. Consistent with the earlier expectation and established economic theory, the randomly offered bid value (BID) has a

negative and significant effect on the WTP for the conservation of Taj Mahal at 1per cent level of significance. The marginal effect here indicates that a one taka increase in the contribution of the proposed fund reduces the probability of being willing to pay for the proposed fund by nearly 0.5 percent.

Estimation of the Mean Willingness to pay (MWTP) and Aggregate Benefit from Single Bounded DC Format CV Study

Mean Willingness to pay (MWTP)

The mean willingness to pay (μ) was calculated using the formula from the probit model, following Haab and Mconnell (2002), using the following formula:

$$\mu = -\alpha / \text{ß} \quad \text{.......... (1)}$$

Where α = a coefficient for the constant term

ß = a coefficient for the amount of the bid that the household was asked to pay.

The probit estimates show that the coefficient for the constant term is -.0136024 and the coefficient for the bid is found to be 1.495134. Thus, the estimated mean willingness to pay (MWTP) from the probit model for the conservation of the Taj Mahal in India is Rs. 109.92(US$ 1.50) per month.

Table 8: Probit parameter estimates for the conservation of the Taj Mahal

Variable	Estimates	Std. Err
Bid	-.0136024	0.0018234
_cons	1.495134	0.156317
Log-likelihood	-89.023466	
LR chi2(1)	69.82	

Source: Compiled from the Primary Survey, 2020

Welfare Measure and Aggregation

Table 9: The Aggregate WTP

Name of the Study Area	Total Households	Sampled Households	No. of Households with Protest Zero	HHs with Valid Responses	Mean WTP from Probit (Indian Rs.)	Total WTP (Indian Rs. In per month)
Agra	1727	200	18	1572	109.92(US$1.50)	172794 (US$2362.87)

Source: Compiled from the Primary Survey, 2020

Mean was used as a measure of the aggregate economic value of the Taj Mahal conservation in India arising from this study. There are 1727 households in the study area Azizpur of Agra. After deducting the protest zeros 155 the expected total households with valid responses are 1572 households. The total willingness to pay in the whole study area (Azizpur)

is thus simply the multiplication of the respective means and the number of the expected households.

In Table 9 above, the aggregate WTP was calculated by multiplying the mean WTP by the total number of households who are expected to have a valid response in the selected area. Following this, the aggregate WTP for the conservation

of the Taj Mahal is computed to be Rs. 172794 (US$2362.87) per month. This shows that there is a high level of willingness to pay for the Taj Mahal conservation initiative if it is taken seriously.

CONCLUSION

The main objective of this work was to understand how much the residents of Agra City (In this case Azizpur of Agra City) are willing to pay as an economic value for the conservation of the Taj Mahal in India. The study was designed to find out the variables, which determine respondent's willingness to participate in Taj Mahal conservation and find out how each of the selected variables is related to the willingness of the respondents to participate in the Taj Mahal conservation project. Moreover, this study also attempts to estimate the mean willingness to pay to keep in mind its policy relevance. Based on the results from this study, the Government of India can initiate the Taj Mahal conservation project after a proper benefit-cost analysis based on this information to see if the total benefits from the conservation project would outweigh the total costs before charging households. It is said conservation program is implemented; the study findings can serve as a policy input for involving households/ stakeholders in the management process. The aggregate amount is obtained by multiplying the mean WTP by the households with the valid response from Azizpur. The mean WTP from the probit model estimates is Indian Rs. 109.92 (US$1.50) per month per household. The mean WTP found from this study indicates that government can generate a substantial amount of revenues for designing, evaluating, or managing a Taj Mahal (historical site) conservation project/policy. Finally, this study only analyses the demand side information for the Taj Mahal conservation of India. It is expected that the findings from the present study may serve as a basis for any possible future study on the ancient historical site Taj Mahal and the need for initiating better management of the Taj Mahal.

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Role of Mobile Technology on Business Opportunism and Performance of SMEs in Sri Lanka

SLJSSH

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Abstract

The study empirically examined how the use of mobile technology affects the opportunism and business performance of Small and Medium-sized Enterprises (SMEs) in Sri Lanka. The Partial Least Squares-Structural Equation Modelling (PLS-SEM) was utilized to analyze the data that was collected from 400 SMEs by utilizing a structured questionnaire having face-to-face and telephony interviews. Results revealed that mobile technology generates a significant positive effect on business performance and, consequently, a negative effect on opportunism while opportunism makes a negative impact on the business performance of SMEs. Simultaneously, the study revealed that opportunism considerably interposes in the relationship between mobile technology and SME business performance. Finally, the study has made a strong recommendation to strengthen the use of mobile technology and its applications which highly relate to solving the issues faced by SMEs in the current imperfect market mechanism.

Keywords: Business Performance, Mobile Technology, Opportunism, SMEs

INTRODUCTION

Mobile technology is one of the prominent and leading technologies which rapidly changes communication between businesses and its latest enhancements have made virtual environments with prompt communication which allows the business stakeholders to abandon the traditional and information less business communication to more effortless information-rich communication (Bovee and Thill, 2015). Widespread adoption of mobile technology has also had significant effects on not only how businesses communicate but also changing the way they deal with suppliers, consumers, and other third parties involve with them (Bovee and Thill, 2015; Kenneth and Jane, 2013). Presently, these characteristics digging whole information sources all over the world and provide pieces of information that someone required easily and timely to their hand (Alghizzawi, 2019; Fischer and Smolnik, 2013; Taylor et al., 2017).

Information is a very essential resource for the business organization (Kenneth and Jane, 2013). According to Williamson (1979), the asymmetry of information creates a crucial problem for businesses such as Transaction Cost (TC) which essentially affects business performance. Humans are bounded rational due to the incapability of handling information (Simon, 1990). According to his generalization, this limitation is two folds. The former is cognitive attributes and the latter is language processing limitations. Therefore, an information-rich person can behave differently beyond the information less person. If someone uses this phenomenon to obtain additional benefits it is called opportunism. Thus, opportunism makes fear on businesses, and thereby, they always attempt to safeguard it by expending more cost in addition to the production cost and finally, it affects the performance and the survival in the market especially in the

SME sector (Carmel and Nicholson, 2005; Dyer and Chu, 2003; Ranatunga et al., 2020b). All these circumstances appeared since the scarcity of information.

As mentioned above, if mobile technology eliminates the information barriers among businesses then opportunism should be disappeared. According to the World Bank, the use of mobile phones in Sri Lanka is 142.65 per 100 inhabitants in 2018 and the total value is 24.4 Million with an average annual rate of 20.71% (World Bank, 2020). It is a considerable amount of using mobile technology by the population in Sri Lanka. Therefore, there is a high possibility to think that the use of mobile technology in the SME sector has also been increased, and simultaneously, information dissemination among the SME sector is also raised by mobile technology. This development could affect their level of faced opportunism and it should be decreased. Therefore, the business performance should be increased because they can behave under the reduced TC. However, this phenomenon has not been examined by the studies, especially in the Sri Lankan context.

According to Priyanath and Premarathne (2017b), if SMEs capable to collect and evaluate information, they would be able to reduce opportunism. Nevertheless, mobile technology can easily be used to end up the situation of scarcity of information around the stakeholders of SMEs (Alghizzawi, 2019; Fischer and Smolnik, 2013). This research has particularly identified a significant gap in this area of literature which is the lack of empirical studies for examining the use of mobile technology to disseminate information and its effect on opportunism and business performance of SMEs. Therefore, the major objective of this study is to understand

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the impact of using mobile technology on business performance and opportunism as well as the mediating effect of opportunism on the relationship between mobile technology and business performance of SMEs in Sri Lanka.

THEORETICAL BACKGROUND

Mobile Technology: Although mobile technology was a mystery two decades ago presently it has made a remarkable necessity to both the urban and rural areas of any country. It is a form of technology that is mostly used in cellular-based communication with related other aspects used as wireless communication. It uses many transmitters to send data simultaneously through the same channel called Code-division multiple access (CDMA) and now becomes a very sophisticated and efficient communication approach with diverse functionality in 4G networks (Taylor et al., 2017). Though this technology was first used for calls, SMS, and games presently the digital world mostly depends on it by implementing the internet and its functionalities through mobile technology (Alghizzawi, 2019; Taylor et al., 2017). Mobile technology creates an environment to obtain the correct information to the correct user at the correct time by providing facilities for personalization and localization of the contents (Fischer and Smolnik, 2013). Using mobile technology with internet connectivity users can gain vast areas of required information by downloading files, internet calls, video conferencing, entertainment, easily trace places on the earth using the Global Positioning System (GPS), etc. Therefore, businesses manipulate their businesses virtually even without seeing them in person and bankers hang on mobile technology on managing finances and stocks and presently, many business firms use mobile apps to increase their earnings by facilitating customer care and satisfaction (Keneth and Jane, 2013). These impressive successes of mobile technology which can be easily reached to the business are attributed to key features as ease of use without the higher cost of infrastructure, low-cost equipment, low-cost messaging ability, self-effacing nature, and any time of the day from anywhere in the world (Levi-Bliech et al., 2018). According to Alghizzawi (2019), the trend of using the internet has reached 4.1 Billion and 92% of them use mobile technology to access it.

Opportunism: The Transaction Cost Economics (TCE) which emphasized a more complete theory about the firms and markets which was begun by Coase (1937), outlines how the cost determines in a particular individual transaction and it includes two major factors such as human (behavioral) factors and environmental factors. Human factors consist of consequences of the characteristics of human decision-makers, in which bounded rationality (Simon 1990) and conversely, opportunism (Williamson 1993) is another. According to Williamson (1975), opportunism is self-interest-seeking with guile. More generally, researchers mentioned opportunism as incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse (Priyanath and Premarathne, 2017b). Two kinds of opportunism such as ex-ante which can establish by the principal business partner by providing imperfect information or misleading expose of information before the transaction and ex-post opportunism which occurs after a transaction due to the hidden activities of the principal business partner. According to Hobbs (1996), business parties behave opportunistically through hiding information or some business actions from opposition partners for increasing their earnings as well as benefits. If this nature leads to make risk on the suffering business partner

and avoid this situation they need to either do transaction by vertical integration or involve the third party like contracts, arbitrators, courts, etc. and again it raised more cost (Gray and Boehlje, 2005; Hobbs, 1996; Priyanath and Premarathne, 2017b; Yousuf, 2017).
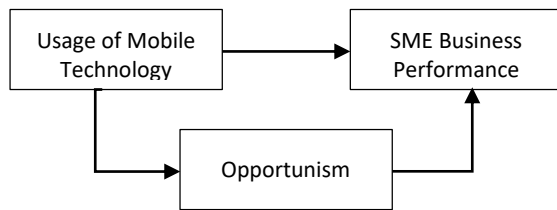
Business Performance: "Performance serves as a significant predictor in organizational commitment and retention" (Kim et. al., 2004: 672–681). Performance is a final result of followed procedures which is evaluated against the standard or a benchmark (Khare et al., 2012). According to Nieman et al. (2003), SME performance is dependent on several factors such as survival in the market for more than two years, employing a staff of more than five and less than thirty by earning a profit, and develop the business in terms of infrastructure and growth and consequently, all these considered as the success of the SME. Researchers mostly explained growth and profitability factors which can be calculated quantitatively are the considerations for obtaining the business performance (Simpson et al., 2004). Therefore, frequently, most researchers used only the financial measures for estimating the performance (Richard et al., 2009). Conversely, non-financial aspects are also considered by some researchers to determine the performance (Walker and Brown, 2016).

Researchers argued that measuring the performance should contain significant explanatory power to predict the business achievements and should concern a wide range of aspects rather than the narrow path (Haber and Reichel, 2005; Simpson et al., 2004). Business performance particularly in the context of SMEs made more attention to overall performance rather than the traditional measures of only using financial performance (Saunila, 2016; Waśniewski, 2017). Two types of performance identified by Santos and Brito (2012) such as financial performance and strategic performance instead of standard operational performance. Waśniewski (2017) proposed another system for measuring the performance of SMEs which depended on the key success factors of the organization. Thereby, including all the consideration this research use not only the strategic factors but also the operational factors to evaluate SME business performance (Santos & Brito, 2012; Tarutė and Gatautis, 2014).

RESEARCH MODEL AND HYPOTHESES

Imperfect market behavior makes fail paths for SMEs and they cannot achieve the expected level of business performance especially in developing countries (Ranatunga et al., 2020b). Researchers stated that opportunism is one of a major issue which implies high cost and therefore, depicts low performance (Dyer and Chu, 2003; Priyanath 2017; Priyanath and Premaratne 2017a, 2017b). According to TCE the behavioral assumption of opportunism distributes through the asymmetry of information (Williamson 1985, 1993; Zhang, 2009). Therefore, the information asymmetry problem can be eliminated by providing adequate, reliable, and timely information to the SMEs which reduces the opportunism as well as the TC. Mobile technology provides the above-mentioned adequate, reliable, and timely information to reduce information asymmetry (Fischer and Smolnik, 2013). Therefore, certainly, it reduces the opportunism and increases the business performance of SMEs and thus, there should be a mediating effect of opportunism. Figure 01 conceptually established this rationale.

Figure 01: Relationships among ICT, bounded rationality and business performance of SMEs

Usage of Mobile technology and SME business performance: According to Donner and Escobari (2010), four categories of potential impacts on mobile technology on businesses such as increased availability of information in the network, the entry of new actors particularly buyers and sellers into markets, mobiles help enterprises cut out middlemen, and mobiles help individuals start new businesses have been identified. Mobile technology provides a higher value system which makes opportunities for new customers and suppliers into the market for increasing the earnings (Aker, 2008). Aker (2008) mentioned mobile technology declines the price dispersion by 21% and increases the profit by 29% of the SMEs. Jagun et al. (2008) stressed that mobile technology avoids the effect of middlemen on the business and the way of efficiency on routing around the buyers and suppliers and thereby increases the performance. Mobile technology improves than ever the communication on business functions such as purchasing, selling, delivery, inventory, and stock control, accounting not only within the business but also external to the business and therefore, increase the performance (Rashid and Elder, 2009). Organizations compressed their inefficient old hierarchical structures because of mobile technology and obtained more benefits and further, they enable to create a dynamic marketplace and helps to preserve the competitiveness, improve profitability and success (Akanbi, 2017; Tarutė & Gatautis, 2014). Therefore, the study predicts that:

H1: Usage of mobile technology positively relates to the SME Business Performance

Usage of mobile technology and opportunism: Unquestionably, mobile technology and its devices facilitate to implementation of the simplified business information exchange, making it easier to access a vast area of supplier and customer information as well as goods and services. As mentioned by Donner and Escobari (2010) the mobility, availability (anytime, anyplace), and personalization as important benefits of mobile technologies and their services. According to Krishnan (2014) and Sun and Wang (2012), Virtual Social Networks (VSN) encourages a new and a different form of the wide-area network through mobile technologies and establishes a simple communication environment for making effective relationships among partners and thus all these natures focused on avoiding the information asymmetry to reduce the bounded rationality of business partners which directly affects to reduce the opportunism. According to Carmel and Nicholson (2005) various uncertainties such as economic, political, technological, may face due to the opportunistic behavior by the large and small firms and they can reduce it using mobile communication. Zhang (2009) confirmed on their findings if there is a high technological practice that negatively affects the uncertainty and its capabilities positively impact the different types of performance. Priyanath and Buthsala (2017) said that the ability to access information and network density negatively affects opportunism. Mobile technology directly facilitates access to information and conversely, it facilitates to advance of the network density of the business partners. Therefore, the usage of mobile technology has a negative effect on opportunism. Thus the study proposes that the:

H2: Usage of mobile technology negatively relates to the opportunism

Opportunism and SME business performance: As explained in the TCE information asymmetry generates opportunism. Those who have more information will mislead the other party since they have less information (Bellalaha and Aboura, 2006; Williamson, 1981). The risk of opportunism faced by the SMEs encourages to safeguard the transactions such as search markets and prices, make negotiation among the transaction details with exchange party, make agreements and get legal advice to agreements, monitoring the transaction while it is executing, to avoid such opportunism (Priyanath and Premarathne, 2017c). Consequently, the presence of opportunism leads to an increase in the TC and thus decreases the performance of SMEs. Thus the study predicts that the:

H3: Opportunism negatively relates to the SME business performance

Usage of mobile technology, opportunism, and SME business performance: Mobile technology establishes a more systematic way of doing business between both suppliers to business and customer to business and thereby increases the performance (Levi-Bliech et al., 2018). Conversely, mobile technology enhances the information flow between the businesses which directly affects to reduce information asymmetry and hence, opportunism. Further, effective communication improves organizational as well as employee performance especially in SMEs because most of the employees are semi-skilled such as agriculture-related businesses (Durowoju, 2017). Meanwhile, according to the establishment of hypothesis H2, mobile technology has a negative impact on opportunism since mobile technology directly helps to eradicate the major factors which are born opportunism. Consequently, the opportunism that reduces business performance is predicted by the H3 hypothesis. Therefore, it is reasonable to assume that:

H4: Opportunism has a mediating role in the relationship between the usage of mobile technology and the business performance of SMEs

METHODOLOGY

According to the concept established under the research problem, three pieces of theories are combined, and therefore, it is a deductive approach, and the method is quantitative. The study selected only the manufacturing SMEs and the survey method is used for the data collection on a unit of analysis as the SME owners. Department of Census and Statistics (DCS) has given definition for SMEs as $5 - 24$ persons engaged for small industries and $25 - 199$ persons engaged for medium enterprises. This definition provides 81,531 SMEs and it has been used as the study population. According to Kock and Hadaya (2018) and Ranatunga, Priyanath, and Meegama (2020b), the 'Inverse Square Root Method' was employed to obtain the minimum sample size. As mentioned by Kock and Hadaya (2018), a pilot survey has been conducted by using 110 sample size in order to calculate the minimum β value. The calculated minimum β value is 0.123 and it is applied to the computer program. The result was 397 and therefore, a 400 sample size is used for the research. Stratified sampling method utilized to select items

pertaining to all the manufacturing industrial divisions according to the ISIC category while the sample is populating on the percentage share of the SMEs distribution in each district and determine the number of SMEs to represent all the districts in Sri Lanka.

Face-to-face and telephony interviews were conducted with owners/managers of SMEs to collect data. By using a systematically designed 7-point Likert scale questionnaire which is prepared on a two-step procedure utilizing a pool of items for each variable by reviewing the past literature and select items carefully according to the environment of Sri Lanka. A pilot survey covered the validity and reliability of the study, and it satisfied the questions are understood; whether the instructions are cleared; whether the order of the questions is appropriate and the questions are useful, etc. Partial Least Square - Structural Equation Modelling (PLS-SEM) is identified as the most useful analysis technique for multiple independent and dependent variables. The study followed standard techniques to evaluate the reliability and validity as well as the efficiency of the model examined by using the multi-collinearity issues, R^2, effect size (f^2), and predictive relevance (Q^2). The SmartPLS (version 2) software is used to analyze the data.

Measures: Ten items have been utilized to operationalize the use of mobile technology for business activities in SMEs (Matlala et al., 2014). According to Priyanath (2017), two major attributes of opportunism have been identified as buyer opportunism and supplier opportunism eight items have been utilized for determining the exaggeration of needs, sincerity in dealings, truthfulness in dealings, good faith bargaining, dishonesty in dealings, unfairness in dealing, cheating in dealing and breach of agreement engaged in by the exchange partner. SME business performance is mainly measured using two aspects such as financial and operational performance (Tarutė, and Gatautis, 2014; Santos & Brito, 2012). The financial performance measured as profitability, growth, market value, and conversely, strategic or operational performance indicated by customer satisfaction, employee satisfaction, environmental performance, and social performance. Cover the financial performance, profitability operationalizes by 05 items and the growth operationalizes by using another 05 items. Consequently, within the strategic or operational performance, customer satisfaction operationalizes by 07 items, employee satisfaction operationalizes by 05 items, environmental performance operationalizes by 04 items and social performance operationalize by another 02 items.

RESULT AND DISCUSSIONS

First, the measurement model is evaluated on reliability and validity as shown in table 01 which illustrated the six first-order constructs (Hair et al., 2012; Thatcher, 2010).

Table 01: Analysis of First-Order Constructs

	Construct	Loading	t- Statistics	CR	AVE	α*
1	**Business Performance Customer Satisfaction**					
	Customer feedback on production	0.937	57.091			
	Changes of production on customer feedback	0.920	41.554			
	Customer request for new production	0.905	34.066	0.971	0.828	0.965
	Growth of customers in each marketing area	0.888	41.952			
	Complaints on the production(s)	0.894	26.929			
	Frequency of returning items	0.886	30.479			
	Growth of popularity of the tradename	0.939	49.029			
2	**Business Performance Employee Satisfaction**					
	Growth of Expenses on training programs	0.759	26.589			
	Growth of providing gift and bonus for the employee	0.775	18.233	0.864	0.560	0.808
	Decrement of resignation	0.700	9.635			
	Increment of employee salary	0.755	10.859			
	Increment of employee welfare	0.750	10.559			
3	**Business Performance Growth**					
	Opening of a new factory	0.825	21.153			
	Increment of the number of employees	0.828	25.212			
	Establishing new buildings	0.795	16.089	0.915	0.682	0.884
	Establishing new Machines	0.858	32.647			
	Growth of investments	0.823	24.089			
4	**Business Performance Profit**					
	Growth of monthly sales volume	0.968	126.045			
	Growth of monthly income	0.926	59.015			
	Growth of profit	0.946	73.546	0.970	0.869	0.962
	Decrement of sold product returning volume	0.909	40.559			
	Increment of stock movement	0.910	66.941			
5	**Opportunism Buyer**					
	Provide actual information about the deal when negotiating the transaction.	0.956	114.271			
	Genuinely act when negotiating the transaction.	0.853	29.165	0.976	0.834	0.971
	Overstate the requirements that they want to form the transaction.	0.959	100.037			

Reasonable bargaining requests from the buyers when negotiating the transactions.	0.960	145.106	
Change the pre-agreed facts while executing the transaction.	0.938	102.588	
Buyers are dishonest in transaction activates.	0.803	20.076	
Buyers make unfair changes in the dealings while executing the transaction.	0.917	43.407	
Buyers attempt to breach the established agreement.	0.905	35.727	

				CR	AVE	α
Opportunism Supplier						
Give actual information about the deal when negotiating the transaction.	0.982	175.040				
Make genuine when negotiating the transaction.	0.926	69.081				
Overstate the requirements that they want to form the transaction.	0.910	52.679				
6 Reasonable bargaining requests from suppliers when negotiating the transactions.	0.940	72.041	**0.983**	**0.877**	**0.980**	
Suppliers change the pre-agreed facts while executing the transaction.	0.935	97.830				
Suppliers are dishonest in transaction activates.	0.936	77.700				
Do unfair changes in the dealings while executing the transaction.	0.944	69.747				
Attempt to breach the established agreement.	0.918	43.879				

(n=400),
Source: Survey data, 2020.

The indicator reliability evaluates using factor loadings that are above the threshold value 0.7 in the statistical significance at 0.05 level. Cronbach's α and composite reliability of these six constructs also above the threshold value of 0.7 and hence the first-order constructs have been reached high reliability. Two validity test conducts and former includes Average Variance Extracted (AVE) values exceeded the required 0.5 thresholds and obtained the convergent validity and it means that indicators reflect their latent constructs. Latter is discriminant validity and according to table 02, diagonal values that are indicated by bold letters of the square root of AVE values exceed the shared variance with other constructs (Fornell and Larcker, 1981).

Table 02: Discriminant Validity of First-Order Constructs

	BPF_Growth	*BPF_Profit*	*BPO_Cus*	*BPO_EMP*	*Buyer*	*Supplier*
BPF_Growth	**0.826**					
BPF_Profit	0.813	**0.932**				
BPO_Cus	0.810	0.904	**0.910**			
BPO_EMP	0.641	0.615	0.621	**0.748**		
Buyer	-0.592	-0.628	-0.619	-0.401	0.913	
Supplier	-0.626	-0.647	-0.639	-0.443	0.908	0.936

(n=400),
Source: Survey data, 2020.

The second-order constructs are been established by using the latent variable scores of the first-order constructs. Table 03 indicated that the three endogenous latent variables such as business performance (BP), opportunism, and mobile technology (Mobe. Tech) established under the second-order level in order to evaluate the hierarchical mode

Table 03: Analysis of Second-Order Constructs

	Construct	Loading	t- Statistics	CR	AVE	α*
	Business Performance					
	Profit	0.877	31.746			
	Growth	0.920	67.085			
1	Employee satisfaction	0.747	74.611	**0.942**	**0.700**	**0.928**
	Customer satisfaction	0.923	14.503			
	Policy on environmental protection	0.814	17.776			
	Allocation of job opportunities for employees in less income group	0.755	13.516			
	Conducting social activities	0.798	18.411			
	Opportunism					
2	Buyer Opportunism	0.981	162.805	**0.982**	**0.964**	**0.963**
	Supplier Opportunism	0.983	160.741			
3	**Mobile Technology** Use mobile phones for business purposes.	0.731	15.923	**0.958**	**0.718**	**0.950**

Use mobile devices to connect to the internet for business purposes.	0.846	28.616
uses voice or video call application over the internet (skype for business, WhatsApp for business, Viber) for business activities with mobile devices	0.841	24.209
uses social media like (Facebook, LinkedIn) for business activities especially, production and marketing with mobile devices	0.805	20.381
Employees can use the Internet and its services through mobile devices	0.912	54.321
Employees use internet messaging and e-mails through mobile devices for business purposes	0.856	27.062
Employees can do video conferencing with their mobile devices for business purposes	0.870	29.004
Use mobile devices for innovations by using knowledge of the internet	0.868	27.679
Use mobile devices for solving business problems by using the knowledge on the internet	0.884	33.659

(n=400),
Source: Survey data, 2020.

As depicted in table 03 all the factor loadings, Cronbach's α, and composite reliability exceed the threshold value of 0.7 at the significance level 0.05, and hence, the constructs obtain the reliability. According to table 04, the AVE values of the constructs are above 0.5 and the square root of AVE values in the diagonal exceed the shared variance and both of the convergent and the discriminant validity of the constructs received and satisfied.

Table 04: Discriminant Validity of Second-Order Constructs

	BP	*Mob. Tech*	*Opportunism*
BP	**0.837**		
Mob. Tech	0.750	**0.847**	
Opportunism	-0.653	-0.721	**0.982**

(n=400), Source: Survey data, 2020.

The structural model has been assessed for collinearity issues according to the given guidance by Hair et al. (2014). Initially, collinearity issues have been examined and VIF values should below 5. Both VIF values obtained 2.081, and hence the analysis does not depict any collinearity issues. Tolerance levels are 0.481 which exceeded the threshold value of 0.2. Therefore, multicollinearity issues between the independent constructs and the dependent constructs cannot be seen in the structural model.

The established three hypotheses between the relationships of variables mobile technology, opportunism, and SME business performance tests using path coefficients β value and t-statistics provided by the PLS bootstrap process. Table 05 shows that mobile technology has a significant positive effect on SME business performance including β = 0.591 and t-statistics 4.685. Consequently, mobile technology has a significant negative influence on opportunism β = -0.723 and t-statistics 10.440. Finally, it shows opportunism has a negative effect on the SME business performance like β = -0.230 and t-statistics 1.687. Therefore, it is reasonable to accept H1, H2, and H3 hypotheses.

Table 05: Path Coefficient and Significance

Hypotheses	Relationship	Beta (Path)	T Statistics	Decision
H1	**Mob. Tech -> BP**	0.591***	4.685	Accept
H2	**Mob. Tech -> Opportunism**	-0.723***	10.440	Accept
H3	**Opportunism -> BP**	-0.230*	1.831	Accept

*P>0.1, **P>0.05, ***P>0.01
Source: Survey Data, 2020.

The study focused on another idea such as identifying the mediating effect of opportunism on the relationship between mobile technology and the SME business performance and it was previously made as hypothesis H4. Table 06 shows the calculation and the result which used the method given by Zhao et al. (2010) and Carrión et al. (2017). According to their instructions, it has a complementary mediating effect and as mentioned by Hair et al. (2013), it has a partial mediating effect because the VAF value is 0.22 (22%) and it is between the range of 20% - 80% and thus, H4 is accepted.

Table 06: Analysis of the mediate effect of Opportunism

Path	Direct effect model		Indirect effect[s]	S_e[d]	t-stat[e]	Total effect[s]	VAF axb/ (axb)+c	Type of mediation
	β[a]	t-stat	*axb*	(SD)	*(axb)/ S_e*	*(axb) + c*		
Mob. Tech → BP (c)	0.591	4.685	0.166	0.126	1.320	0.757	**0.220**	**Complementary**
Mob. Tech → Opportunism (a)	-0.723	10.44						
Opportunism → BP (b)	-0.23	1.831						

Source: Survey Data, 2020.

Following the steps given by Hair et al. (2014), the correlation between independent and dependent variables considered is the next step. The model having R^2 business performance and opportunism as 0.598, 0.522 respectively, which are considered as moderate. The effect size and the predictive relevance of opportunism as well as mobile technology on all dimensions according to Cohen (1988) and Chin (1998) examined as the last two steps. The result is shown that the large explanatory power given by such variables indicating a small effect size of opportunism (0.05), a large effect size of mobile technology (0.41), and large predictive relevance (0.510).

Mobile technology amplifies the information gain of the business stakeholders and eliminates the barriers which make many circumstances to achieve the target performance of the businesses (Donner and Escobari, 2010; Levi-Bliech et al., 2018). Although it dramatically reduces information asymmetry researchers do not attempt to examine its effect on opportunism that is one of the leading factors of reducing the business performance of SMEs especially in the COVID-19 environment. Therefore, this research is a unique effort as well as it is a necessity for the current phenomena in the world. The study predicts mobile technology positively affects SME business performance. The result proved it and found a significant effect as a 59.1% contribution to enhance the business performance of SMEs. This result proved the obtained outcome of other researches conducted in developing countries on technological changes of SMEs. According to Durowoju (2017), it is found that technological changes affect 56.6% to increase SME business performance. As well as Alaba (2020) revealed that there was a 64.5% positive correlation between mobile technology and SME business performance. Conversely, how do this performance can be obtained by SMEs? According to the theoretical explanation, it is obvious that mobile technology reduces information asymmetry on one hand and thereby reduces the extra cost on other hand. Because mobile technology reduces opportunism also. This study directly found it in which mobile technology decreases 72.3% of the opportunism of an SME. Priyanath and Premarathna (2017c) also explored that interpersonal trust reduces 73.6% of the opportunism of small-scale industries (SEs) of Sri Lanka. Mobile technology mainly affects to generate interpersonal trust among SMEs. Priyanath and Premarathna (2017b) also mentioned that Social Capital such as structural, relational, and cognitive have a negative impact on the opportunism of SEs of Sri Lanka. This study proves it also since mobile technology enhances such social capital because it facilitates the creation of informal links, interpersonal trust, as well as relational qualities which finally aim to reduce the asymmetry and increase the quality of information. The findings revealed that the nature of opportunism makes a low negative impact on the SME business performance including a 23.0% negative effect. It is reasonable to identify that the high influence of mobile technology has affected to reduce the opportunism and thereby it has a low impact on the SME business performance. Another unique finding of this study can exhibit as what is the mediating effect of opportunism on the relationship between mobile technology and SME business performance? The above result analysis provides the answer and opportunism contains a complementary mediating effect on the mentioned relationship and its gravity is 22.0%.

CONCLUSIONS

SMEs are making less business performance due to various reasons. It is worth identifying these reasons from different perspectives including the combination of novel communication technologies and a cost-based approach. The study mainly argued that mobile technology improves business performance by accelerating communications. Because it decreases the information asymmetry and increases the decision-making power on the information as well as reduces the opportunism which directly reduces the transaction cost of SMEs and thereby increases the business performance. Working hypotheses have been established under the above concept and attempt to test empirically in the domain of Sri Lankan SMEs. The results exposed that mobile technology used in SMEs makes a significant positive impact on business performance as well as negatively influenced opportunism. Simultaneously, the study uniquely found that opportunism negatively impacts the business performance of SMEs in Sri Lanka. Conversely, the study distinctively exposes the result as opportunism plays a foremost role in the relationship between ICT usage and the business performance of SMEs. According to findings, while mobile technology is making the 59.1% positive effect the opportunism impels it by 22.0%. It is rational to understand, World Bank said the use of mobile phones in Sri Lanka is 142.65 per 100 inhabitants in 2018 is heavily affected to obtain this kind of properties to the SMEs in Sri Lanka.

A number of contributions have been provided by this research. First, it delivered a unique combined model using theoretical bases of mobile technology, opportunism, and business performance which help to identify how mobile technology makes an impact on opportunism and business

performance in the SME environment. It is an exclusive contribution and has not been empirically studied by previous researchers. Therefore, the combination of technology and a cost-based approach to measuring business performance especially, in the SME sector provides an avenue for the implementation of theories practically. Second, both mobile technology and business performance have been quantified by this study covering all the available attributes that have not been considered extensively in the past researchers in the context of SME. Thus, future researchers may practice it to operationalize their attributes. Third, the mediate effect of opportunism between the relationship of mobile technology and SME business performance has not been studied in the past literature. Therefore, this research reserved that opportunity to present it to the research world firstly.

The study recommends policymakers to enhance the existing mobile technology-related aspects such as cheaper telecommunication facilities and make easiness of use for business purposes. Government and private sector organizations that provide telecommunication facilities can implement services such as mobile applications, mobile data services to enhance the connections between SMEs and the market without barriers to avoid information asymmetry and it accelerates the establishment of information-rich SMEs network in Sri Lanka.

This research uses mobile technology with the opportunism that has not been operationalized in the past literature especially, regarding SMEs and it is a noticeable starting point. However, the mobile technology use of the country can be varied and future researchers can adjust the items accordingly. This research employed a comparatively small sample considering the population. Further researchers can extend the study with a larger sample size to avoid the far-reaching consequences of generalization problems. The generalization of the research findings is restricted to Sri Lanka and it may not be valid in the context of other countries because the technological face and business performances can vary according to the different cultural and socio-economic conditions. Therefore, future researches are proposed to enhance this study in another region of the world with the different cultural and socio-economic background to know how empirical evidence differ from Sri Lanka.

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Students' Perception Regarding the Teaching Strategies of Government ESL School Teachers and Private Tutors: With Special Reference to a Grade Nine Government School in Galle, Sri Lanka

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Abstract

Today, the English language has drawn 'global recognition' and is taught as the second language in most of the countries around the world. In Sri Lanka too, there is a considerable demand for learning English as a second language. English is being taught as a Second Language in government schools as well as in private institutes in Sri Lanka. However, the role of the teacher undergoes fundamental changes with the delivery of a multidimensional second-language program. It is the teacher who acts as a facilitator, resource person, and language model for the second-language classroom. Thus, this study examines the perception of the students regarding the teaching strategies used by government ESL school teachers and private tutors. The study was based on a mixed approach with a survey and a questionnaire. A mixed school in Galle District, Sri Lanka was used as the study area including one hundred and seventy-two students of grade nine using the justification sampling method. The interview was conducted considering the random sampling method with ten students. However, perception varies according to the attitudes of the students regarding the teaching strategies used by the teacher. According to statistical information, it is evident that a large number of students prefer private tutoring as an aid to their government school education in ESL learning. Therefore, the implementation of new strategies is discovered to be important to serve every student in a common ground. Motivational factors are of greater importance in enhancing the ESL knowledge of the students and making them competent in the acquisition of the language.

Keywords: ESL learning, Grade nine, Private tuition, School education, Student perception, Teaching strategies

INTRODUCTION

The history of English language runs back to the 5th century A.D and it begins with the arrival of three Germanic tribes. They were the Angles, Saxons, and Jutes. The Angles came from "Englaland" and their language was called "Englisc" from which the words "England" and "English" are derived. In contemporary society, English has become the lingua franca almost in most countries. According to statistics nearly half of the population use this language even to a certain degree. Many people believe that the English language would bring extinction to the local cultures, but it is completely the opposite and many people believe in that language. They are in the need to learn the language in order to have a good reputation and to be on the top ranks in society. The English language is a dire necessity to everyone, and it is being felt throughout the world. The English Language was introduced to Sri Lanka by the British in 1798. Even after 71 years after gaining independence in 1948, still English language remains to be a status symbol in Sri Lanka. English language being the language of science, computer technology, aviation, and diplomacy, the necessity of mastering the language has become an essential need. This is evident in the contemporary context where a boost of the number of English classes conducted by people with various qualifications is notable. At the same time, the parents who believe that private tutors do much better in classes than in the school environment are also keen to send their children to private tutors apart from their school ESL teacher. The government has also taken many steps in order to enhance both the productive and receptive skills of the school children. Distribution of English textbooks and producing qualified ESL teachers with the knowledge of innovative teaching strategies are a few of many considerable measures that were taken by the government. In such a circumstance, the government ESL teachers who are well trained by conducting many teacher training programs are convinced to have private classes not only for the students of other schools but also for the ones who are under their guidance at schools. In that case, the problem, why these students prefer to go to private classes of the same teacher rises. Thus, this study focuses on the student's perception regarding the teaching strategies used at school and private classes by the ESL teachers, how they differ from one another. Moreover, it also investigates in which way these effective strategies can be utilized in order to amplify the English language skills of ESL learners.

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The teacher-student relationship is the basic fundamental in evaluating the learner outcomes. It is necessary to have a two-way interaction in order to develop a good learner healthy background. Learning a language is an active process, both the teacher and the learner should actively take part in the process of teaching and learning. McDonough (1986) puts it clearly that "as language teachers, we need to understand as much as possible about the language teaching/ language learning process." It is doubtless that teachers have a powerful role in L2 learning. A traditional classroom is teacher-centered but in recent times the classroom is more student-centered. The teacher should be mindful of the students' participation in an ESL classroom because a language can only be learned through active participation. Therefore, students' perception of the teaching strategies needs to be taken into consideration. There is a noticeable change in students' perception of their school teacher and private tutor. In contemporary society, students tend to attend private tutors apart from their school ESL teacher as a matter of various perceptions that students have. Therefore, this study which investigates the students' perception regarding the teaching strategies of government ESL school teacher and the private tutor and how it affects the ESL learning of the students is important as it will contribute to implementing new strategies in government schools in order to enhance English Language skills of the ESL learners.

It is evident that a limited number of research articles are published on different aspects of ESL teaching and this study investigates the students' perception regarding the teaching strategies of government school ESL teacher and the private tutor, is not an area that has been researched or addressed up to date.

LITERATURE REVIEW

The decisions made by the ESL teacher in the classroom are highly important in the process of teaching and learning. In the traditional classroom, context teachers were playing a dominant role and the class was structured in the form of a lock step classroom. All activities are "teacher-fronted" and in the current context students are active learners and teachers are facilitators. They play a passive role in the classroom. Students play a vital role in the class structure. As stated by Addisu Sewbihon Getie and Maria Popescu the perception of students regarding their ESL teacher can have a positive or negative effect upon their learning. Teaching a language requires an ample amount of effort in relation to many skills, teaching methodology, right decision making at the proper time, and evaluation. It's an art that has to be mastered to create the future of the world.

There are various environments in which students learn ESL. School is the basic and most fundamental place where the students receive proper education apart from the help of their parents at home. Private tutoring is the next step that most of the students tend to take in their learning process. Private tutoring is at a stage where it's difficult to decide whether it's a supplement for a school education or merely a trend that students follow. The teaching strategies vary from person to person and also from one institute to the other. These varying strategies lead to the change of student's perception towards government ESL teachers and private tutors.

ESL education for Government schools and private tutoring: Government school education has been recognized as the main mode through which society educates their younger generations. Government school education is considered free education. Dr. C. W. W. Kannangara by making education free for all students benefitted thousands of underprivileged students in rural parts. The fast-moving world has introduced a new way of learning as private tuition. Private tutoring regarding ESL also has gone hand in hand in the past few decades and it has brought rapid growth adding a trend of gaining knowledge and skills. People who were engaged in agricultural activities and other household chores have felt the importance of learning. Moreover, the importance of learning English to cope up with the ongoing world is also evident. The necessity of learning English as the second language has opened avenues in various ways. Based on the findings of Samia Manzoor school students tend to gain more knowledge of English as their second language, by attending tuition classes.

In addition, it is clear that a few research had been administrated concerning students' perception regarding the teaching strategy. Therefore, the necessity to have a close observation on "students' perception regarding the teaching strategy of government ESL school teacher and the private tutor" drew the attention of the researcher. The main reason for implementing this research is that a study of this nature hasn't been implemented at any level or forum to date though it has become a necessity. Therefore, the research gap is defined and subjected to be researched in terms of exploring the feasibility of the application.

Student's perception in language learning: Dr. Tūrkay BULUT and Selma DURAK UGUTEN performed a study aiming at the comparison between students and their teacher's perception about English Language teaching activities. According to him, learners have the right to decide what to learn, when, and why to learn. A contrasting idea was presented by Barkhuizen (1998), "learners are ignored or seldom involved during this decision-making process".

The above-given idea regarding the teacher and the students' language learning is important. The teacher as well as the student must receive equal importance in the classroom. Therefore, students have the right to decide on their learning materials to achieve the maximum benefit of learning the language. Ignoring the learner might lead to negative attitudes and it will affect the language acquisition of the student.

As Fermon stated (1998) that "seeing teaching as choosing options or making decisions is not by itself new or controversial". The students should be given the freedom to select and to learn and the teacher's role is to facilitate the learners whenever it is needed.

As Lewis and Hill stated: "it is almost invariably a good idea to begin a new course by discussing with students why they are studying English, what uses they see for the English they learn, and something for their expectations of what they expect to happen in the classroom… (1990, p.9). It is evident that both these researchers have stated that student's perception is really important in the ESL learning and teaching process.

Mc. Donough (1986) has stated that "as language teachers, we need to understand as much as possible about the language teaching/ language learning process" (p. 161). It is clear that teachers should always be mindful, and the teacher must learn various teaching methods to create a learner-friendly environment that makes the learner effectively learn ESL. The main reason for considering learner per-

ception in teaching is because without learner's participation in an ESL classroom the teacher too won't have an active and enjoyable classroom.

According to the standpoint of Bada (1997), "student-centered approaches are those where learners are no longer free from the responsibility of contributing to the language learning; rather they are active participants in designing and evaluating their language learning process" (p.20). Teachers creating a student-centered classroom can have a positive perception regarding the ESL teacher. The teaching strategies used by the teachers can be very effective as well as not at all effective depending on the perception of the students towards their teacher.

The study of "The importance of student perception in language teaching" has mainly focused on the ESL teaching activities and they have concluded the perception of the instructors did not always match with those of the students and also the students preferred to have more communicative activities rather than doing reading aloud by the teacher.

Shengli ZHAN, Mark BRAY, Don WANG, Chod LYKINS, and Ora KWO have surveyed regarding "The effectiveness of private tutoring: students' perception in comparison with mainstream schooling in Hong Kong." According to their opinion "students generally perceive private tutoring and private tutors to be more effective in the provision of examination support 7 compared with the mainstream schooling in Hong Kong." It also states that private tutoring is received to academic subjects as a supplement to the mainstream schooling system. They have made a comparative study to analyse the perception of students about school education and private tutoring in Hong Kong.

The above quotation reveals that private tuition is more important to get through examinations. Marimuthu et al (1991: v1) also states that private tuition as "shadow education" private tutoring is presented as a helping aid to mainstream school education. Bary too relates the appropriateness of the above-mentioned question depicting that supplementary tutoring only exists because of the existence of mainstream education, the changes that occur in mainstream also occur in supplementary tutoring and that he used to elicit the appropriateness of denoting tuition as "shadow education". Almost all societies pay more attention to the mainstream than shadow education. The features of the shadowed stream are less distinguishable than those of the mainstream.

Dawson too has used a biological metaphor in describing private tutoring as "parasitic" and Baker and LeTendre 2005, Mori and Baker 2010 described the relationship as "symbiotic". Although there are various metaphors to describe private tuition all these metaphors share comparisons and all the metaphors carry the idea of supplementary education.

The findings of this study have depicted that English and Mathematics were the most popular subjects for tutoring. According to the statistics, 70% of students receive tutoring in English and nearly 60% in Mathematics. The discovered data reveals that during exam periods students pay as much as fifty hours per week in private tutoring for many subjects (English, Mathematics, and Chinese) than the time they spend in mainstream classrooms.

The survey classified tutoring into various categories as one-on-one tutoring, small-group tutoring, lecture-type tutoring, and online tutoring. Out of these four types of tutoring one-on-one tutoring and small-group tutoring are more effec-

tive. The effectiveness of these tutoring is witnessed in improving examination grades, confidence in examinations, revision skills, and learning strategies.

Importance of private tutoring: The data reveals that there is a necessity for private tutoring and going for private tuition has increased from grade nine to twelve as they feel the necessity to cope with their subjects and to increase their results as they are in their secondary schools.

It is evident through the survey that the perception of the parents also matters in selecting private tutoring. The general acceptance of the society leads parents to march forward with private tutoring as a trend and also for educational purposes.

The paper published by Shengli ZHAN, Mark BARY, Dan WANG, Chad LYKINS, and Ora KWO concludes that Hong Kong secondary students have great demand for private tutoring. The data revealed that "examinations and the consequences from success or failure in examinations were the dominant drivers of demand for tutoring". The study has drawn a comparison between teachers and tutors in a common ground where all the subjects needed to be catered with tutoring.

According to the above-mentioned article, it is clear that private tuition is important but they haven't discussed the reasons for the students to attend private tutoring to develop their ESL knowledge. Moreover, they have given an overall idea by doing a comparative study of the perception of the students about their mainstream teachers and private tutors. In addition, the effects of students' attitudinal change, towards the strategies used by the school ESL teacher and private tutor is not addressed in the above-mentioned study.

The concept of extra tuition is a practice that is said to enrich the academic ability of learners with the hope of sharpening their preparedness for the natural examinations (Wanyama and Njeru, 2003). According to the above quotation, extra tuition was conducted to develop the learner knowledge and tutoring is a common phenomenon since the 1960s in several parts of East Asia especially in Japan, the Republic of Korea, and Taiwan (Hallack and Paison, 2007), Hallack and Poison (2007) has also observed that extra tutoring was given to children of 3 years of age in Australia. Tutoring in Australia is common and there is also a method of funding private tutoring. According to Bray, one-third of the students in Egypt receives private extra tuition.

According to the above quotations, it is evident that private tutoring is a part and parcel of the education system. Therefore, according to this article, "Teachers and students' perception on effect of extra tuition on academic performances in public secondary schools in Machakos County, Kenya" reveals that most teachers (85%) and students (82%) supported the practice of extra tuition. Through the data analysis, it was concluded that extra tuition helps students to cover the syllabus and revise for examinations. "Based on findings of the study, it was concluded that extra tuition is a common practice in secondary schools in Machakos county". (Maithya and Mutua, 2015)

The study, "Perception of parents on the practice of private tuition in public learning institutions in Kenya" had discovered that parents had a positive, favorable attitude towards private tuition.

Moreover, Stevenson and Baker (1992) refer to private tutoring as a set of educational activities outside formal schooling that are administrated to improve student's ability to move easily through school education.

According to the above statement, it is evident that the purpose of private tutoring is to improve the knowledge and skills of the students and to make them competent in education.

Tansel and Bircon (2006) define private tutoring as educational outside the formal schooling system where the tutors teach particular subjects for financial gain.

The justification provided by Tansel and Bircon provides evidence to the fact that for tuition there are other ulterior motives as well.

Finally, it is distinctively evident that it is important to investigate the student's perception regarding the teaching approach of government ESL school teachers and private tutors. Moreover, this study must be conducted based on grade nine government school students who are in their adolescence.

RESEARCH METHODOLOGY

Introduction: This study adopted a descriptive research design to investigate the students' perception regarding the teaching strategies of government ESL school teachers and private tutors and this study was conducted based on a grade nine government school in Galle District in Sri Lanka. The study reported in this paper used mixed methods of both quantitative survey and qualitative interview. Creswell and Plano Clark (2007) highlighted several types of mixed research methods. A common approach, used in this study, uses a qualitative survey to identify overall patterns and interview data to triangulate and illustrate these patterns. This paper is mainly based on the questionnaire and interviews which were held to have a deeper understanding to derive sensitive factors regarding the perception of students.

Sample: The qualitative data reported in this paper were driven through the non-probability sampling method. It was through judgmental sampling. Students in grade nine in a particular school in the Galle District were targeted. The rationale behind the sample of grade nine students is that their mindset is focused on studies and they are not exam oriented but in need of quenching their thirst for knowledge. Therefore, the researcher was compelled to have the sample set of students from grade nine. Table 1 denotes the sample as one hundred and seventy students out of a population of eighty-six thousand students. The questionnaire was distributed to all the students in grade nine in that particular school. According to census reports, there are 430 schools in Galle District including 6 boys' schools, 10 girls' schools, and 414 mixed schools. The selected school is one out of the top three mixed schools in Galle District with the lowest percentage of the failures in English for G.C.E O/L. The selected school represents both genders and an English medium class coming from grade one. The prime objective to focus on government school children is to derive a comprehensive perception of private tutors and ESL teachers. It is since an individual who has experienced both parties is highly productive as he or she compares and contrasts the two teachers based on his or her personal opinion. Therefore, the researcher was compelled to select this school.

Table 1: Sample

Category	Sample	Population
Students	172	86000

Source: Survey data, 2020.

Instrumentation: Two tasks were utilized to gather data. Both quantitative and qualitative methods were used for data gathering and closed group interviews were done to gather sensitive data as a way to gather qualitative data.

The questionnaire was based upon fixed alternative questions. This method is also known as the closed type of questions and the students were provided with a Likert scale. The questions were categorized under three main categories as sections A, B, and C.

Section A contained personal questions about students' grades, sex, ethnicity, and the parent's occupation. Section B contained two questions to have the general idea regarding the importance of private tuition and attendance to private tuition and section C contained thirty-two questions based on several categories such as teacher personality, the language of the teacher, methodology, sensitivity, learning environment, and facilities and those categories were not mentioned in the questionnaire in order to gather authentic details from the students rather than having a biased attitude.

The questions related to these categories were divided into school and tuition. It was done to derive a comprehensive perception of private tutors and ESL teachers. Visiting tuition classes and filling up the questionnaire is not practical. The data can be affected by various reasons. This method of collecting data is very effective as an individual who has experienced both parties can easily compare and contrast the two teachers based on his or her personal experiences. A sample set of one hundred and seventy-two students are given a questionnaire as students experience their ESL teacher daily and thus may be an important source of information regarding the student's perception of their teachers' teaching process. Furthermore, students have experienced various teacher behaviours concerning teacher pleasantness, classroom language, and teaching methodology.

Then, closed group interviews were conducted to derive sensitive data and for this selection, a random sampling method was used. Two students from each class were randomly selected with the representative of both genders. Later on, ten questions were asked from each student. The beginning of the interview was quite informal discussion. Then the questions were asked to find the comparative and contrasting features of teaching approaches in government school ESL teachers and private tutors.

DATA COLLECTION

First Level

A sample questionnaire was given to a sample of twenty students to find out the effectiveness and to draw feedback from the students regarding the questions that were included. Classroom observation was also done while the students were filling it. The classroom observation was done to identify the level of the students. The feedback received by the researcher was neutral therefore, certain questions were included in the final questionnaire and some were omitted.

Second Level

The questionnaire was administrated after requesting the ESL teacher to leave the classroom. It was done to derive authentic information from the students. The questions were given in English and for better understanding, translation of each question was read aloud to the class. The participants were requested to refrain from writing their identity in the questionnaire. While the questionnaire was being filled the students came up with several comments as to how the government ESL teacher and private tutor differ. The comments of the students were also noted by the researcher. A five-

point Likert scale was presented as denoted in table 2 with five options with the relevant marks.

Table 2: Perspectives of ESL learners based on the questionnaire

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Source: Survey data, 2020.

Third Level

Next, ten students were selected randomly representing two students from both genders from five classes. The comments and their thoughts regarding the varying teaching strategies were noted down.

Then, the data obtained from the questionnaire were entered into SPSS (Statistical Package for Social Sciences) and the closed group interview answers of the ten students were analysed using the thematic analysis method.

RESULTS AND DISCUSSION

This section analyses data to derive a comprehensive understanding of the focused areas of the research. Since the perception of the students towards their ESL teacher affect their language development.

Conceptual Framework: As noted in figure 1 the students' perception regarding the teachers' quality of delivery has been identified as the dependent variable with a range of independent variables. The following independent variables are taken into consideration to explore the relationship to have a better understanding.

Teacher personality, Language of the teacher, Methodology, Sensitivity, and Learning environment and Facilities

Figure 1: Conceptual Framework
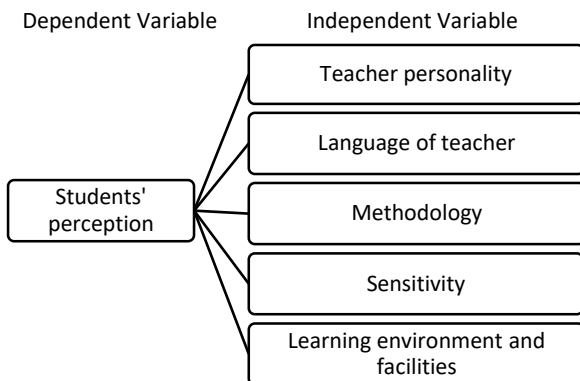
The researcher had to employ both qualitative and quantitative data to obtain a realistic perception of the focused area.

This segment is focused on statistical data analysis through SPSS (Statistical Package for the Social Sciences). The opinion of the students towards the teaching strategies of the government ESL teachers and private ESL tutors are analysed in this study.

The responses of the students towards these questionnaires and the informal interviews are considered as the main stakeholders and as the focal point. The included information is designed with graphs to create a visual impact on this comparative study. The data is categorized as follows with a view of analysing.

Student Questionnaire Data Analysis: This segment explains the responses of the main stakeholders who were subjected to the study. A questionnaire with 3 sections was

utilized. The first section included questions about students' general information including their grade (Table 3), gender (Table 4), and ethnicity (Table 5). Section B included two selection questions. It analysed data on private tutoring. One was the importance of private tutoring (Table 6) and the other question focused on the participation of the students in private tutoring (Table 7). Section C included questions to have a clear study of the student's perception regarding government school ESL teacher and private tutor. Questions in section C consisted of 32 questions and it was addressed under five main categories for better analysis.

Table 3: Grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	172	100.0	100.0	100.0

Source: Survey data, 2020.

Table 4: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M	74	43.0	43.0	43.0
	F	98	57.0	57.0	100.0
	Total	172	100.0	100.0	

M=Male, F=Female
Source: Survey data, 2020.

Table 5: Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	S	172	100.0	100.0	100.0

S=Sinhala
Source: Survey data, 2020.

Table 6: Private Tuition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SA	80	46.5	46.5	46.5
	A	40	23.3	23.3	69.8
	N	28	16.3	16.3	860.
	D	13	7.6	7.6	93.6
	SD	11	6.4	6.4	100.0
	Total	172	100.0	100.0	

SA=Strongly Agree, A=Agree, N=neutral, D=Disagree, SD=Strongly Disagree
Source: Survey data, 2020.

Table 7: Attend to classes or Not

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Y	154	89.5	89.5	89.5
	N	18	10.5	10.5	100.0
	Total	172	100.0	100.0	

Y=Yes, N=No
Source: Survey data, 2020.

Variable 1: Teacher Personality

The first variable refers to the personality of the teacher. Four questions were directed to identify the contrasting perspective of the students regarding teacher personality in a government school and private tuition. The personality of the government school ESL teacher and private tutors was measured through the neatness, activeness, and having a beautiful or handsome personality.

Variable 2: Language of the Teacher

The second variable refers to the language used by the teacher. Five questions were given to identify the changing perspectives of students. It includes statements under the indicators of clarity of teacher instructions, ability to understand instructions easily, repetition of the lesson for better understanding, audibility of voice, and understandable nature of teacher language.

Variable 3: Methodology

The third variable refers to the methods or strategies used by the teachers. A comparative study is drawn to measure the perspectives of the students. It includes statements under the indicators of giving enough wait time to ask questions, use of different teaching methods, waits for majority understanding, special attention for weaker learners, activities such as group works, debates, speeches are conducted, covers the syllabus, readiness for lessons, giving homework, practice test to evaluate the level of the students, encouragement to learn the language, teacher availability, appreciation of the students, correcting the students and revising the learned lessons are the questions that were used. The majority were included under the variable as the study is based basically on the teaching approaches of the ESL teachers.

Variable 4: Sensitivity

The fourth variable addresses the sensitive behavior of the teacher towards students. Though learning is an active process it can depend on the sensitive nature of the teacher. It is analysed through the indicators of treating everyone alike, teacher cooperation with students, advising the students, and also helping the students whenever needed.

Variable 5: Learning Environment and Facilities

The last variable is the learning environment and the facilities available to the learners. It includes statements as, pleasant learning environment with necessary facilities, the use of technological resources, and providing extra tutorials related to the lessons.

Figure 2: Dependent and independent variables
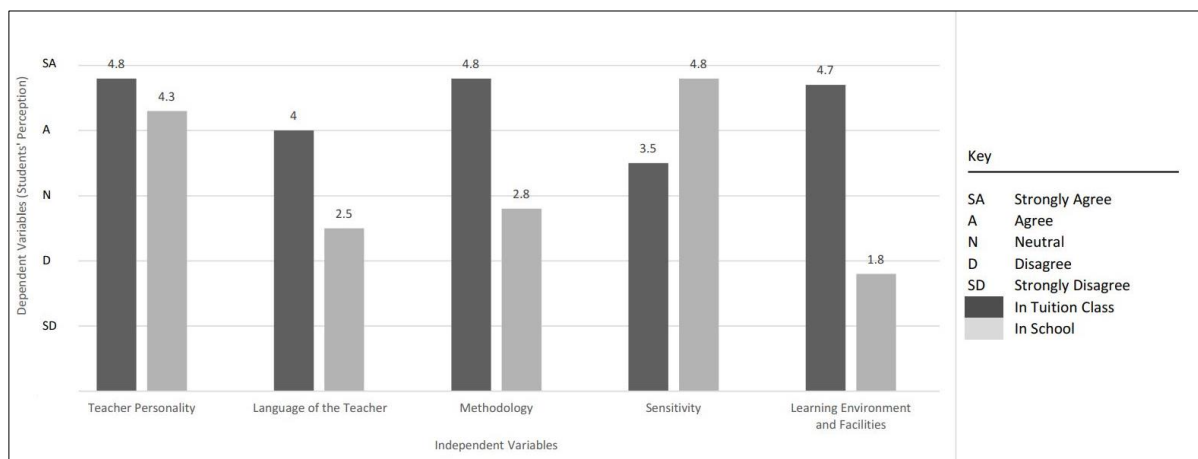
Source: Survey data, 2020.

The above mentioned five variables as presented in figure 2 give a descriptive analysis through a comparative study. The bar graphs denote that the students' perception towards the private tutor is positive. The sensitivity variable has a significant deviation in comparison to the other variables concerning school ESL education. Through that it is evident that the school ESL teacher is more sensitive and keen on the students than the private tutor. In the interviews, the students mentioned that the school teacher is closer and sensitive towards the students since the students are more familiar, as they spend more time in the school.

Student Interview Data Analysis

The questions on student's perception regarding the teaching strategies to teach ESL in both government schools and private tuition were addressed through informal interviews to derive sensitive data. The thematic analysis method was used to analyse the data. The interview questions focused on learning experiences in both schools and private tuition classes. The reasons for choosing private tutoring for assistant learning instead of finding help from school teachers.

In the process of informal interviews, the students were free to express their views and experiences about both government school ESL teacher and ESL tutor. During the interviews, the students discussed the key reason for seeking help through ESL tutors was the need to have better knowledge to gain more experience in using the language.

"I like to learn English, but in the school, I don't have the ability to identify my weaknesses and the school teacher wants us to finish one lesson per day and to cover up the syllabus. But in the class, the teacher makes the class more interactive and she puts extra classes for us."

The students stated that they lack the opportunity to use the language in the school context. The teaching strategies have compelled them to be more passive learners. They came up with the concept of treating front students the best, the most talented students the best. The selected students on a random basis talked with a note of disappointment while some students were delighted to talk about their ESL teacher. They stated that they lack chances to explore the world and did not receive opportunities to go for English day competitions due to the biased nature of the ESL teachers.

"I am going to my teacher's class and the teacher loves me a lot and she gives me chances to read the book in the class. The teacher takes me to the board and also I receive chances to go for English Day competitions"

For the same question, another student replied in an opposite way.

"Teacher always asks answers from the students who go for her class. She marks their books first. She appreciates only those students and she always scolds me and punishes me. She never allows me to raise my voice. Even I and some of my friends don't get the opportunity to ask questions. She talks about those students who go to her class and she loves them a lot."

Based on the variables, the researcher was compelled to ask the same questions from the ten students. The overall attitude of the students regarding the variables was positive with ESL tutors and the sensitivity factor was negative. According to their opinion, the school ESL teacher is more familiar and closer towards the students.

The students' opinion was that private tutors use a lot of effort to teach English to the students. In order to achieve their objectives, the private tutors design their lesson plans with creative activities with the use of visual aids. Private tutors bring practical activities to the learner environment. Thereby, the students enjoy learning the language.

Two students objected to the idea from the rest of the students. They were on the standpoint that school education was better. According to their opinion, they stated that the education provided to ESL is sufficient in school to have good knowledge and also to achieve good grades.

"I like my school teacher she explains the lesson very well. She treats us all alike. She is like a mother to us."

The interviewed students who had positive attitudes towards private tutoring made explanations to the preference. They said that tutors were more inspiring, motivating, knowledgeable, supportive, and interactive with the students.

School ESL teachers are compelled to cover the syllabus and they are limited to the activities in the textbook and the students stated that although teachers label the classrooms as student-centered it is not the reality. All the decisions of the lessons and everything in the classroom are monitored by the teacher.

CONCLUSION

The analytical process, methodology, and techniques have instrumentalized the course of the study with close observations related to the dependent and independent variables in mechanizing a systematic progression. The specified condition based on identified objectives has directed the researcher to arrive at specific conclusions.

The objectives were to study the effects upon the learners and learning process due to the varying learner perceptions, determining the differences of learner perceptions towards government school teacher and private tutor in learning ESL, and also to examine the adolescents' psychological reactions to government and private ESL tutors.

The close observations through the questionnaire and the interviews have compelled the researcher to conclude that the number of students attending tuition classes is at a very high rate and the factors affecting this are mainly due to unchanging independent variables. Many students spend a whole lot of time at tuition classes than in schools. According to the analysed data, it is evident that the school ESL teachers lack motivational factors that help the students with their language acquisition and in comparison, the private tutor acts as the driving force that encourages and helps them in learning difficulties and acts as a creative mentor. He or she leads the learners to a world of practicality, and it has made the learners have disparity towards their school teachers.

Through this study, it was evident that the steps that were taken to enhance the productive and receptive skills of the students haven't been much advantageous. The government has taken steps in providing qualified special teachers for the government schools to teach ESL. The prevailing system in schools and lack of enough time to engage in creative activities such as group works, debates, prompt speeches have paved the way to the downfall of the new strategies of ESL teaching. Those well-trained teachers become reluctant in the school sector and as a result, they implement those strategies during private tuition.

The government has taken steps to develop the ESL language, also through the distribution of textbooks but due to the shortage of time and other extra-curricular activities in the school system, the teacher is in a rush to complete the syllabus. Therefore, the students do have a negative perception towards the learning approaches of their school ESL teacher.

The negative attitudes towards tutoring were also taken into consideration. According to the students' idea, it was due to the large class tutoring and the attention paid by the ESL tutor is less.

The majority had a positive attitude towards the strategies of the private tutor than to their school ESL teacher.

Significance of the study

While results of the students' survey cannot be generalized to all the educational institutes, this study will provide valuable information regarding the perception of the students regarding the varying teaching strategies used by Government ESL teachers and private tutors in a particular mixed school in Galle District. Results will hopefully motivate other university students to investigate the various strategies used by the teacher and how it helps to develop the English Language proficiency of the learners. The results also may encourage the school administration to make necessary amendments to develop the teaching strategies and to motivate the teachers for a better outcome.

Limitations

In this research, the researchers have focused only on a sample set of 172 grade nine students in a particular school in the Galle District. One government school was selected due to the time factor and other practical issues. Due to the prevailed situation in the country, there were difficulties in drawing a comparison among the number of private tutors. There were issues related to data collection as some participants were reluctant to provide 100% authentic information. The perception of the students regarding their teachers were influenced by the parents of the students.

Recommendations

The research findings and revelation of the elements related to the phenomenon have provided feasibility to generate recommendations to develop the competence of the learners.

The study suggests that the school ESL teachers and the administration should pay special attention to the learner perceptions. The students are considered to be the most important group in the teaching-learning process. Therefore,

the perception of the students towards the teaching approaches is very important.

• The school can observe the strategies used by the ESL teacher.

• Conducting an island-wide survey to identify the teaching approaches that students find effective in the process of learning ESL.

• Designing the textbooks to meet good strategies to teach the language.

• Inclusion of materials with practical purposes to make the learner motivated.

• Providing the freedom to the students to select good teaching approaches on behalf of the teacher to create a conducive learning environment.

The aforesaid recommendations are presented with the view of creating a good perception of the students regarding their school ESL teacher. It is because all the students are not privileged to attend private tuition in order to develop their ESL learning. Therefore, developing a positive student perception by implementing better teaching approaches to school ESL teachers can help all the students to be competent in English.

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