Worth of Celebrity Attributes on Purchasing Behaviour of Assurance Service in Sri Lanka: Mediating Effect of Source Credibility

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Authors’ contributions
This work was carried out in collaboration between both authors. Author KMVS designed the study, performed data analysis and wrote the manuscript. Author AKGP managed literature review and collected the data. Both authors read and approved the final manuscript.

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ABSTRACT

Purpose: Celebrity endorsement has been investigated in prior studies regarding various behavioural and cognitive aspects about consumer purchasing behaviour, it is not clear whether principles findings in the general celebrity literature can be directly applied to the service context. This study examines the effects of different attributes associated with celebrities on purchasing behaviour of life insurance policy in Sri Lanka.

Design: The study used a deductive approach and quantitative research design. Data were collected from 150 life insurance policy holders who representing four insurance companies in Sri Lanka. A self-administrated structured questionnaire was used to collect data. The step-wise multiple regression and regression-based path analysis were employed to test the hypotheses.

Findings: The study finds that celebrity attractiveness, trustworthiness and expertise have significant influence over purchasing behaviour and however the influence is not strong. Further, celebrity trustworthiness has a significant mediating effect on the relationship between celebrity expertise and buying behaviour.

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1. INTRODUCTION

Traditionally, advertising has been preferred to other elements of the promotional mix. Celebrity endorsement has long been considered as a powerful promotional tool by marketers and now it is recognised as a predominant strategy in modern marketing [1]. In fact, companies spend enormous amount of money on celebrity endorsement advertisements believing that celebrities become effective voices of their products or services. The prior studies with related to service sector (telecommunication, finance and hospital) and goods demonstrate that good celebrity endorsers can influence advertising effectiveness, brand recognition, brand attitudes, brand recall, product evaluations, purchase intentions and purchase behaviors [1,2].

In assurance sector, celebrity endorsement is becoming more popular because insurance companies are finding that it is increasingly difficult to survive in the marketplace and gain market share. This is not exemption in Sri Lankan context because insurance sector has rapidly changed over the recent years. Representing service sector contribution towards gross domestic product, banking and insurance sector provides 9 percent contribution to Sri Lankan economy [3]. Numerous insurance policies have been introduced and number of promotional channels and messages are formalizing to gain customer attentions. As a result, insurance companies have commenced to employ celebrities to differentiate their insurance policy from those of their competitors and enhance their competitive positions in the minds of their target customers. Here again, highly reputed celebrities are equipped with different attributes such as attractiveness, likeability, expertise and trustworthiness [2], which may not equivalently influence consumers’ mind set. Thus, again implications of celerity attributes for brand endorsement could be differed according to the products. Not like tangible products, services are intangible and there are constraints for feel the product before it consumes. The celebrities who are employed to promote services like insurances needs to generate an individual consumer’s self-reported feelings or beliefs on insurance service and leads to enhance public perception about the service. Thus, it becomes even more important to know how celebrities’ attributes influence consumer behaviour towards insurance companies’ offers. As McCormick [4] stated, purchase intention and high recall rates among consumers have increased with the use of celebrity endorsement. More importantly, given the fundamental differences between tangible and intangible products, it is not clear whether principles findings in the general celebrity literature can be directly applied to the service context [1]. Thus, the objective of the current study is to examine the effects of different attributes associated with celebrities on purchasing behaviour of life insurance policy in Sri Lanka.

The study advances the literature on celebrity endorsement and its influence on consumer purchasing behaviour by seeking evidence from emerging service sector in developing country. Further, the influence of celebrity attributes has been explored considering direct influences, rather than indirect influences. Indeed, this study indicates that indirect effect of celebrity attribute enhances purchasing behaviour, situating this finding within the context of Sri Lanka, a country highly characterised by esteem for celebrities.

The paper proceeds as follows: First, there is a discussion of the relevant literature, followed by the study objective. Next, an explanation of data and methodology is provided. Finally, results are explained, followed by discussion, implications and conclusion.

2. LITERATURE REVIEW

2.1 Celebrity Endorsement

Celebrity is a person who are widely recognized by a certain group of people because of his/her accomplishments in the field of operation. Okorie and Aderogba [5] defined celebrity endorsement as involving the use of any person who enjoys public recognition and usually uses that recognition on behalf of a consumer product or service. 

| Keywords: Celebrity endorsement; attributes; purchasing behaviour; life insurance; mediating effect; regression-based path analysis. | }

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Originality: Despite the role of celebrity attributes in influencing the buying behaviour of tangible products, limited studies have been conducted specifically on intangible products and also, the literature is not clear whether principle findings in the general celebrity can be directly applied to the intangible product or service context. This study has addressed that empirical gap.
service by appearing with it in an advertisement. In here, celebrity acts as the spokesperson of product brand and certifies the brand’s claim and position by encompassing his/her personality [6].

Traditionally, celebrity endorsers are movie stars, singers, models, athletes, politicians and business people [7]. With the popularity of television, internet and social media channels, celebrity considers as any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement [1]. Hence, celebrity endorsement is a promotional tool where celebrity gives his/her opinion associated with a particular product (good or service). In line with that, Seno and Lukas [8] claimed that endorsement can be explicit, implicit, imperative or co-presentation.

Prior studies have revealed several benefits as well as risk of celebrity endorsement [1,4,9,10,11]. It is not surprising that we have mixed results in the extant literature on the effectiveness of celebrity endorsement as a marketing strategy. Eventhough celebrity endorsement associates with the benefits and risks of using, it is still believed by the majority of marketers and researchers that if used appropriately, celebrity endorsement can be an effective communication strategy to promote a product/brand and influence consumers’ purchasing decisions [1]. Then the question is raised, what characteristics should be considered when choosing appropriate celebrities for specific product or brand. Marketers therefore should not just select any celebrity as a spokesperson of their brand, but must consider the fit of the attributes of celebrity in promoting the brand to the targeted customers [10]. Then, celebrity attributes/characteristics become very critical in enhancing the successfulness of celebrity endorsement process [12]. The influence of these attributes can differ according to the product type.

### 2.2 Celebrity Attributes

The source credibility model emphasised three celebrity attributes namely attractiveness, expertise and trustworthiness [13]. Celebrity attractiveness consists with physical characteristics of the celebrity such as height, weight and facial beauty of the celebrity. Seno and Lukas [8] defined celebrity attractiveness as theendorser’s appealing nature – such as physical beauty, personality, familiarity and likeability to consumers. Physically attractive celebrities are generally identified as more preferable to consumers than non-physically attractive ones [14]. However, attractiveness goes beyond the physical features that involve personality and athletic abilities [2]. The source attractiveness model [15] is based on celebrities related to physical attractiveness, however, the attractiveness should be included both physical attractiveness and virtuous characteristics such as personality, lifestyle and intellectual skills [16]. Accordingly, Saldanha [17] indicated that customers become more attached to products that are promoted by attractive celebrities. However, Till and Busler [18] and Caballero [19] opined that attractive celebrity endorsers do not always translate into higher purchase intentions, although it enhanced customer assessment of advertisement. Further, Eren-Erdogmus [20] identified that attractive celebrities had much influence in the promotions of tangible products. Thus, the effect of celebrity attractiveness over consumer buying behaviour is ambiguous. Taking a closer look, in the practice, marketing promotions are mainly focused on physical attractiveness [21].

The source credibility model highlights that an advertising message from a credibility influences consumers’ beliefs, attitudes and behaviors [22]. In here, credibility is the extent to which the information is perceived as possessing expertise and can be trusted to give an objective opinion on the subject [23]. The model suggests two attributes, trustworthiness and expertise, have been documented as important indicators of an endorser’s credibility [22]. Celebrity endorser’s expertise refers to a celebrity endorser’s perceived level of knowledge, experience or skill related to the endorsed product/brand or extent to which a communicator is perceived to be a source of valid assertions [16]. The source credibility model highlighted that expert celebrities are more persuasive and able to influence purchase intentions among customers [22]. In that sense, Erdogan [16] opined that the celebrity may not be a real expert on the endorsed product, but if he/she is perceived to be a valid source of information, the endorsement message will be more persuasive and generate more favorable reactions.

Trustworthiness refers the level of confidence customers put in source’s intent in conveying the claims he/she considers valid [22]. It is a celebrity endorser’s perceived believability, honesty and integrity [16], whereas a celebrity’s trustworthiness depends on the target audience’s perceptions. Studies have found trustworthiness
as having a positive influence on customer belief and highly opinionated recommendations from a highly trustworthy celebrity leads to an effective attitude change, and the vice versa [24,25,17]. Trustworthy celebrities are effective in the promotions of intangible product [20]; like insurance.

Acknowledging the source credibility model, Yang [1] indicated that information from a credible person can influence beliefs, opinions, attitudes and/or behaviors (internalization), which occurs when consumers accept influence from a credible person on their personal attitudes and value structures. Further, the match-up hypothesis model [16] claimed that there must be a congruent relationship between the celebrity and the product he/she is endorsing. The model believes that poor fit between brands and celebrities is the primary reason why certain celebrity endorsements are unsuccessful. Extent literature have investigated the match between a product and a celebrity attribute in terms of physical attractiveness [1], it remains difficult to know which dimensions should be matched between a product and a celebrity. There seems to be a lack of agreement over which attribute is the most powerful and whether conditional situations can make one attribute more suitable than others. Thus, more studies on this area are required to investigate situations in which different attributes are more suitable for selecting appropriate celebrity endorsers to enhance purchasing behaviour.

3. METHODOLOGY

3.1 Population, Sample and Data

The scope of this study includes life insurance policy holders who representing four insurance companies in Sri Lanka. Recently, insurance companies in Sri Lanka have commenced to employ celebrities, believing that celebrities become effective voices of their service and differentiate their life insurance policy relative to the competitors. The importance of the four selected insurance companies is reflected in their significant contributions towards insurance market share. These four companies are representing 87 percent of the insurance market share in the country [26]. The majority of life insurance policy holders represent in Colombo district, the study thus selected Colombo district life insurance policy holders of four selected insurance companies. Based on the IRCSL report (2017), there are nearly 1,800,000 life policies in force. Since policy holders' information is restricted to reveal to the third party, the study selected purposive sampling technique. In order to obtain an adequate sample, 300 questionnaires were distributed and in return, 161 questionnaires were received. After filtering with respondents' errors and incomplete questionnaires, 150 questionnaires were considered for final analysis, resulting 50 percent of response rate.

A self-administered structured questionnaire was used to collect data. The survey questionnaire comprised a total of 19 items, closely corresponded to the instrument used by Wang [27] and Zakari [2]. The measurement items were adapted according to the scope of the study. These 19 items were represented the four variables (attractiveness – 5 items, trustworthiness – 5 items, expertise – 5 items and purchase behaviour -4 items) and they were measured on a continuous, itemised rating scale (five-point Likert-scale) with end points of strongly disagree and strongly agree (Refer Table 1). In addition, the first part of the questionnaire included three categorical items which were used to solicit demographic information from the respondents.

3.2 Data Analysis

The multiple regression analysis was employed to determine the significant effects of celebrity attractiveness, trustworthiness, expertise on purchase behaviour of life insurance policy holders in this study. In here, step-wise regression analysis was performed to identify the individual effect of independent variables into dependent variable. The relationship among celebrity attractiveness, trustworthiness and expertise and purchase behaviour of life insurance policy holders was further estimated using regression-based path analysis [28,29]. Taking the cue from Baron and Kenny [30] and Hayes [31], the regression-based path analysis follows four steps in order to assess the mediating effects of variables and their significance. Accordingly, the path coefficient between independent and dependent variables has to be significant. Likewise, the path coefficient between independent and mediating variables as well as between mediating and dependent variables should be significant as well. When the mediating variables are included in the model, the path coefficient between independent and dependent variables should decrease in size and has to be non-significant [27,28,32,33].
Table 1. Operationalisation

| Attractiveness                                                                 |                |
|--------------------------------------------------------------------------------|----------------|
| Bought the assurance policy because the celebrities are attractive            |                |
| Bought the assurance policy because the celebrity endorsed products create a  |                |
| class                                                                         |                |
| Bought the assurance policy because the celebrities who endorsed the products |                |
| are beautiful                                                                  |                |
| Bought the assurance policy because the celebrity endorsed products are      |                |
| elegant                                                                       |                |
| Bought the assurance policy because the celebrity who endorsed the product   |                |
| is famous                                                                      |                |

| Trustworthiness                                                               |                |
|--------------------------------------------------------------------------------|----------------|
| Depend on celebrity because the products endorsed by celebrities are good     |                |
| Bought the assurance policy because the celebrity is honest about the message|                |
| Message, he/ she is giving                                                    |                |
| Message which is given by the celebrity is reliable, so I could count on it  |                |
| Trust on the celebrity regarding the assurance policy                        |                |
| Celebrity is sincere about the endorsed assurance policy                     |                |

| Expertise                                                                    |                |
|--------------------------------------------------------------------------------|----------------|
| Bought the assurance policy because the celebrity has enough expertise on the  |                |
| policy                                                                        |                |
| Bought the assurance policy because the celebrity has enough experience to   |                |
| endorse the policy                                                            |                |
| Bought the assurance policy because the celebrity has enough knowledge on the|                |
| policy                                                                        |                |
| Bought the assurance policy because the celebrity has enough qualification   |                |
| to endorse the policy                                                         |                |
| Bought the policy because the celebrity has enough skills about the policy,  |                |
| he/ she endorsed                                                              |                |

| Purchase behaviour                                                          |                |
|--------------------------------------------------------------------------------|----------------|
| Buy insurance policy because I am concerned about risk of the life           |                |
| Say positive things about the insurance policy to other people               |                |
| Recommend the insurance policy to someone who seeks my advice                |                |
| Buy insurance policy for the long-term health benefits                       |                |

4. RESULTS

Table 2 depicts the demographic picture of the sample. Accordingly, age category 30-45 years records the highest percentage (44.0%) of respondents. When consider the income level of the respondents, most of the respondents belong to the Rs. 26,000-40,000 income level category and it represents 44.7% portion from the sample. When comes to the number of insurance policies, 86% respondents have only one life insurance policy and 10.7% of respondents indicated that they have two life insurance policies. Interestingly, 3.3% of respondents from the sample have more than two insurance policies.

4.1 Goodness of the Measurement

The study assessed the validity and reliability of each measurement items used for four variables; celebrity attractiveness, trustworthiness, expertise and purchase behaviour. Content validity is ensured through reviewing literature comprehensively and critically. The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was employed to determine the appropriateness of factor analysis. Composite Reliability (CR > 0.7) and Average Variance Extracted (AVE > 0.50) are used to ensure the convergent validity [34]. Table 3 shows that the KMO measure of the variables were greater than 0.50 (p < 0.05), indicating the appropriateness of factor analysis. The results presented in Table 3 further shows that both CR and AVE values exceed the respective threshold values ensuring the convergent validity. Under reliability internal consistency is ensured through Cronbach’s Alpha values (< 0.70) [34]. The results are also given in Table 3.

The discriminant validity was ensured as the square root values of all AVEs exceed the correlation values of the respective constructs [35] Table 4. Table 4 further illustrates the descriptive statistics and inter-correlational values between the variables. There were statistically significant correlations among celebrity attractiveness, trustworthiness, expertise and purchase behaviour at 0.01 and 0.05 significance level. Further, none of the correlation coefficient was above 0.85, indicating the absence of multicollinearity in the variables [34].

4.2 Multiple Regression Analysis

The multiple regression analysis was initially employed to determine the significant effects of celebrity attractiveness, trustworthiness, expertise on purchase behaviour of life insurance policy holders in this study. Accordingly, step-
wise regression analysis was performed to identify the individual effect of independent variables into dependent variable. Table 5a shows the result of the relationship between celebrity attractiveness and purchase behaviour, indicating that only 3% of the variation in purchase behaviour of life insurance policy can be explained by the celebrity attractiveness of this study and that effect was statistically significant (Table 5b). Further, there is a negative relationship between celebrity attractiveness and purchasing behaviour ($b = -0.141$).

**Table 6a** shows the changes of effects on purchasing behaviour when celebrity

| Characteristics                      | Frequency |
|--------------------------------------|-----------|
| In numbers                          | In percentages |
| **Age**                             |           |
| 18 - 29                              | 18        | 12.0% |
| 30 - 45                              | 66        | 44.0% |
| 46 - 60                              | 47        | 31.3% |
| Above 60                             | 19        | 12.7% |
| **Income level**                    |           |
| Less than Rs. 10,000                 | 4         | 2.7%  |
| Between Rs. 10,000 – Rs 25,000      | 45        | 30.0% |
| Between Rs. 26,000 – Rs 40,000      | 67        | 44.7% |
| Above Rs. 40,000                     | 34        | 22.7% |
| **Number of life insurance policies** |           |
| One                                  | 129       | 86.0% |
| Two                                  | 16        | 10.7% |
| More than two                        | 5         | 3.3%  |

**Table 3. Results of KMO, AVE, CR and Cronbach’s Alpha**

| Variable                  | KMO   | CR    | AVE | Cronbach’s Alpha |
|---------------------------|-------|-------|-----|------------------|
| Attractiveness            | 0.835 | 0.814 | 0.587 | 0.824           |
| Trustworthiness           | 0.868 | 0.834 | 0.659 | 0.870           |
| Expertise                 | 0.844 | 0.826 | 0.582 | 0.820           |
| Purchase Intention        | 0.673 | 0.741 | 0.569 | 0.791           |

**Table 4. Values for Discriminant Validity**

| Variable                  | Mean  | Std. deviation | Att    | Trust | Exp  | PB   |
|---------------------------|-------|----------------|--------|-------|------|------|
| Attractiveness (Att)      | 2.548 | 0.737          | .766*  |       |      |      |
| Trustworthiness (Trust)   | 4.186 | 0.772          | .142   | .812* |      |      |
| Expertise (Exp)           | 4.169 | 0.734          | -.175**| .270***| .762*|      |
| Purchase Behaviour (PB)   | 4.215 | 0.683          | -.173**| .261***| .240***|.754*|

Note: *square root of the AVE; ** Correlation is significant at the 0.05 level (2-tailed); *** Correlation is significant at the 0.01 level (2-tailed)

**Table 5a. Model summary (Celebrity attractiveness)**

| Model | $R$ | $R$ square | Adjusted $r$ square | Std. error of the estimate | Durbin-watson |
|-------|-----|------------|---------------------|---------------------------|---------------|
| 1     | .173* | .030        | .023                 | .45715                    | 1.754         |

a. Predictors: (Constant), Attractiveness

**Table 5b. Coefficients (celebrity attractiveness)**

| Model | Unstandardized coefficients | Standardized coefficients | t | Sig. |
|-------|-----------------------------|---------------------------|---|-----|
| B     | Std. Error                  | Beta                      |   |     |
| 1     | (Constant)                  | 4.575                     | .173 | 26.466 | .000 |
|      | Attractiveness              | -.141                     | -.173 | -2.131 | .035 |
attraction made together with celebrity trustworthiness. The result indicated that 21% of the variation in purchase behaviour of life insurance policy can be explained by the celebrity attractiveness and trustworthiness of this study. However, when celebrity trustworthiness was entered into the model, celebrity attractiveness was no longer statistically significant. The p-values for attractiveness was greater than 0.05 (Table 6b). This implies that celebrity trustworthiness has a mediating effect on the relationship between celebrity attractiveness and purchasing behaviour.

Moreover, Table 7a shows the changes of the effects on purchasing behaviour when celebrity attractiveness, trustworthiness made together with celebrity expertise. The result indicated that there was no statistically significant R square change in model 3, where celebrity expertise did not have a significant effect on purchasing behaviour. This is further explained in the p-value of expertise (Table 7b) which was greater than 0.05. Moreover, celebrity trustworthiness was the only significant factor (p-value = 0.028), implying that celebrity trustworthiness has mediating effects on the relationship between celebrity attractiveness, celebrity expertise and purchasing behaviour of life insurance policy. Hence, it is required to test the mediating effect of celebrity trustworthiness.

4.3 Regression-based Path Analysis

The regression-based path analysis [27] was further performed to test the relationships among celebrity attractiveness, celebrity trustworthiness, celebrity expertise and purchasing behaviour of life insurance policy. In here, celebrity trustworthiness was included as mediating variable. Table 8 shows the results of path analysis of celebrity attractiveness, celebrity trustworthiness and purchasing behaviour of life insurance policy.

In regression-based path analysis, the path coefficient between independent (career attractiveness) and dependent variable (purchase behaviour) has to be significant (model 3). Second, the path coefficient between independent variable and mediating variable (career trustworthiness) (model 1), as well as between the mediating variable and dependent variable (model 2) should be significant as well. Finally, when the mediating variable is included in the model, the path coefficient between independent and dependent variables should decrease in size and has to be non-significant (model 2).

Model 1 (Table 8) predicts celebrity trustworthiness using celebrity attractiveness, model 3 predicts purchase behaviour using celebrity attractiveness, celebrity trustworthiness and purchasing behaviour. According to the result of model 1, celebrity attractiveness was not a significant predictor for celebrity trustworthiness (p-value = 0.0828), hence the basic condition of path-regression (path coefficient between independent variable and mediating variable should be significant) was not satisfied. In this case, celebrity trustworthiness does not mediate the relationship between celebrity attractiveness and purchasing behaviour in this study. However, model 3 result indicates that celebrity attractiveness has a significant negative influence over purchasing behaviour.

Moreover, Table 9 shows the results of path analysis of celebrity expertise, celebrity trustworthiness and purchasing behaviour of life insurance policy.

Model 1 (Table 9) predicts celebrity trustworthiness using celebrity expertise, model 3 predicts purchase behaviour using celebrity expertise, and model 2 predicts the purchase behaviour using celebrity expertise and trustworthiness. Model 1 shows that celebrity expertise was a significant predictor for celebrity trustworthiness (R-square = 0.1935; p < 0.001). Model 3 shows that celebrity expertise was a significant predictor for purchasing behaviour (p < 0.001). Further, model 2 shows that celebrity trustworthiness was a significant predictor for purchasing behaviour (p = 0.0304). However, in Model 2, celebrity expertise is no longer significant in the presence of celebrity trustworthiness as a mediator (p = 0.2864, p > 0.05). Hence, the results confirm the mediating effect of celebrity trustworthiness on the relationship between celebrity expertise and purchasing behaviour. The value for indirect effect of celebrity expertise on purchasing behaviour was 0.2325, which is significantly greater than zero at 95% confidence interval. In addition, the R² value of model 2 (0.2190) (indirect effect) was greater than model 3 (0.1935) (direct effect). In this case, celebrity trustworthiness significantly mediates the relationship between celebrity expertise and purchasing behaviour of life insurance policy.
### Table 6a. Model summary (celebrity attractiveness and trustworthiness)

| Model | R       | R square | Adjusted R square | Std. error of the estimate | R square change | F change | df1 | df2 | Sig. F Change | Durbin-watson |
|-------|---------|----------|-------------------|---------------------------|----------------|----------|-----|-----|---------------|---------------|
| 1     | .173<sup>a</sup> | .030     | .023              | .45715                    | .030           | 4.540    | 1   | 148 | .035          |               |
| 2     | .474<sup>b</sup> | .225     | .214              | .41008                    | .195           | 36.923   | 1   | 147 | .000          | 1.961         |

<sup>a</sup> Predictors: (Constant), Attractiveness  
<sup>b</sup> Predictors: (Constant), Attractiveness, Trustworthiness

### Table 6b. Coefficients (celebrity attractiveness and trustworthiness)

| Model | B     | Std. error | Beta | t    | Sig. |
|-------|-------|------------|------|------|------|
| 1     | 4.575 | .173       |      | 26.466 | .000 |
|        | Attractiveness | -.141 | .066 | -.173 | -2.131 | .035 |
| 2     | 3.065 | .293       |      | 10.466 | .000 |
|        | Attractiveness | -.089 | .060 | -.109 | -1.488 | .139 |
|        | Trustworthiness | .329  | .054 | .446  | 6.076  | .000 |

### Table 7a. Model Summary (celebrity attractiveness, trustworthiness and expertise)

| Model | R       | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | Durbin-watson |
|-------|---------|----------|-------------------|---------------------------|-------------------|---------------|
| 1     | .173<sup>a</sup> | .030     | .023              | .45715                    | .030             | 4.540         | 1             | 148 | .035          |
| 2     | .474<sup>b</sup> | .225     | .214              | .41008                    | .195             | 36.923        | 1             | 147 | .000          |
| 3     | .479<sup>c</sup> | .229     | .213              | .41029                    | .004             | .848          | 1             | 146 | .359          |

<sup>a</sup> Predictors: (Constant), Attractiveness  
<sup>b</sup> Predictors: (Constant), Attractiveness, Trustworthiness  
<sup>c</sup> Predictors: (Constant), Attractiveness, Trustworthiness, Expertise
Table 7b. Coefficients (celebrity attractiveness, trustworthiness and expertise)

| Model | Unstandardized coefficients | Standardized coefficients | t     | Sig.  | Collinearity statistics |
|-------|-----------------------------|---------------------------|-------|-------|-------------------------|
|       | B              | Std. error | Beta |       | Tolerance | VIF |
| 1     | (Constant)     | 4.575      | .173 | 26.466| .000       |     |
|       | Attractiveness | -.141      | .066 | -.173 | -2.131     | .035|
| 2     | (Constant)     | 3.065      | .293 | 10.466| .000       |     |
|       | Attractiveness | -.089      | .060 | -.109 | -1.488     | .139|
|       | Trustworthiness| .329       | .054 | .446  | 6.076      | .000|
| 3     | (Constant)     | 2.944      | .321 | 9.167 | .000       |     |
|       | Attractiveness | -.083      | .060 | -.102 | -1.381     | .169|
|       | Trustworthiness| .242       | .109 | .328  | 2.223      | .028|
|       | Expertise      | .113       | .122 | .137  | .921       | .359|

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Table 8. Path analysis result (Attractiveness, Trustworthiness and Purchase behaviour)

| Model 1 | Outcome: Trustworthiness |
|---------|--------------------------|
| **Model 1 summary** |  |
| R | R-sq | MSE | F | df1 | df2 | p |
| .1421 | .0202 | .3875 | 3.0506 | 1.0000 | 148.0000 | .828 |
| **Coefficient** |  |
| Coeff | se | t | p | LLCI | ULCI |
| constant | 4.5881 | .2354 | 19.4931 | .0000 | 4.1229 | 5.0532 |
| Attract | -.1575 | .0902 | -1.7466 | .0828 | -.3358 | .0207 |

| Model 2 | Outcome: Purchase behaviour |
|---------|---------------------------|
| **Model Summary** |  |
| R | R-sq | MSE | F | df1 | df2 | p |
| .4739 | .2245 | .1682 | 21.2829 | 2.0000 | 147.0000 | .0000 |
| **Coefficient** |  |
| Coeff | se | t | p | LLCI | ULCI |
| constant | 3.0650 | .2929 | 10.4657 | .0000 | 2.4862 | 3.6437 |
| Trust | .3290 | .0542 | 6.0765 | .0000 | .2220 | .4361 |
| Attract | -.0893 | .0600 | -1.4877 | .1390 | -.2079 | .0293 |

| Model 3 | Outcome: Purchase behaviour |
|---------|---------------------------|
| **Model Summary** |  |
| R | R-sq | MSE | F | df1 | df2 | p |
| .1725 | .0298 | .2090 | 4.5403 | 1.0000 | 148.0000 | .0348 |
| **Coefficient** |  |
| Coeff | se | t | p | LLCI | ULCI |
| constant | 4.5746 | .1728 | 26.4660 | .0000 | 4.2330 | 4.9162 |
| Attract | -.1411 | .0662 | -2.1308 | .0348 | -.2720 | -.0102 |

**Total, direct and indirect effects**

**Total effect of X on Y**
| Effect | SE | t | P | LLCI | ULCI |
| -.1411 | .0662 | -2.1308 | .0348 | -.2720 | -.0102 |

**Direct effect of X on Y**
| Effect | SE | t | P | LLCI | ULCI |
| -.0893 | .0600 | -1.4877 | .1390 | -.2079 | .0293 |

**Indirect effect of X on Y**
| Effect | Boot SE | BootLLCI | BootULCI |
| Trust | -.0518 | .0550 | -1.1675 | .0481 |

According to the regression-based path analysis results, the study argues that celebrity expertise leads to enhance the trustworthiness of celebrity, in turns influence consumer’s purchasing behaviour of life insurance policy. Further, the negative relationship between celebrity attractiveness and purchasing behaviour was weak (R-square = 0.0298) (Table 8, model 3) but significant at 95% confidence interval. Finally, the relationship between celebrity expertise and purchasing behaviour was positive (b = 0.3632, R-square = 0.1935) and significant at 95% confidence interval (Table 9, model 3). Thus, the framework that is confirmed in this study illustrates in Fig. 1.

5. DISCUSSION AND IMPLICATIONS

Celebrity endorsement has recognised as a powerful promotional tool in modern marketing. Celebrity marketing mobilises a millionaire advertising market and understanding the effects of this marketing tool attracts the attention for the researchers [36]. Among the factors that enhance the effectiveness of celebrity endorsement process, celebrity attributes/characteristics is thus very vital [12]. Despite the role of celebrity attributes in influencing the buying behaviour of tangible products, limited studies have been conducted [1] specifically on intangible products. Further, the literature is not
clear whether principle findings in the general celebrity can be directly applied to the intangible product or service context. Thus, the present study intends to examine the effects of different attributes associated with celebrities on purchasing behaviour of life insurance policy in Sri Lanka.

The regression analysis results (Table 7a) revealed that celebrity attributes namely attractiveness, trustworthiness and expertise have significant influence over actual purchase behaviour of life insurance policy. However, the influence was weak (R-square = 0.229). Mowen and Brown [37] argued that the impact of the celebrities on product may be weaken when a celebrity becomes an endorser for the product which has diversified characteristics. Therefore, this result of the study is not surprised because insurance products have different varieties and specifically life insurance offers with varied policies. Thus, making huge investments on celebrities that has a least influence on consumer buying decisions of life insurance policy should be a great concern to the management of the insurance companies in Sri Lanka.

Table 5a shows that there is a negative relationship between celebrity attractiveness and purchasing behaviour (b = -.141). This result is further confirmed by the result in Model 3 (Table 8). The finding is not in line with the literature [38,16,17,39,40] that found celebrity attractiveness positively influence over consumer buying decisions. They have stated that celebrities with attractive attributes are effective in endorsing merchandise. And also, this finding has been contradicted with the studies of several authors [41,19,42] opined that there was no significant influence of attractive celebrity on purchase intention. Accordingly, they argued that while attractive celebrity endorsers increase attitude towards advertising, their influence on generating repeat purchase intentions is ambiguous.

Kamins [43] stated that attractive celebrities are effective endorsers for products such as cosmetics, perfume, clothing and apparels. However, based on the insurance services, the present study revealed the negative relationship between celebrity attractiveness and purchasing behaviour. There are reasons for this discrepancy. The findings echo the ideas of Anon [44]; there is a risk that the celebrities may overshadow the brands. Additionally, Langmeyer and Shank [45] and Zakari [2] argue that attractiveness involves not only physical features but also other intangible traits that consumers may relate to, such as lifestyle, personality and athletic competence. Hence, concern only on extraordinary beauty and stature of the celebrity may not be enough to appealing to consumers in order to increase brand recall and the positive attitude towards the brand. From the research perspective, the study’s finding confirmed the opinion of Kamins [46] that celebrity makes positive and negative affirmations about the endorsed brand therefore, the endorsement on both sides of the message is most effective to increase the brand.

The importance of celebrity expertise is further confirmed by the finding of this study (Model 3, Table 9), consistent with the studies of Batra [47] and Till and Busler [18]. And also, contradicting with the finding of Wei and Li [48], indicated that source expertise does not seem to affect consumers’ behavioural intentions. This implies that perceived expertise of a celebrity lead to a positive attitudinal change of consumers and consequently change the consumer's buying behaviouir. In light with the findings, it is imperative the source credibility model [22] which explains that expert celebrities are more persuasive and able to influence purchase intentions among customers. R-square value for the relationship between celebrity expertise and buying behaviour (R-square = 0.1935, model 3, Table 9) was greater than the R-square value for the relationship between celebrity attractiveness and buying behaviour (R-square = 0.0298; model 3, Table 8). Having said so, this finding acknowledges the opinion of Atkin and Block [49], using an expert spokesperson as an endorser is significant for products and services that have higher physical, financial or performance risk. For low-risk and non-financial products and services, the testimonials of consumers are deemed sufficient to create favourable behavioural responses. Since life insurance policies are involved with financial and performance risk, the expertise of an endorser is considered to be an important factor in increasing the influence of marketing messages. It is thus more effective to use a celebrity with relevant expertise as an endorser than to use conventional messages and advertorials conveyed by the insurance companies in Sri Lanka.

Corroborating Bozic [50], Djafarova [24], Dwivedi [25] and Saldanha [17], the findings suggest that celebrity trustworthiness as having a positive
influence on customer buying behaviour. This study defines trustworthiness as a consumer’s perception towards the honesty, integrity and believability of a celebrity [16]. A celebrity who is more believable, dependable and honest leads to an effective influence over buying behaviour of consumers. The finding also consists with the opinion of Atkin [49], stated that celebrities are perceived to be more trustworthy than are non-celebrities. The finding has disconfirmed the results of Ohanian [22] and Speck [51] who revealed that celebrity trustworthiness does not lead to higher purchase intentions for the endorsed brand. Having said so, the management of the insurance companies in Sri Lanka thus select celebrities that are more neutral, genuine and sincere.

In light with the findings, it is imperative for the management of insurance companies to configure the selection of celebrities. This is because celebrity trustworthiness mediates the relationship between celebrity expertise and buying behaviour. According to the finding, the celebrity who may be perceived as expertise in his/her field, will influence to the consumer’s perception towards the honesty, integrity and believability of a celebrity and result in changing their buying behaviour of life insurance policy. As Dean [52] stated, celebrity expertise emerges as

### Table 9. Path analysis result (Expertise, Trustworthiness and Purchase behaviour)

| Model 1 Outcome: Trustworthiness |
|----------------------------------|
| **Model 1 Summary**             |
| R  | R-sq  | MSE  | F   | df1  | df2  | p    |
| .8703 | .7574 | .0960 | 461.9777 | 1.0000 | 148.0000 | .0000 |
| **Coefficient**                 |
| Coeff | se | t   | p   | LLCI | ULCI |
| constant | .1279 | .1905 | .6712 | .5031 | -.2486 | .5044 |
| Expertise | .9735 | .0453 | 21.4937 | .0000 | .8840 | 1.0630 |

| Model 2 Outcome: Purchase behaviour |
|-------------------------------------|
| **Model Summary**                  |
| R  | R-sq  | MSE  | F   | df1  | df2  | p    |
| .4679 | .2190 | .1694 | 20.6042 | 2.0000 | 147.0000 | .0000 |
| **Coefficient**                    |
| Coeff | se | t   | p   | LLCI | ULCI |
| constant | 2.6703 | .2535 | 10.5332 | .0000 | 2.1693 | 3.1713 |
| Trust | .2388 | .1092 | 2.1866 | .0304 | .0230 | .4546 |
| Expertise | .1307 | .1222 | 1.0700 | .2864 | -.1107 | .3721 |

| Model 3 Outcome: Purchase behaviour |
|-------------------------------------|
| **Model Summary**                  |
| R  | R-sq  | MSE  | F   | df1  | df2  | p    |
| .4399 | .1935 | .1737 | 35.5194 | 1.0000 | 148.0000 | .0348 |
| **Coefficient**                    |
| Coeff | se | t   | p   | LLCI | ULCI |
| constant | 2.7008 | .2563 | 10.5361 | .0000 | 2.1942 | 3.2074 |
| Expertise | .3632 | .0609 | 5.9598 | .0000 | .2428 | .4836 |

### Total, direct, and indirect effects

| Total effect of X on Y | Effect | SE   | t    | P   | LLCI | ULCI |
|------------------------|--------|------|------|-----|------|------|
|                        | .3632 | .0609 | 5.9598 | .0000 | .2428 | .4836 |

| Direct effect of X on Y | Effect | SE   | t    | P   | LLCI | ULCI |
|------------------------|--------|------|------|-----|------|------|
|                        | .1307 | .1222 | 1.0700 | .2864 | -.1107 | .3721 |

| Indirect effect of X on Y | Effect | Boot SE | BootLLCI | BootULCI |
|--------------------------|--------|---------|-----------|-----------|
| Trust                    | .2325  | .1288   | -.0117    | .4773     |
the most powerful attribute in advertising utilitarian and costly brands. Based on the finding of mediating effect of the present study, using a celebrity with relevant expertise is not only enough to influence over consumer's buying behaviour. A celebrity with relevant expertise needs to be able to make consumer believes that celebrity is perceived to be more trustworthy than others which in turn enhance the buying behaviour of consumers.

The source credibility model suggests two attributes, trustworthiness and expertise, have been documented as important indicators of an endorser’s credibility [22]. In line with the model, Yang [1] indicated that information from a credible person can influence beliefs, opinions, attitudes and/or behaviors (internalization), which occurs when consumers accept influence from a credible person on their personal attitudes and value structures. The mediating results of this study confirmed that celebrity expertise who are able to build perceived trust on consumer’s mind become very critical in influencing purchasing decisions of life insurance policies. Further, the findings of this study echo the idea of Kings [53] where companies require to recognise that the indiscriminate use of celebrities is not going to lead to increased usage or favourable attitudes towards their products. Miller [54] stated that without trustworthiness, the other attributes possessed by the celebrities are unlikely to be effective in changing consumers’ attitudes. According to the insurance sector, it is clear that celebrity expertise should be come across with celebrity trustworthiness. This is implying that the insurance companies that engaged celebrities who are experts in their field, are required to boost their trust over consumers’ mind, then the companies who do not engage experts. Thus, management of insurance companies should pay particular attention to celebrity expertise and trustworthiness attributes, as that would be more rewarding to the companies.

For the management implications, some important aspects were highlighted in the discussion. First, attractiveness involves not only physical features but also intangible traits such as lifestyle, personality and athletic competence. Hence, the management of insurance companies may need to concern that attractiveness goes beyond the physical features. Rather than selecting a celebrity only with extraordinary beauty and stature, it might be more beneficial to choose a celebrity includes both physical attractiveness and virtuous characteristics such as personality, lifestyle and intellectual skills. Second, the expertise of a celebrity is considered to be an important factor to appealing to consumers in order to increase brand recall and the positive attitude towards the brand. It is one of growing concern, because life insurance policies are involved with financial and performance risk. The understanding of the inter-connection between celebrity expert and trustworthiness and the resulting findings provide useful direction in terms of how celebrity expertise can be configured with celebrity trustworthiness and subsequently deployed for greater returns from consumers.

From the theoretical perspective, this study has extended knowledge of celebrity endorsement by addressing the roles of different attributes associated with celebrities on purchasing behaviour of life insurance policy in Sri Lanka. Prior studies related to celebrity attributes have concentrated on the direct effects, however this study shows that celebrity attributes could also serve as a mediating variable. Empirical studies in the area of celebrity attributes have also paid not enough attention to intangible products; like insurance, which may have their own characteristics that research attention required. Thus, it is probably one of the first empirical investigations to integrate celebrity attributes in the insurance sector in Sri Lanka.
6. CONCLUSION AND FURTHER RESEARCH SUGGESTIONS

The study has achieved its objectives of investigating the situations in which different attributes are more suitable for selecting appropriate celebrity endorsers to enhance purchasing behaviour of life insurance policy. From the research perspective, it is hoped that this study provides the impetus for more research to be conducted in the future. Further research is required to test the proposed research framework on other insurance services. The prior studies have considered celebrity likability as one of the attributes [55,21]. However, Kahle [56] argued that celebrity likability same as attractiveness. Though celebrity likability has been ignored in the present study, the future survey could be expanded to examine how that attribute, together with other three attributes, makes influence over on purchasing behaviour. Finally, although the sample size in this study was comparatively small, it was acceptable for further inferential statistics. Nonetheless, a larger sample is necessary in order to improve the generalisability of the findings.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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