INVESTIGATING THE SOURCE ATTRIBUTES INFLUENCING CONSUMERS’ CREDIBILITY EVALUATIONS OF AN ATHLETE-CELEBRITY ENDORSED PRODUCT

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Abstract
The use of celebrity endorsement as an advertising strategy has been widely embraced by numerous organisations. Nonetheless, scholarly wisdom suggests the need for cumulative research that seeks to identify the unique set of source factors that enhance the credibility of advertising communication messages delivered by celebrities across countries. In this vein, the primary purpose of this research was to apply the dimensions of the source attributes theory (Ohanian, 1990) to understand the underlying factors that influence South African consumers to have positive perceptions towards purchasing a product that has been endorsed by a local athlete celebrity-endorser. A quantitative research approach was applied, wherein a self-administered survey questionnaire comprising 20 scale items was adapted for this research. Data were collected from a consumer sample of 456 consumers based in Gauteng, South Africa. Upon applying exploratory factor analysis and mean score rankings, source likeability, source trust, source authority and source credibility were established as the underlying factors influencing consumers’ credibility evaluations, in descending order of importance. Moreover, the inter-factor correlation matrix revealed positive relationships among the identified factors. Insights gained from this study could assist practitioners to design effective advertisement strategies that foster positive credibility evaluations through known product endorsers.

Key Words: likeability, trust, authority, credibility, athlete celebrity-endorser

JEL Classification: M31, M37


1. **INTRODUCTION**

Approximately 10 percent of all advertisements in the United States of America featured a celebrity as a spokesperson around the late 1980s (Ohanian, 1991). This number had risen significantly by the year 2000, with the figure estimated to be around 25 percent of all television commercials involving celebrities during the period 2010 to 2015 (Belch & Belch, 2013; Keel & Natarajan, 2012). The global popularity of this strategy has also been witnessed in other countries such as the United Kingdom (Jin & Phua, 2014; Elberse & Verleun, 2012), Korea (Paek, 2005) and Japan (Money, Shimp & Sakano, 2006). Keel and Natarajan (2012) affirm that approximately 25 percent of all global advertisements utilise a celebrity. The number is significantly higher in Asian countries such as Korea and Japan, with the national percentages ranging between 57 and 85 respectively, since 2010 (Doss, 2011). Notably, companies spend a lot of money on celebrities with the promise of hefty returns on their investment. For example, Nike spent 800 million US dollars on endorsements involving athlete celebrities in 2013 alone. This has prompted continued research on the attributes that are considered salient when nominating celebrities for this marketing endeavour. As such, the aim of this study is to provide a better understanding of the specific attributes that render a selected celebrity a credible product endorser.

Muda, Musa, Mohamed and Borhan (2014) define a celebrity endorser as a famous public figure known for his or her achievements in areas other than the product endorsed. This may include stars such as film actors, musicians as well as athletes (Mathys, Burmester & Clement, 2016). Specifically, an athlete-celebrity endorser, which forms the basis of this study, may be defined as a well-known personality who uses his or her acquired fame through professional sports in order to improve the effectiveness of advertising messages (Lear, Runyan & Whitaker, 2009). Nevertheless, this definition could include current and retired professionals that are not actively involved in the field of sports. In this vein, Dix, Phau and Pougnet (2010) affirm that athlete celebrities are regarded by fans as role models because of their lifestyle and achievements in their respective fields, which provides marketers with the ideal means to deliver a message in a precise way.

Wheeler (2003:18) suggests that before selecting an endorser, marketers must ensure that the celebrity has “qualities that fit the image suitable for the organisation”. It is also important to find someone with a logical connection to the
organisation, someone who is familiar with the target group or constituency. Put simply, the chosen athlete-celebrity should be someone who has a story and can tell it well. This study was predicated upon the endorsement role of Abraham Benjamin De Villiers (hereinafter referred to as A.B De Villiers), the current captain of the South African cricket team. The athlete-celebrity appeared for the first time in a television advertisement endorsement of Lay’s™ potato chips on 13 February 2015. The advertisement portrays the lengths to which South African customers will go to sample Lay’s™ potato chips whenever there is a bag nearby, owing to the close association of the product with their favourite sportsman. A.B De Villiers currently appears in television, magazine, newspaper, billboard and YouTube advertisements, among other advertising media platforms in South Africa, through his endorsement of Lay’s™ potato chips.

1.1 Research questions

Since it is important to understand the specific factors that consumers prioritise when evaluating the credibility of messages dispensed by an athlete-celebrity endorser, the following research questions were formulated in this work:

*RQ1*: *What are the underlying determinants of consumers’ credibility evaluations of a local athlete-celebrity endorser?*

*RQ2*: *What is the effect of selected attributes on consumers’ credibility evaluations of a local athlete-celebrity endorser?*

2. LITERATURE REVIEW

The literature relating to the persuasiveness of celebrity endorsers in advertising is drawn mostly from two celebrity endorsement theories, namely the source credibility theory and the source attractiveness theory (Muda et al., 2014). Nevertheless, Solomon (2002) alludes that consumers rarely have the ability and motivation to carefully process message content. Relatedly, Fang and Jiang (2015) asserts that receivers of advertising messages are generally emotional and habitual, implying they use peripheral heuristics to evaluate product endorsers. Thus, the aforementioned theories in some degree needs to be supplemented, which provides fertile ground for more dimensions to be investigated.
While the dimensions of expertise and trustworthiness underscore the preliminary research applying the source credibility theory (Hovland, Janis & Kelley 1953), knowledge and credibility equips product endorsers with authority, which in accordance with its natural tendency increases his/her persuasiveness in making product recommendations. Therefore, authority serves not only to enhance the total number of favourable thoughts, but to also improve the quality of those evoked favourable thoughts, eventually resulting in consumer persuasion. By comparable standards, Cialdini (2007) nominated trust and authority among the six most salient weapons of influence.

Ohanian (1990) assessed a tri-component credibility construct comprising expertise, trustworthiness and attractiveness. The scholar incorporated similarity, familiarity and likeability as the notable attributes of the attractiveness construct. The effect of both similarity and familiarity on consumer attitude only increases when there are brief exposures of the celebrity and when there are longer delays between the exposures (Fang & Jiang, 2015). Moreover, both familiarity and similarity are pronounced in physical-related products such as cosmetics whereas likeability is a more dominant attribute in the advertisement of low-involvement products. Nevertheless, a study by Shahrokh and Are (2013) validated the direct and positive impact of likeability on attractiveness while Solomon (2002) pinpointed that endorser likeability enhances the social value of a product endorser. Therefore, the use of a likeable celebrity is pivotal in this research, which invokes repeated exposure and recall of a mass media advertisement of a low-involvement product, namely potato chips as stimuli. The next section discusses celebrity trust, authority and likeability.

2.1 Celebrity trust

The degree of confidence the receiver of marketing messages places on the celebrity endorser determines the extent to which the overall communicated message will be accepted (Muda et al., 2014). Trust, by definition, refers to consumers’ perceptions regarding the honesty and truthfulness of the product endorser when delivering marketing messages (Koekemoer, 2012). According to Sertoglu, Catli and Korkmaz (2014), a trustworthy communicator is viewed by the audience as a credible source, regardless of whether they are an expert in their field. On the other hand, consumers generally view messages from a person that is not trustworthy as a questionable message source (Belch & Belch, 2013). As such, messages from a
trusted source are generally viewed by consumers as valid and thereby rendering the source credible (Wang, Kao & Ngamsiriudom, 2017; Ohanian, 1991; Ohanian, 1990). In the sports-marketing context, Lee and Kwak (2016) stress that trust plays a key role in sport marketing regarding how well the attribute influences the effectiveness of the marketed messages. The relationship between fans and an athlete-celebrity is noteworthy for determining sport consumers’ trust in an athlete endorser and the ultimate success of the advertising message.

2.2 Celebrity authority

Fink, Parker, Cunningham and Cuneen (2012) opine that the knowledge as well the skills acquired by athlete-celebrity endorsers, supplemented by their achievements, puts them in a unique position to be perfect endorsers of sports-related products. Similarly, Uribe, Buzeta and Velásquez (2016) as well as Jung, Walsh-Childers and Kim (2016) concur that source authority can assist to project the credibility of a message communicator. In other words, consumers’ perceptions regarding the authority of a celebrity as a successful athlete affords the consumer confidence that information provided by such a source could be useful to resolve problems relating to the purchase of the endorsed product.

2.3 Celebrity likeability

Likeability is the “affection for the source as a result of the source’s physical appearance and behaviour” (McGuire, 1985:239). In general, when consumers like the celebrity they will also like the accompanying brand. Put simply, likeability sends favourable messages or a positive impression of other traits that sources may have, such as talent, kindness and intelligence.

3. MATERIALS AND METHODS

This study was part of a larger study conducted amongst consumers based in the Gauteng province, of South Africa. A cross-sectional, descriptive survey grounded in the quantitative research strategy was conducted in August 2016. Since a complete cricket fan base list could not be identified, a non-probability snowball sample was drawn whereby the researchers were involved in identifying a random group of respondents who are familiar with the advertisement where the celebrity endorser features. In particular, the stimulus advertisement was that of A.B De Villiers, captain of the South African national cricket team endorsing Lay’s™
potato chips. Thereafter, the participants were asked to identify other qualifying members until the required sample size of 456 participants was attained. Participation in the study was voluntary and no incentives were offered, as this would yield undue influence.

3.1 Instrumentation and data collection
Data were collected with the aid of a self-administered structured questionnaire. All variables under investigation were operationalised using validated scales drawn from previous studies. In particular, the multiple-item scales used by Ohanian (1990), De Pelsmacker, Geuens and Anckaert (2002) as well as Williams and Drolet (2005) were adapted in this research to identify the source attributes that are relevant. The scale indicators were measured on a five-point Likert scale with anchors ranging from strongly disagree (1) to strongly agree (5).

4. RESULTS

4.1 Demographic characteristics of the sample
Evidently, there was a near-equal split among the sample participants, based on gender, with 54.6 percent being male (n=249) while 45.4 percent (n=207) were female. The majority age cohort comprised consumers between 21 to 30 years (n=264; 57.9% of the sample), while 32.7 percent (n=149) of the participants had a minimum diploma qualification and 66.4 percent (n=303) either work full-time or are self-employed. In terms of product purchase habits, the majority of consumers reported that they make purchases of the endorsed product at least once a month (n=213; 46.7% of the sample), whereas the celebrity endorsement advertisement of the product is most frequently watched on television media (n=285; 62.5% of the sample).

4.2 Exploratory factor analysis (EFA)
The EFA procedure applied Varimax rotation with Kaiser Normalisation, converging in nine iterations, to produce a cleaner and easy to interpret factor solution. Principal Components Analysis (PCA) was chosen as the appropriate method of factor extraction since the concern was to determine the minimum number of factors that would account for maximum variance in the data. Upon applying EFA, the initial task was to observe the correlation matrix among the
items, whereby all the variables were highly correlated ($r \geq 0.30$). Thereafter, factorability of the data was established by observing the Kaiser-Meyer Olkin value (KMO=0.851) as well as a high Chi square Bartlett’s test statistic (Chi=8785.438; df=496), which were both high and significant at the 5 percent level ($p=0.000$). Consistent with Tustin et al. (2010), only four components were extracted, accounting for 63.6 percent threshold for total variance contribution, which is greater than the 60 percent minimum threshold.

An examination of the rotated component matrix required that observations be made along four key statistics. First, factors were reduced if the eigen value was less than 1.0 (Kaiser, 1960). Secondly, the item was deleted if the factor loading was less than 0.50 or if it cross loaded onto another factor (Tabachnick & Fidell, 2007). Thirdly, all items with item-to-total correlation values that fell below 0.30 were eliminated, while fourthly, items with communality values below 0.50 were eliminated as they failed to demonstrate their strong convergence along the respective factors (Field, 2009). All of the factors aligned well with the specified scales whereas three items were dropped from further analysis since they failed to meet the requisite criteria.

During scale purification and item reduction it was noted that C1 had an unacceptable factor loadings of 0.490 (below 0.50), although the item-to-total correlation value (0.503) and the communalities value (0.392) for that item were both within acceptable ranges. On the other hand, C14 reported an unsatisfactory factor loading (0.374). Furthermore, the communality (0.351) and item-to-total correlation values for item C14 were low as it was reported at 0.222 (below 0.50). Item C18 reported a factor loading of 0.407 (below 0.50), implying that the item did not load fairly well with other items along the respective factor. Drawing from the aforementioned scale examination, items C1, C14 and C18 were targeted as potential candidates for deletion. Thereafter, subsequent consultation with the research leader affirmed that the intended item reduction would not alter the original constructs’ conceptualisation in any way. Therefore, the three items were deleted and excluded from further analysis. Once items C1, C14 and C18 were removed, the factor scores for the remaining scale items greatly improved. The four dimensions were labelled celebrity likeability, celebrity trust, celebrity authority and celebrity credibility. The extracted factors from the pattern matrix are presented in Table 1.
Table 1: Rotated component matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Communalties</th>
<th>Corrected item to total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1* Sincere</td>
<td>0.490</td>
<td></td>
<td></td>
<td></td>
<td>0.503</td>
<td>0.392</td>
</tr>
<tr>
<td>C2 Reliable</td>
<td>0.593</td>
<td></td>
<td></td>
<td></td>
<td>0.607</td>
<td>0.646</td>
</tr>
<tr>
<td>C3 Honest</td>
<td>0.600</td>
<td></td>
<td></td>
<td></td>
<td>0.726</td>
<td>0.612</td>
</tr>
<tr>
<td>C4 Dependable</td>
<td>0.630</td>
<td></td>
<td></td>
<td></td>
<td>0.673</td>
<td>0.669</td>
</tr>
<tr>
<td>C5 Trustworthy</td>
<td>0.549</td>
<td></td>
<td></td>
<td></td>
<td>0.629</td>
<td>0.637</td>
</tr>
<tr>
<td>C6 Knowledgeable</td>
<td>0.590</td>
<td>0.516</td>
<td></td>
<td></td>
<td>0.635</td>
<td></td>
</tr>
<tr>
<td>C7 Experienced</td>
<td>0.588</td>
<td>0.574</td>
<td></td>
<td></td>
<td>0.488</td>
<td></td>
</tr>
<tr>
<td>C8 Skilled</td>
<td>0.653</td>
<td>0.592</td>
<td></td>
<td></td>
<td>0.629</td>
<td></td>
</tr>
<tr>
<td>C9 Qualified</td>
<td>0.724</td>
<td>0.648</td>
<td></td>
<td></td>
<td>0.609</td>
<td></td>
</tr>
<tr>
<td>C10 Proficient</td>
<td>0.712</td>
<td>0.676</td>
<td></td>
<td></td>
<td>0.662</td>
<td></td>
</tr>
<tr>
<td>C11 Impressionable</td>
<td>0.761</td>
<td>0.543</td>
<td>0.654</td>
<td></td>
<td>0.658</td>
<td></td>
</tr>
<tr>
<td>C12 Familiar</td>
<td>0.622</td>
<td>0.620</td>
<td></td>
<td></td>
<td>0.712</td>
<td></td>
</tr>
<tr>
<td>C13 Pleasant</td>
<td>0.774</td>
<td></td>
<td>0.586</td>
<td></td>
<td>0.643</td>
<td></td>
</tr>
<tr>
<td>C14* Classy</td>
<td>0.374</td>
<td>0.351</td>
<td>0.222</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C15 Likeable</td>
<td>0.605</td>
<td>0.678</td>
<td></td>
<td>0.660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C16 Consistent</td>
<td>0.652</td>
<td>0.682</td>
<td>0.707</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C17 Believable</td>
<td>0.713</td>
<td>0.686</td>
<td>0.667</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C18* Responsible</td>
<td>0.407</td>
<td>0.431</td>
<td>0.304</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C19 Truthful</td>
<td>0.745</td>
<td>0.698</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C20 Credible</td>
<td>0.635</td>
<td>0.625</td>
<td>0.665</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eigenvalues</th>
<th>3.619</th>
<th>2.036</th>
<th>1.483</th>
<th>1.181</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>14.330</td>
<td>15.883</td>
<td>16.299</td>
<td>17.119</td>
</tr>
<tr>
<td>Cumulative % of variance</td>
<td>14.330</td>
<td>30.213</td>
<td>46.512</td>
<td>63.631</td>
</tr>
</tbody>
</table>

Extraction method: Principal component analysis
Rotation method: Varimax with Kaiser normalisation
a. Rotation converged in 9 iterations
*Items deleted during EFA (C1, C14 and C18)
The first factor labelled *celebrity trust*, explained 14.3 percent variance with an extracted eigenvalue of 3.619. This factor consists of four items (C2-C5), which loaded satisfactorily, with extracted communalities values ranging between 0.607 and 0.726. These results are in keeping with a previous study by Wang et al. (2017), denoting that South African sport consumers prioritise trust elements relating to honesty and dependability when evaluating the effectiveness of athlete-celebrity endorsers. The second factor was named *celebrity authority*, explaining 15.9 percent variance with an extracted eigenvalue of 2.036. Items C6 to C10 reported factor scores above 0.50, while communality values were 0.516 to 0.676.

The third factor was labelled *celebrity likeability*, with 16.3 percent variance with an extracted eigenvalue of 1.483. This factor consists of four items (items C11-C13 and C15), which loaded satisfactorily on this factor, with extracted communalities values ranging between 0.543 and 0.678. Interestingly, consumers tend to develop affection for celebrity endorsers they know based on their achievements in the field of play. *Source credibility* was the label given after interpreting the five items loading along factor four. These comprised items C16 to C20, explaining 17.1 percent variance with an extracted eigenvalue of 1.181. The five items loaded satisfactorily on this factor, with extracted communalities values ranging between 0.625 and 0.698.

### 4.3 Reliability of the study

To confirm the internal consistency among the identified factors, a Cronbach’s alpha test was applied, wherein values ranged between 0.791 and 0.893, across all four identified components, which is above the benchmark of 0.70 for acceptable reliability (Hair et al., 2011). As a result, there was no need to further delete any of the items at this stage. Based on this, the 17-item scale was considered suitable for further inferential testing.

### 4.4 Mean score ratings

In terms of the mean score ratings, the majority of the respondents conceded that source credibility is the most important dimension ($\bar{x} = 3.645; SD = 0.995$); followed by celebrity likeability ($\bar{x} = 3.576; SD = 0.919$); celebrity trust ($\bar{x} = 3.574; SD = 0.969$); and celebrity authority ($\bar{x} = 3.440; SD = 1.163$), respectively. These results suggest that the four factors are noteworthy towards strengthening the
credibility evaluations of consumers with regard to A.B De Villiers as an endorser of a low-involvement consumer good. Ultimately, marketers need to enhance the nominated attributes in view of proffering a holistic, value-based experience when communicating product messages through athlete-endorsers.

4.5 Correlation analysis

Spearman’s rho ($r_s$) was computed to establish the possible existence of a relationship among the sub-scales. In particular the rho coefficient was chosen since the variables on the non-categorical data were measured on an ordinal scale, namely a five-point Likert scale (Prion & Haerling, 2014). This procedure is applied with a view to assess the degree to which quantitative variables are linearly related in a sample. Moreover, Spearman’s rho ($r_s$) was preferred since the data set in this study was not subjected to rigorous testing for normality. The correlation results are presented in Table 2.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Celebrity likeability</th>
<th>Celebrity trust</th>
<th>Celebrity authority</th>
<th>Celebrity credibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celebrity likeability</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celebrity trust</td>
<td>0.551**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celebrity authority</td>
<td>0.467**</td>
<td>0.595**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Celebrity credibility</td>
<td>0.512**</td>
<td>0.593**</td>
<td>0.489**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)

Correlation coefficient values ranged between 0.467 and 0.595, whereas none of the values exceeded the 0.70 cut off (Field, 2009) implying that each variable used in this research possessed theoretical uniqueness and could be used in isolation in this work. Therefore, consistent with the rule of thumb for interpreting Spearman rho ($r_s$) suggested by Prion and Haerling (2014), the highest (moderate) correlation coefficient value was computed between source authority and source trust ($r_s=0.595; p=0.01$). This suggests that the authority evaluations of the athlete-celebrity are positively related to consumers’ perceptions of how trustworthy A.B
De Villiers is, as the selected athlete-celebrity for the product choice in this study. In the same vein, moderate, yet positive linear relationships were established between source authority \( (r_s=0.467; p=0.01) \) and source trust \( (r_s=0.551; p=0.01) \) when both attributes were correlated against source likeability respectively. In addition, the results of the correlation matrix revealed that there were positive and moderate relationships among the three source attributes when correlated with consumers perceptions of the overall credibility of the athlete-endorser at the \( p<0.01 \) level.

Positive correlation coefficient values were reported between source credibility perceptions when correlated with source likeability \( (r_s=0.512; p=0.01) \), source trust \( (r_s=0.593; p=0.01) \) and source authority \( (r_s=0.489; p=0.01) \) respectively. This result corresponds with the finding by Sallam and Wahid (2012) who established the salient role of celebrity trust and expertise as determinants of the overall credibility of product endorsers. This result therefore, draws the inference that a deliberate and systematic augmentation of the selected attributes of trustworthiness, product knowledge and authority as well as overall likeability of an athlete-endorser will invariably lead to enhanced credibility perceptions regarding the endorsed brand \textit{per se}.

5. CONCLUSIONS AND FUTURE RESEARCH

To avoid costly mistakes of choosing celebrities that do not possess the right elements for conveying credible persuasiveness, it is important for marketers to have a knowledge of the right set of attributes to consider in selecting an ambassador to market their products. This study established the important role of choosing an athlete-celebrity that possesses trust, authority, likeability and overall credibility. It is vital for marketers to ensure that the characteristics of the celebrity endorser selected, match that of the product endorsed. This study recommends the training of product endorsers by marketers. This would improve the level of knowledge as well as equip endorsers with relevant skills, culminating as acquired authority in product endorsement. On the other hand, celebrities are encouraged to maintain constant engagement with their audiences through participation in non-commercial, community engagement initiatives. Such interaction can potentially lead to the formation of trust and positive images in the minds of consumers about the celebrity, thereby leading to likeability inclinations.
The study is not without any limitations that could open up possible avenues for future research. First, the study placed emphasis on Ohanian’s (1990) source attributes theory as a foundation, in keeping with previous research on celebrity endorsements. While this theory is useful during the early stages of the celebrity selection process, other theories such as the match-up hypotheses as well as the meaning transfer theory should be considered with a view to assess the long-term effectiveness of an already contracted celebrity endorser. Secondly, a limited sample size was employed on a single-cross sectional sample. Naturally, consumers sometimes change their perceptions according to time change, cultural shifts and/or individual experiences. Thus, marketers cannot depend entirely on what they currently know about the credibility of celebrity endorsers to remain the same in the future. Therefore, it would be worthy to consider a longitudinal study to compare how consumers’ perceptions change over time and across provinces.

REFERENCES


