The Mediating Effect Of Financial Inclusion On Financial Literacy And Women’s Economic Empowerment: A Study Among Rural Poor Women In Sri Lanka

Kumari D.A.T., Ferdous Azam S. M

Abstract: Women’s Economic Empowerment is a combination of individual’s knowledge, ability, skills and confidence in handling their own financial decisions. Today, most of the social scientists believe that the degree of women’s economic empowerment can be considered as a powerful indicator of their economic empowerment for the development of the respective countries. Even though women’s economic empowerment is a circumstance of several antecedents, many researchers argue that financial literacy becomes a one of the major contributors of women’s economic empowerment specially, among rural women. Further, this association can be varied in different socio-cultural contexts. However, there are sufficient evidences to argue that the association between women’s economic empowerment and financial literacy can be changed with the effect of Level of financial inclusion among rural women. Hence, in this study, researchers examined this issue by investigating the mediating role of financial inclusion on the relationship between financial literacy and women’s economic empowerment among rural women in Sri Lankan context. The sample for this study was drawn from rural poor women who are living under the poverty line by representing nine provinces in Sri Lanka. Altogether 426 rural poor women were selected and data were collected using a researcher administrated questionnaire. Further, the sample was designated based on the multilevel mixed sampling method and the unit of analysis was the women headed households in rural areas. Furthermore, as the principle data analysis approach, the partial least squares structural equation model (PLS-SEM) was employed, and Smart-PLS 3 was employed as the main analytical software. The findings revealed that financial literacy made significant impact to the women’s economic empowerment and the influence of financial literacy is exaggerated by the mediation effect of financial inclusion among the rural poor women in Sri Lanka. Findings of the study will help the policymakers of Sri Lanka to undertake financial literacy development programs to ensure greater participation of women in the formal financial sector for enhancing their economic empowerment process.

Index Terms: Financial Inclusion; Financial Literacy; Formative Mediation; Women’s Economic Empowerment

1 INTRODUCTION

ECONOMIC EMPOWERMENT has been discussed by most of the researchers e.g. [96], [21], in terms of economic perspective. Economically empowered women are indispensable both to apprehend women’s rights and to achieve broader development goals such as economic growth, poverty reduction, and social welfare. According to [37], when women have the ability to succeed and advance economically as well as have the power to make economic decisions, women are said to be economically empowered. Further, Lusardi & [22], argue that economically empowered women are able to enjoy financial wellbeing and also help in increasing productivity, economic growth, reducing poverty and enhancing efficiency. Therefore, empowerment of women promotes sustainable development of a community [92], as sustainability develops and determines, based on equilibrium structure of society, a society that does not make discrimination or is biased against any social group or gender. On the other hand, many researchers and scholars e.g. [31], [21], argue that women’s economic empowerment promotes inclusive growth in many developing countries. Some researchers e.g. [11], show that a large portion of the hard-core poor are the women, because they face social barriers in accessing formal financial such as savings and credits that make it is much harder for them to overcome poverty.

Further, they are more susceptible to becoming poor when they lose the male earning member of the family due to abandonment, divorce or death. Further, [87], pointed out that continued disparities between women and men in employment and income opportunities, education, financial literacy and control over assets demonstrate that development activities are centered on men. Therefore, WEE is vital to recognize women’s right [88], [35]. Moreover, economy and organizations start to realize that women empowerment is a win-win situation not only for women but also for economy as a whole [21], [1]. As citizens of a developing country, Sri Lankan women in rural areas have to confront many challenges so as to obtain financial knowledge. A 52% of the entire Sri Lankan population is composed of women, and when it comes to the life expectancy rate, women (79%) are 7 years ahead of men (72%) (GFDR, 2018). Thus, their expenses spread over a longer period of time. In face of these realistic situations, many women are compelled to confront monetary problems. According to the Standard and Poor’s Rating Services Global Financial Literacy Survey, 2018, what is more, around 90% of women are the sole breadwinners of their families after the death of the spouse or divorce (S&P Global Fin Lit Survey, 2018). Fortunately, only an 8% of women among them are illiterate in a general sense. These women are poor in Fin Lit and particularly, lack of knowledge and proper financial attitudes and therefore, poor in financial decision making [21]. In comparison to a number of other Asian countries, Sri Lanka has a financial inclusion rate as high as 73.4%, as stated by the Little Data Book on Fin In, 2018. All adults (above 15 years) who possess an account in formal financial sector were considered as “Financially Inclusive”. Accordingly, Sri

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Lanka is at the top with the highest rate in women’s Fin In at a rate of 73.4%. On the other hand, a 26.6% of the Sri Lankan population is deprived of any form of financial services (S&P Global Fin Lit Survey, 2018). This exclusion of the formal financial market is the outcome of Fin Lit and lack of a sound financial attitude. Globally, a 35% of men are financially literate as opposed to a 30% of women. When it considers, Sri Lankan adult population, only a 35% are financially literate and this turns out to be a severe drawback in women’s Fin Lit and their wellbeing. An education on finance with a positive attitude has now become a chief requirement for women of all ages who have to go through many challenges (Kumari, 2017). In accordance with the above discussion, the researchers noted that Fin Lit and Fin In can be considered as crucial areas which need to be further investigated with relation to women’s economic empowerment [21]. More specifically, the contribution of those concepts for enhancing WEE is an area which needs the attention of researchers in economics and management [20]. Therefore, this is a contemporary study, on Fin Lit as a main determinant of Fin In for enhancing economic empowerment of women. Hence the main purpose of this study is to investigate and analyse the effect of Fin In as a mediator on Fin Lit and economic empowerment of rural women. The contribution to the knowledge of the present study can be discussed in three aspects. In general, this study will draw attention to Fin Lit as a significant contributor in enhancing WEE in rural poor communities in developing countries. Further, it will provide new insights to researchers on how Fin In plays the mediating role in the relationship between Fin Lit and WEE. In the theoretical perspective, this study will provide key insights to the applicability of related theories in different contexts. In the practical aspect, this study will support to policy decision makers of the economy to make decisions for enhancing WEE of rural poor women in the country through effective financial education programs. Further, findings will be immensely useful to the key player of financial markets to develop strategies to attract rural poor community to the formal financial system. In this article, the researchers will first discuss the background of the study and respective literature to provide the conceptual background for the study. Subsequently, it will be continued by presenting the conceptual framework, hypotheses and methodology. Discussion of the results will be presented in section five, followed by the conclusion, recommendations and the areas for further studies in the final sections.

2 LITERATURE REVIEW

2.1 Financial Literacy and Women’s Economic Empowerment

According to OECD & INFE (2012), Fin Lit of the society can be developed by making financial awareness, knowledge, skills, attitude and behavior towards sound financial decisions to achieve the financial wellbeing. Some researchers commonly adopted several dimensions such as knowledge about financial instruments E.g. [17], [51]. Knowledge about financial service usage E.g. [54], [40], and Awareness about financial planning E.g. [75], etc. for estimating the degree of Fin Lit. Those dimensions have been considered by many researchers for their studies. Financial awareness is an important dimension (Ghosh, 2019) in understanding the link between Fin Lit and level of Fin In of women’s financial decisions ([18]. Financial knowledge is often considered as a central root of Fin Lit [82], and it consists of individual’s knowledge of the financial system and understanding of alternative options in using financial resources (Garg, & Singh, 2018). Financial skills mean the ability to use the knowledge of financial services implied in Fin Lit [46]. Empirical evidence suggests Fin Lit has significant impact on financial status of an individual ([74]. Further, [84]), noted that financially literate people become wealthy by accumulating wealth. Financial attitudes refer to one’s beliefs and values related to various personal finance concepts, such as whether one believes it is important to save money [78]. [84], argues that the way people thinks and feel about money issues may have a significant impact upon how receptive they are into learning about money. Attitudes towards money and the financial system has a significant impact on healthy financial behavior [94]. Financial behavior can be considered as another aspect of Fin Lit [53]. Even though an individual has financial knowledge, skills and positive attitudes towards financial system, behavior will be the last determinant in better financial decisions [90]. On the other hand, WEE can be analyzed in terms of women’s control over income, relative contribution to family support, access to and control of family resources [59]. Even though many indexes were introduced by previous researchers and organizations to measure WEE, it is worthwhile to reflect on the limited conceptualization of women’s empowerment in these indices, as they exclude, for example, women’s rights and opportunities of choice, as well as cultural and religious factors. Therefore, many researchers argued that more detailed indices are needed to develop based on primary data analysis [21]. For instance, [2], developed a life cycle analysis. In this framework, authors define empowerment as a person’s capacity to make effective choices; that is, as the capacity to transform choices into desired actions and outcomes. The indicators which use are asset endowments for personal agency, the capacity to make purposeful choice (psychological, informational, organizational, material, social, financial, or human), and opportunity structure for institutional context [81]. Some indicators introduced to measure the WEE are difficult to measure and cannot be employed in some research contexts [21]. However, the most important matter is that the economic empowerment should be measured in the present study among the rural woman. Authors such as [4], [26], & [43], argue that “gender”, similar to other norms and rules, defines the realm of choice. In making human behavior predictable, “gender” is believed to reduce the transaction/ coordination costs involved in human interaction. Further, it has been well documented that an increase in women’s resources results in increased wellbeing of the family, especially children [43], [60], [61], [39]. [37], observe that women’s access to credit contributes significantly to the economic well-being of the family. According to the above discussion, measurement indicators for the women’s economic empowerment can be measured by considering the situation of rural poor women in Sri Lanka. Therefore, some commonly adopted dimensions such as economic decision making power, control over use of income and expenditures, leadership in the community, control over the time allocation and financial wellbeing can be employed in...
the present study to measure economic empowerment of the rural women.

2.2 Mediating Role of Financial Inclusion

Over the past decade, access to financial services or outreach of the financial system has become a major concern to many policy makers, and therefore financial inclusion has entered the social policy glossary of many developed and developing countries [16], [6]. In simply, the Fin In means, access to an intermediation process and use the products and available transaction facilities from formal financial intermediaries. The study performed by), attempted to construct Index of Financial Inclusion, based on three aspects, namely, penetration of banking system, its availability to users and its actual usage for a cross-section of countries. Further, some researchers suggest Fin In measurement can be mainly estimated by the usage and access to the formal financial services by using supply-side aggregate data (e.g. [77], [16], [8]). However, [23], proposed an index based on demand-side data, at the individual level, which focuses on several usages- and barriers-related indicators individually. However, [3], adopted the access, usage, quality and impact of the formal financial sector as main measurements of Fin In and it was adopted by many researchers to measure the degree of Fin In. There are many empirical evidences can be identified that Fin In is intended to connect people to banks with consequential benefits. Access to financial system facilitates equal opportunities, enables economically and socially excluded people to integrate better into the economy and protect themselves against economic shocks [58], [50]. Fin In will happen on its own. [36], compared the gender effects of two subsidized credit programs in southern India and found that the decision-making influence of women increases only when credit transfers are made to women. Similar studies by [85], revealed that there is a positive correlation between Fin In programs targeting women and their well-being. Without an understanding of basic financial concepts, people are not well equipped to make decisions related to financial management [48]. Proper and informative evaluation of various financial products will be very difficult for someone without significant financial knowledge. Fin Lit refers to the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being [69]. A base of financially literate consumers and investors, in combination with efficient financial markets, has the potential to reduce the degree of regulatory intervention required, hence lessen the financial burden for the regulating authority [21], [14], indicated that Fin Lit is important for everyone and financial education is linked to financial stability for both individuals and societies. Increase in financial awareness will therefore aid financial sector development through stability and the quality of services and products offered [56]. Access to well-designed financial services or Fin In can also help poor households build assets, engage more effectively in markets, and reduce their vulnerability to crises, especially when access to services is planned as part of household livelihood strategies and sustained over time [27]. Throughout the Fin In, financial markets allow individuals to save and earn returns, hence wealth creation is enabled [48]. On the other hand, women’s access to financial resources help in gaining wide range of developmental goals like reduction in poverty, increase in knowledge and economic growth [25]. Women’s Fin Lit not only helps in the promotion of the households but also contribute in economy to become empower [21]. Different studies have highlighted the importance of Fin Lit for household’s wellbeing and ultimately economic stability. Fin Lit is positively correlated with the financial situation and leads towards the financial empowerment of women [44]. Positive financial access is a result of Fin In and ultimately results in financial wellbeing and economic empowerment of women [11], [59], [16], [87], [21]. Further, Fin Lit is linked with financial knowledge [93]. On the other hand, Fin Lit is an important factor that affects the Fin In. Fin Lit of working women is an important factor that affects to increase the Fin In. Many researchers e.g. [11], argue that Fin Lit develops Fin In and Fin In leads toward financial empowerment of the communities. Positive change in Fin In is marked by the Fin Lit possessed by the individual. Accordingly, Fin Lit is strongly correlate with Fin In and WEE [21]. On the other hand, Fin In of the family, particularly that of children improves if the financial resources of household are in women’s hand [81]. According to [75], Fin In is positively and significantly related with the economic empowerment of the working women. Further, Fin In of the women is an important element for predicting their economic empowerment [22]. Women access to financial resources help in gaining wide range of developmental goals like reduction in poverty, increase in knowledge and economic growth [7]. According to [55], Fin Lit positively contributes in wellbeing of women, strengthens the economy and promotes growth. Fin Lit and Fin In are positively correlated to each other. Further, Morgan, & Trinh (2019) noted that Fin Lit leads toward higher Fin In and WEE, and ultimately, economic growth. Further, some researchers argue that WEE is highly depending on the Fin Lit and Fin In. (Maarten, Lusardi & Mitchell, 2008).

Many researchers have found the strong positive relationship between Fin Lit and Fin In [11], [80]. And also some are revealing that there is positive relationship between Fin Lit and WEE [14], [88]. Further, some researchers stated that the WEE is highly depending on Fin In [61], [44]. Therefore, this study mainly focused on financial literacy and its impact on financial inclusion and

![Fig. 1. Conceptual Framework](image)
ultimately turn into the economic empowerment of the rural women can be justified by many previous scholars in their empirical studies in different socio-cultural contexts (e.g. [37], [13], [59], [11], [24], [88], [87]. The relationship between Fin Lit and WEE have been studied by several scholars [21]. In international context, some researcher such as [9], [59], etc. explored that Fin Lit is an important factor which influence on the WEE. Further, some researchers argued that Fin Lit through Fin In is an essential factor to attain WEE [13], [9], [59]. Further, some researchers e.g. [10], noted that Fin Lit is a main determinant of Fin In. Based on the above critical literature review, the conceptual framework for the study can be developed as the path diagram given in figure 01.

3 HYPOTHESES DEVELOPMENT

As per the above discussion there are several studies directly investigated about the impact of Fin Lit on WEE in some perspective. Specially, Fin Lit has a positive influence on each dimension on WEE such as economic decision making power e.g. [68], [55], [18], etc. control over use of income and expenditures e.g. [7], [91], etc.), leadership in the community e.g. [87], [29], etc. time allocation (e.g. [17], [7], and financial wellbeing e.g. [37], etc. of rural women. Based on the preceding discussion, the researchers have developed the first testable hypothesis to determine the relationship between Fin Lit and WEE.

H1: Financial literacy is positively influenced on the economic empowerment of rural poor women in Sri Lanka.

Further, most of the researchers have explored that each selected dimension of the Fin Lit has a significant impact on the degree of Fin In. For instance, financial knowledge e.g. [48], [86], [93], financial skills e.g. [14], etc. financial attitudes e.g. [88], etc. Financial behavior e.g. [88], [65], [71], [56], are positively associated with financial inclusion. Based on the preceding discussion, the researchers have developed the second testable hypothesis to determine the relationship between Fin Lit and Fin In.

H2: Financial literacy is positively influenced to the degree of financial inclusion among rural poor women in Sri Lanka.

As per the above discussions, many researchers have investigated about the relationship between Fin In and women’s empowerment in different socio-economic contexts. For instance, [11], [59], [19], [46], etc. observed that Fin In is one of the major determinants of WEE. specially, each dimension of WEE such as the degree of financial inclusion becomes a major determinant of economic decision making power [95]. Controlling power of income and expenditures [25], [7], Leadership in the community [24], Time allocation [25], and Financial wellbeing [75], [45], [88], [74], [51], among rural women are influenced by Fin In. Based on the aforesaid empirical evidences, researchers developed the third hypothesis to demonstrate the relationship between Fin In and WEE.

H3: Financial inclusion is positively influenced on the economic empowerment of rural poor women in Sri Lanka.

Furthermore, the previous literature discussed in the above sections clearly emphasis that Fin Lit has a direct influence on Fin In e.g. [48], [93]. Further, most of the researchers noted that Fin In becomes the most significant antecedent of WEE e.g. [11], [59], [21]. Therefore, the researchers initially argues that Fin In becomes a mediator between Fin Lit and economic empowerment among rural women. Further, the prevailing literature is strongly supporting the researchers’ argument. For instance, some researchers [66], [41], etc. found that both Fin Lit and Fin In become key determinants of WEE of rural women. However, if rural women adopt to formal financial system in the country, the impact of Fin Lit will be high. Further, some researchers noted that Fin Lit and Fin In become exogenous construct to determine economic empowerment of rural women [14]. Furthermore, [28], argue that when rural women become more financially literate, they can easily work with the formal financial institutes and subsequently achieve their financial well-being. Moreover, [18], argues that highly educated rural women maintain community leadership and they do not invest in informal financial institutes. Further, some local researchers e.g. [42], [45], also explore that the influence made by Fin Lit on WEE further enhanced through Fin In of rural women in Sri Lankan context. Based on the aforesaid empirical evidences and arguments, the researchers can reasonably assume that Fin In plays a moderation role in the relationship between Fin Lit and economic empowerment among rural women in Sri Lanka. Therefore, H4 was developed as follows,

H4: Financial Inclusion mediates the relationship between financial literacy and women’s economic empowerment

4 METHODOLOGY

As the present study was designed based on deductive approach in positivist research paradigm, conceptual framework and hypotheses were developed based on sound theoretical and literature background. As survey method was adopted to primary data collection, researcher administrated questionnaire was employed as the research instrument. The target population for the study is defined as “Rural poor women in Sri Lanka with fixed consumption expenditure per month below Rs. 4,677” (poverty line). According to Household Income and Expenditure Survey in 2016 conducted by Department of Census and Statistics, Sri Lanka, overall poverty head count index in Sri Lanka was reported as 4.1%. That means 843,913 of people in Sri Lanka are in below the poverty line. Accordingly, the researchers initially defined the target population and estimated the size of the sample unit. Further, it was decided the appropriate sample size 386 based on the Cochran’s sample size estimating formula. Even though, [83], noted that non-response rate is minimum in collecting data from researcher administrated questionnaire, the researcher decided to increase the sample size by considering 10% contingency factor due to some possible missing data. Accordingly, the total sample size was calculated as (384/0.90X100= 426) 426. The multilevel mixed sampling method involves in several levels in selecting the sample and at each level, probability or purposive sampling method was adopted. Accordingly, the sample selecting process for the study consisted of four levels. Further, several measurement indicators were identified to assess
each variable of the conceptual framework. Therefore, the selected indicators were validated by other researchers in many socio-economic contexts with an accepted level of reliability (more than 0.70 alpha). As data collection was done through researcher administered questionnaire and all 09 provinces were included into the sample, it was decided to administrate the questionnaires by well experienced data enumerators. Altogether 426 questionnaires were administrated and 386 questionnaires were only taken for data analysis due to some missing values and extreme cases. The sample consisted of females and higher proportion represent 25 to 44 age categories (50.3 percent). Further, 65% of the sample is educated up to A/L and others completed their primary education only. In addition, 64 percent of the rural women are not involving in permanent employment and some of them are self-employed. As per the employment sector, the majority of respondents (57.4 percent) were represented agriculture and service sector. Therefore, the demographic profile of the sample was reasonably representing the target population of the given study and it is sufficient to analyze the research issue of the given context.

5 DATA ANALYSIS AND DISCUSSION
The IBM SPSS 22 package was employed for initial data analysis. Initially, a reliability analysis was conducted to determine the internal consistencies of each scale adopted to measure the concept through Cronbach’s Alpha Coefficients. Further, descriptive statistics were calculated to measure the degree of Fin Lit, Fin Lit and WEE in the given research context. The results are summarized in the table 01.

<table>
<thead>
<tr>
<th>TABLE1: Results of Reliability Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Financial Literacy</td>
</tr>
<tr>
<td>Financial Inclusion</td>
</tr>
<tr>
<td>WEE</td>
</tr>
<tr>
<td>Source: Survey data 2019</td>
</tr>
</tbody>
</table>

According to the reliability statistics given in the table 1, all the reliabilities for all 03 scales are found to be adequate since Cronbach’s Alpha values are higher than 0.7. Further, descriptive statistics revealed that financial literacy of rural women was relatively low (M = 2.76, SD = .62576). However, it was further noted that both Fin In (M = 3.22, SD = .76712) and WEE (M = 3.25, SD = .79147) of present research contexts were reported at medium level. Further, the researcher conducted an exploratory factor analysis (EFA) to re-examine whether measurement items are accurately represented in respective dimension of Fin Lit and WEE. According to the results of EFA for Fin Lit, items were loaded into 05 factors with reporting eigenvalues greater than 01. Further, the total variance of the extracted factors was 52.09%. The findings revealed that only 25 items were selected for further analysis based on factor loading structure. Furthermore, results of EFA for WEE were revealed that 26 items were loaded into 05 factors with 58.02% total variance. Therefore, 24 items only considered for further analysis of WEE. All the 20 items of Fin In were directly taken for the data analysis as the adopted scale of Fin In was validated in different socio contexts to measure the degree Fin In. PLS-SEM was employed as the main measurement model for the present study. And also, the researchers employed the Smart-PLS 3 as the main analytical software due to the formative nature of the mediator in the conceptual model [32]. Initially, it was tested in theoretical and literature perspective and then it was statistically justified by confirmatory tetrad analysis (CTA) [33]. According to the findings of CTA, Fin In was recognized as a formative latent variable in the present model [34]. It was further confirmed that LOCs (Lower Order Constructs) of Fin Lit and economic empowerment of women can be considered as reflective latent variables in the present conceptual model. Therefore, measurement model assessments criteria should be tested separately to each variable categories based on CTA [62], [63], [64]. As [72], suggested that when formative mid-endogenous mediating relationship occurs in the HCMs (Hierarchical Component Models), the two-stage approach as a special condition should be followed. Therefore, the present model was assessed based on two stage approach. Based on all the considerations, initially direct relationship between the Fin Lit and WEE was tested and results are summarized into figure 2 and table 2.

**TABLE 2: Significance of the Direct Relationship between Fin Lit and WEE**

<table>
<thead>
<tr>
<th>Path</th>
<th>β</th>
<th>Sample Mean (M)</th>
<th>Std De:</th>
<th>T Statistic</th>
<th>P Values</th>
<th>Bias</th>
<th>5.0%</th>
<th>95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>fin Lit -&gt; WEE</td>
<td>0.362</td>
<td>0.36</td>
<td>0.052</td>
<td>6.9</td>
<td>3</td>
<td>0.000</td>
<td>0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: Survey data 2018

Direct relationship is assured based on significant path coefficients (β=0.362, t =6.93, p=0.000), with acceptable range of BCa confidence intervals (lower = 0.273 and upper = 0.445). Further, determinant of coefficient is given in the figure 2, 13.1% of WEE is represented by Fin Lit among the rural poor women in Sri Lanka. Therefore, H1 is empirically supported in the present research context. Further, the model was re-estimated with including Fin In as a moderating variable and results are given in figure 3 and table 3. The mediating effect on the linkage between Fin Lit and WEE was tested by adapting the [32], procedure due to the fact that it can be applied over the Sobel test as it does not have strict distributional assumptions. Accordingly, H4
was tested based on the mediating effect of Fin In in the present research model by assuming the mediating role in Fin In on the relationship between Fin Lit and WEE, as developed as above. According to [34], mediation effect is occurred when the causal effect of an independent variable (X) on a dependent variable (Y) is transmitted by a mediator (M). Further, [72], emphasizes that mediating variable can be estimated without considering the direct effect of independent variable on dependent variable by using partial least square algorithm [73].

![Fig. 3. Mediation of financial inclusion in fin Lit and WEE](image)

Source: Survey data 2019

### TABLE 3: Significance of the Direct and Indirect Relationship between Fin Lit and WEE

<table>
<thead>
<tr>
<th>Path</th>
<th>Sample Mean (M)</th>
<th>Std Dev.</th>
<th>T Statistics</th>
<th>P Value</th>
<th>Bias</th>
<th>2.5% 97.5%</th>
<th>95% Confidence interval of the Direct Effect</th>
<th>Signif (p&lt;0.05)</th>
<th>Indirect Effect</th>
<th>95% Confidence interval of the Indirect Effect</th>
<th>Signif (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fin Lit -&gt; WEE</td>
<td>0.05</td>
<td>0.053</td>
<td>0.073</td>
<td>0.71</td>
<td>0.47</td>
<td>0.00</td>
<td>0.7</td>
<td>0.3 0.59</td>
<td>(No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fin Lit -&gt; Fin In</td>
<td>0.71</td>
<td>0.717</td>
<td>0.026</td>
<td>28.05</td>
<td>2</td>
<td>0.00</td>
<td>0</td>
<td>0.0 0.92</td>
<td>(No)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fin In -&gt; WEE</td>
<td>0.43</td>
<td>0.432</td>
<td>0.065</td>
<td>6.634</td>
<td>0.00</td>
<td>0</td>
<td>0</td>
<td>0.7</td>
<td>0.64 0.7</td>
<td>(Yes)</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Survey data 2019

The results revealed that direct relationship between Fin lit and Fin In was assured based on significant path coefficients (β=0.718, t =28.052, p=0.000), with acceptable range of BCa confidence intervals (lower = 0.092 and upper = 0.191). Further, determinant of coefficient given in the figure 4.13, 51.5% of Fin In is represented by Fin Lit among the rural poor women in Sri Lanka. On the other hand, direct relationship between Fin In and WEE was assured based on significant path coefficients (β=0.432, t =6.634, p=0.000), with acceptable range of BCa confidence intervals [79]. (lower = 0.064 and upper = 0.764). Therefore, H2 and H3 was empirically supported in the present context. The results further revealed that direct effect of Fin Lit on WEE has been significantly dropped as the respective path coefficient was reduced from 0.362 to 0.052. The coefficient is not found as statistically significant (β=0.052, t =0.71, p=0.478). Therefore, the magnitude of the effect is 0.31 (0.362 – 0.052). This is equal to the product of coefficient (0.718*0.432). Further, bootstrapping t-test results to identify the direct and indirect effects are summarized into table 4.

### TABLE 4: Mediation analysis of Direct and Indirect effects

<table>
<thead>
<tr>
<th>Path (β)</th>
<th>Direct Effect</th>
<th>95% Confidence interval of the Direct Effect</th>
<th>t-value</th>
<th>Signif (p&lt;0.05)</th>
<th>Indirect Effect</th>
<th>95% Confidence interval of the Indirect Effect</th>
<th>t-value</th>
<th>Signif (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fin Lit -&gt; WEE</td>
<td>0.3 62</td>
<td>0.273 - 0.445</td>
<td>6.9</td>
<td>3</td>
<td>0.000 (Yes)</td>
<td>0.05</td>
<td>2</td>
<td>0.3 - 0.559</td>
</tr>
</tbody>
</table>

Source: Survey data 2018

According to the bootstrapping t-test results shown in table 4, clearly noted that the direct path is not significant after introducing the mediating variable. Hence, mediation effect is clearly identified based on the specifications given by Judd and Kenny (1981) and Preacher and Hayes (2008). Therefore, hypothesis H4, Fin In mediates the relationship between Fin Lit and WEE was empirically supported in the present research context. Accordingly, the indirect-only mediation is detected and the direct effect is not significant, whereas the indirect effect is significant. That means the effect of the Fin Lit on WEE is completely transmitted with the help of Fin In (mediator). It also implied that the Fin In provides a supportive background to enhance the WEE among the financial literate women in the rural poor community in Sri Lanka.

### 6 CONCLUSION AND RECOMMENDATIONS

In accordance to the empirical results given in above, the selected variables in the conceptual framework can be applied to measure Fin Lit, Fin In and WEE in the present research context. Further, reliability statistics revealed that all 03 scales are reliable to determine the degree of those concepts in rural poor women in Sri Lanka. The descriptive statistics emphasize the present degree of each concept in the present context. Accordingly, Fin Lit among rural poor women in Sri Lanka is relatively low. However, both Fin In and WEE among the selected respondents are relatively high. On the other hand, the results assured the direct relationship between Fin Lit and WEE. Therefore, it was noted that WEE among rural poor communities can be enhanced through Fin Lit in the present context. However, when Fin In is considered as a mediating variable, the direct relationship was significantly dropped. Therefore, full-mediation is established by Fin In. Therefore, it is implied that developing Fin Lit among rural poor women cannot be considered as the only solution to improve the empowerment of rural women. However, the results show that direct relationship between Fin Lit and Fin In was statistically significant. Therefore, the degree of Fin In can be increased by educating rural women about the formal financial system. Further, Fin In has a significant positive direct impact on WEE. Accordingly, high degree of Fin In can enhance WEE among poor rural communities in Sri Lanka. Accordingly, the present finding is not contradictory with the existing literature specified in previous studies (E.g. [11], [24], [57], [50], etc.). According to the previous
literature, some researchers established the relationship between Fin Lit and Fin In, (e.g. [66]). For instance, [41], argued that Fin Lit as a key determinant of Fin In among rural poor communities. Some studies offer evidence of a significant relationship between Fin In and WEE e.g. [87], [49]. There are some studies concerned on Fin Lit and Fin In as exogenous constructs to determine WEE [14]. Hence, it is argued that WEE is influenced by Fin Lit, access to financial products and services (Fin In) and financial well-being. This argument was further empirically proved in a research conducted in the local context, [45], through a survey conducted by Karunathilake at 2016 among rural community in a particular district in Sri Lanka. As many researches focused on such a mediating effect of Fin In on the relationship between Fin Lit and WEE in local context, previous researchers have not sufficiently justified the importance of Fin In for enhancing WEE. Therefore, the present research successfully bridges an important gap in the literature by positioning the mediation effect of Fin In within the developing economies like Sri Lanka. Sri Lanka as a lower-middle income country, planning to achieve the next step (upper-middle), is in need to find the way forward to achieve inclusive growth. In this process, the country is pertaining some problems. For instance, the majority (e.g. 83%) of the population is living in rural areas, more rural people are dealing with informal financial transactions, among them women take large percentage. When it considers the labor force participation, 75% women are considered as economically inactive labor, representing 52% of the population and more life expectancy rate (78%) than men (73%). To empower the rural poor women, they need to be absorbed in to the formal financial sector. While concerning Fin In as the main determinant is Fin Lit, the Sri Lankan Fin Lit level is low. According to the WFDR in 2017/2018, Sri Lankan Fin Lit rate is 35% and it shows a huge gap between print literacy (92%) levels in the country. Therefore, one objective was to find out the real reason for illiteracy in majority of poor women as a barrier for their economic empowerment. Therefore, policy decision makers can include more information about the formal financial sector in to the school curriculum with the purpose of convincing the benefits of the formal financial system and accordingly promote them to deal with formal financial institutes. Further, government can take the initiation to conduct some awareness programs about the new development of formal financial sector. Specially, rural poor communities use formal financial institutes for maintaining the savings accounts only. Government can encourage them to use different formal financial tools by emphasizing the benefits. The institutes of the formal financial sector can convince the benefits of different facilities provide by them to the rural poor. Further, they can use simple procedures to access their services and attract more customers towards new technological innovations such as on-line banking, mobile banking and automated cash deposits etc.

7 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

There are few limitations which offer interesting avenues for further research. Women's empowerment has different perspectives, compared to economic empowerment such as social, political empowerment. Due to the measurement issues of these variables, the present study is limited to the economic empowerment. Therefore, future studies must be focused on the other two aspects as well to study about the entire women's empowerment concept. Further, the present study measured WEE through five dimensions only. Therefore, future researchers can consider more dimensions of economic empowerment or other aspects such as: social, political empowerment of the WEE to provide implication for effective policy decisions. Present research study adopted the quantitative research approach. There are some limitations to quantify some variables as mentioned as above. Therefore, future studies can be performed while using a qualitative research approach, mainly to identify the impact of Fin Lit and Fin In on WEE. Further, this study followed a deductive approach to confirm the existing theoretical arguments in the context of the current study. If future research follows the qualitative as well as inductive research approaches, it would able to investigate respective concepts without having pre-determined framework. Given the newness of concepts such as Fin Lit and Fin In, there are no unique theories to understand the concept and their relationships. Therefore, the researcher proposes that the same study can be carried out by adopting to inductive interpretivist research approach. Although there are some other variables to determine the WEE, Fin Lit is considered as an independent variable in the research model. Therefore, some other independent variables could be employed to measure the WEE in future studies. Further, Fin Lit can be measured using other dimensions which are not employed in the present study. According to the research model, only the mediation of Fin In is positioned in this study to examine the relationship between Fin lit and WEE. However, it is important to conduct future studies in order to identify some other mediating variables to further deepen the relationship between the two variables. The depending variable of this study is the women's empowerment in the rural poor sector only. Further, women-headed households living under the poverty line are taken as a unit of analysis. Rather than rural poor women, future research can be focus the semi-urban and urban sector women to measure the impact of Fin Lit and Fin In on WEE. Furthermore, the future researchers can develop an index to measure the economic empowerment of female to get the real and accurate picture on the WEE while considering the behavioral indicators impacting women's decision-making in poor countries such as Sri Lanka.

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