This study was designed to develop a measure of celebrity reputation and attempt to identify key dimensions for evaluating diverse components of celebrity reputation, including personalities, relationship, appearance, expert abilities, private life management, and reputation. Using exploratory and confirmatory factor analysis, this study confirmed that the measure applied was both reliable and valid.

Since the 1990s when Fortune magazine published “the most admired corporation” list, scholars and practitioners have actively paid attention to reputation (Deephouse, 2002). Several books about corporate reputation or image (e.g., Balmer & Greyser, 2003; Bernstein, 1984; Dowling, 2001; Fombrun, 1996) have been published and a specialized journal addressing corporate reputation, Corporate Reputation Review, has since been established. In a similar vein, some scholars have devoted their efforts to the evaluation of reputations from diverse perspectives, including assessments of the relationship between product quality, price, and reputation (Shapiro, 1983; Wilson, 1985), organizational reputation (Cravens, Oliver, & Ramamoorti, 2003; Rindova & Fombrun, 1998), and brand reputation (Herbig & Milewicz, 1997). These studies have focused primarily on reputation from an organizational perspective, and as such, research addressing individual reputation is still in its beginning stage.

Among individuals in society, celebrities tend to be influential in several aspects, including social, economic, and cultural impacts. For this reason, it would be meaningful to develop a scale which can evaluate celebrity reputation. Accordingly, the purpose of this study is to establish a broad scope index of celebrity reputation and attempt to identify and evaluate key dimensions of diverse celebrity reputation components, including personality, relationship, appearance, expert ability, and private life management. This study utilized a measure originally developed by Han, Lee, and Moon (2007) that was found to be reliable and valid through its application in three Asian countries, Korea, China, and Singapore. Since no previous U.S. studies have developed a measure specifically for celebrity reputation, this study adopted this dimension for application in the U.S. context. The following research question was developed for this study:

Research question: What dimensions can be used to measure celebrity reputation?

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1. Methodology

For the purposes of this study, an online survey was administered following one pre-test. In addition to its convenience, college students were selected as the population for this study due to the high level of influence that celebrity has on this group. Participants included students enrolled in mass communication courses at two large public universities in the southern United States. An invitation email was sent to all students enrolled in the courses requesting their participation. Though completion of the survey was voluntary, all students who participated received extra credit in their courses. While the original sample size was 674, this study deleted the cases that showed response set and used listwise deletion for missing variables, reducing the final sample to 607.

The concepts representing six dimensions of celebrity reputation—personalities, relationships, appearance, expert abilities, management of their private lives, and reputation—were measured using a seven-point Likert scale. The scale's responses ranged from strongly agree (9) to strongly agree (7) with a midpoint of Neutral (4).

Cronbach’s alpha for the initial measures were determined as follows: personalities (6 items) .94, relationships (4 items) .86, appearance (3 items) .89, expert abilities (4 items) .89, management of their private lives (3 items) .76, and reputation (4 items) .94. Although there is no universally accepted standard, one of the most commonly accepted rules of thumb is that the alpha should be at least .70 for a scale to demonstrate internal consistency (Nunnally, 1978). Therefore, all of the initial measures met this criterion.

2. Findings

2.1. Exploratory factor analysis

For scale purification, both exploratory and confirmatory factor analyses were used. The six latent variables with multiple items for celebrity reputation measure were analyzed. Exploratory factor analysis (EFA) was used to reduce items. EFA is displayed that all the measurement items were extracted as the first factor of the intended factor and had factor loadings values of higher than .65 with the other items of their respective subscale. The factor loadings values ranged from .66 to .94, and the percentage of variance ranged from 67.25% (appearance) to 85.91% (private life). Therefore, all of the initial measurement items were used for the next step, confirmatory factor analysis. The results illustrated that all six dimensions were viable constructs for measuring celebrity reputation.

2.2. Confirmatory factor analysis

As the second step, CFA was performed to evaluate the adequacy of the factor structure for celebrity reputation, which was constructed using AMOS 6.0. CFA confirms whether a hypothesized factor model or measurement model fits the observed data. The CFA measurement model shows a six-factor model with 21 items without correlating error terms between the errors of the observed variables. Overall goodness-of-fit indices were calculated using $\chi^2$/df, CFI, GFI, NFI, and RMSEA. In general, the value of $\chi^2$/df is smaller than five, it is considered to be a good fit (Bollen, 1989). Values of CFI, GFI, and NFI range from 0 to 1.00 with higher values indicating better fit; .90 or higher is considered as a good fit. Values of RMSEA that are .08 or less commonly indicate as a good fit (Byrne, 2001; Kline, 2005).

CFA results indicated that all the indices except GFI (.87) met established fit criteria ($\chi^2$/df = 4.33, CFI = .93, NFI = .91, and RMSEA = .074). Even GFI was close to good fit. Therefore, it can be said that the measures of celebrity reputation, including six dimensions—personality, relationship, appearance, expert abilities, management of private life, and reputation—displayed adequate construct reliability and validity.

2.3. Analysis of weighted score on the six dimensions

This study also considered the degree of importance among the six dimensions. Each participant was asked to rank the value of each dimension of celebrity reputation out of 100 points (on a scale of 0–100) with the total score of the six dimensions equaling 100. Out of the six dimensions measuring celebrity reputation, “personality” ($M = 31.65$) was considered the most important characteristic of celebrity reputation, followed by “appearance” ($M = 18.63$), “expert abilities” ($M = 16.73$), “private life management” ($M = 16.55$), and “relationship” ($M = 16.44$).

3. Discussion and conclusion

A primary purpose of this study was to construct the means for measuring celebrity reputation. A measure of celebrity reputation was originally developed by Han et al. (2007). The constructed measures were refined further using two-steps of factor analysis—EFA and CFA. Factor analysis revealed the inclusion of 21 items—six items for personalities, four items for relationships, three items for appearance, four items for expert abilities, three items for management of private lives, and four items for reputation. To assess the hypothesized factor structure, this study used CFA, which indicated that the measures for celebrity reputation possessed reliable and valid factor structure.
In terms of importance of each of the six characteristics for celebrity reputation, "personalities" of celebrity was revealed as the most important factor, followed by "appearance" and "expert abilities." While the order of importance of these three components was different in this study, the same components were also determined to be important characteristics of celebrity reputation in the original study that had applied the scale in three Asian countries. This demonstrates the public's common perceptions and expectations of the qualification of celebrity regardless of their country.

In summary, the results of these analyses suggest the following directions for future research: (a) it can derive the measurement model of celebrity reputation, the generalized standards, from the survey across a much more extended sample—for example, North America and Europe—than was done in this current study, (b) it can contribute to developing guidelines for the improvement and management of celebrity reputation based on the weighted score of each component as well as the regional perceptions of the publics.

References