BRAND PERSONALITY SCALE: IS IT APPLICABLE FOR A SMALL EMERGING COUNTRY?

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Abstract. In Lithuania, a small emerging country, up to now the J.Aaker brand personality scale has been used without a proper validation. Previous researchers have made conclusions that the J.Aaker brand personality scale is both culture- and country-sensitive. Moreover, some studies show that not all dimensions might be suitable for measuring brand personality in a specific country or cross-cultural studies. Therefore, this paper aims to adapt and validate the scale proposed by J. Aaker in a context of a small emerging country. The scale validation takes place in several stages: starting with a qualitative study, involving experts, and finishing with an extensive quantitative study in three product categories. The research has revealed that in the Lithuanian context, the brand personality scale is composed of three dimensions, such as Sincerity, Modernity-Excitement and Competence. The scale, valid for a small emerging country, consists of 13 instead of 42 traits.

Key words: brand personality; brand personality scale; emerging economy; scale validation.

Introduction

The link between personal characteristics and a brand, connections between brand associations and various dimensions of a consumer, the impact of brand personality on consumers - these topics have been the focus of researchers for more than 50 years (Grubb & Hupp, 1968; Dolich, 1969; Landon, 1974; Sirgy, 1982; Belk, 1988). How-

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ever, the creation of theoretical background and its breakthrough in the assessment of brand personality are attributed to J.Aaker's brand personality dimensions identification (Radler, 2018). J. Aaker's findings had a tremendous impact on other marketing practitioners and researchers – the scale has been cited in more than 8900 research papers (Google Scholar, 2018). The brand personality concept has even been adapted and expanded into the store personality (d'Astous & Levesque, 2003; Zentes et al., 2008; Das et al., 2012), business-to-business brands (Veloutsou & Taylor, 2012; Ozretic-Dosen et al., 2018) or places and tourism destination personality research studies (Chu & Sung, 2011, Rojas-Méndez et al., 2015).

Despite such popularity, the brand personality has evoked significant critical positions that have questioned the generalizability and validity of J. Aaker's brand personality scale. A number of studies were performed in the developed countries, such as France (Koebel & Ladwein, 1999), Japan and Spain (Aaker et al., 2001), Australia (Smith et al., 2006), Germany (Zentes et al., 2008; Bosnjak et al., 2007), Netherlands (Smit et al., 2003), Korea (Lee & Oh, 2006, Sung & Tinkham, 2005) and Italy (Caprara et al., 2001). However, the researchers have shown that the extracted dimensions were not constant, since the brand personality reflects the values and beliefs of a culture and its dimensions (individualism, masculinity, etc.) due to the limited meanings of words (Malik et al., 2012). Additional cultural aspect appears when brand personality is measured in countries of emerging economies. The research studies in Mexico (Álvarez-Ortiz & Harris, 2002; Toldos-Romero, 2012), India (Thomas & Sekhar, 2008, Khandai et al., 2015), China (Chu & Sung, 2011; Liu et al., 2016), Brazil (Kim et al., 2013) have demonstrated that the brand personality statements differ considerably in the cross-cultural contexts, since some adjectives (western, small town, hard-working, corporate, etc.) may have a very different meaning, compared to developed countries. Since the majority of studies were performed in large emerging countries, previous authors have noticed the need for studies that would adopt the scale in the context of a small emerging country (Ahmad & Thyagaraj, 2014; Matzler et al., 2016). Moreover, certain adjectives (like *western*) could be perceived in a different way in Islamic countries (Ahmed & Tahir Jan, 2015, Asadollahi et al., 2015) and Eastern European countries (Milas & Mlacic, 2007).

Therefore, the purpose of this paper is to adapt J. Aaker's brand personality and prove its validity in a small emerging country. Such research would make it clear whether the original brand personality scale could be used in small countries, or whether it has to be developed for each country depending on its specifics, and whether it is possible to find similarities with the existing modifications of J. Aaker's brand personality scale. Since a large part of criticism of the scale relates to the impossibility of building the five factors as homologues among various cultures (Kumar, 2018), the research will improve the perception of underlying dimensions. Finally, Das et al. (2012) have raised a question regarding the scale's performance across different product categories, which encouraged us to evaluate the scale on different categories of products – food, clothes and cars.

The contribution of this research is threefold. First, we have adapted and validated the brand personality scale proposed by J. Aaker. The adopted scale has no country-, area- or gender-related traits, which makes the scale more universal and possible to use in various small emerging countries. Second, the results of the previous studies have extracted three main dimensions for measurement of brand personality. Finally, we have found the scale's suitability across different groups of products and local and international brands.

Literature review

Brand personality concept

For almost a century, human personality has been the focus of researchers. The earliest human personality theories were developed by Allport (1927) and Cattell (1949). However, a huge number of traits were classified into quite sophisticated categories, which created difficulties for practical application. The most successful attempt to reduce the number of identifiable traits to a practical level was Norman's (1963) study. It introduced a five-factor typology (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism), which was later called the "Big Five".

The academic literature on branding states that brand personality is the result of associating human characteristics with a brand. Allen and Olson (1995) define brand personality as the set of specific meanings, which describe the brand's inner characteristics. Fournier (1998) has suggested that consumers can perceive brands as partners having specific traits, with traits being inferred on the basis of marketing and communication activities of the brand. J. Aaker (1997) defines brand personality as the set of human characteristics associated with the brand. However, human personality differs from brand personality, since people develop their own personalities, while a brand's personality is created primarily through marketing communications and experiences that consumers have with the brand (Sung & Kim, 2010). J. Aaker (1997) combined human personality scales based on the Big Five construct and a set of unique brand personality traits. The study resulted in 42 traits, represented under five dimensions: sincerity, excitement, competence, sophistication and ruggedness.

Aaker (1997) has associated some dimensions of the brand personality with dimensions of the human personality. One dimension of the Big Five – Agreeableness - is associated with warmth and acceptance as well as Sincerity from the brand personality. Another dimension of human personality – Extraversion – and J. Aaker's Excitement uses a common idea of energy and activity. The third dimension – Conscientiousness and Competence – is tied up with responsibility and reliability. The last two brand personality dimensions – Sophistication and Ruggedness – are different from the Big Five dimensions. J. Aaker (1997) stated that Sophistication can be inspired through advertising to stimulate consumer' desire for upper class status, while Ruggedness is associated with consumers' ideals of "Western, strength and masculinity".

This scale or a part of it was and still is used in numerous consumer behavior studies (for example, Supphellen & Gronhaug, 2003; Parker, 2009; Maehle & Shneor, 2010; Maehle et al., 2011; Liu et al., 2012; Dikcius et al., 2013; Seimiene & Jankovic, 2014).

Stability of J. Aaker's Brand personality dimensions across countries

Despite being one of the most widely used, the brand personality scale developed by J. Aaker has earned a fair number of critics. The critics cast the doubt on the J. Aaker typology's ability to answer the question whether the brand personality scale really assesses the brand personality. Azoulay and Kapferer (2003) claimed that J. Aaker's brand personality scale really assessed not the brand personality, but a dimension of the brand identity. Other authors (Geuens et al., 2009; Valette-Florence & De Barnier, 2013) have discerned more contradictions, which were related to different problematic areas: a) sources which generated brand personality dimensions, because some human personality traits couldn't be transferred to a brand; b) structure of the scales and interpretation of the dimensions, because J. Aaker's 5-dimensional structure was not always empirically justified. Additional critics of the J. Aaker scale aimed at semantic problems, because some dimensions of the scale have come solely from the American culture. This has resulted in variation of dimensions of the brand personality scale using it in a different cultural and marketing application context. Questioning the usage of the scale in different cultures has become the focus of other scientists' research. A number of studies were performed in the developed countries. Smith et al. (2006) confirmed suitability of J. Aaker's five dimensions in Australia, but added an extra dimension - Innovation. J. Aaker herself, together with her colleagues, grounded the adaptation of her construct to the Japanese and Spanish markets on differences of meanings, embedded in consumption symbols in the culturally different markets (Aaker et al., 2001). She found an existence of such dimensions as Sincerity, Excitement, Sophistication, Competence (for Japan), and included additional dimensions of Peacefulness and Passion. Other studies, performed in such developed European countries as France (Koebel & Ladwein, 1999; Ferrandi et al., 2015), Germany (Bosnjak et al., 2007), Italy (Caprara et al., 2001) rejected almost all original dimensions of the J. Aaker scale and developed new dimensions (see Table 1). A lot of new dimensions were added during the scale's adoption for Netherlands (Smit et al., 2003) and South Korea (Sung & Tinkham, 2005).

Many studies were performed in emerging economies as well. Almost all of them included additional dimensions (see Table 1), which found the importance for adaption of J. Aaker's brand personality scale to various cultures. At the same time, the authors found suitability of three-four dimensions for emerging economies, which significantly differs from developed countries. Sincerity, Excitement, Competence and Ruggedness were found in India (Mishra, 2011; Khandai et al., 2015) and Malaysia (Ariff et al., 2012), while Sincerity, Excitement, Competence and Sophistication were found in Iran (Ranjbar et al., 2010), Chile (Rojas-Mendez et al., 2004) and Brazil (Muniz & Marchetti, 2012).

TABLE 1. **Dimensions of brand personality in various countries.**

	Country	Sincerity	Excitement	Competence	Sophistication	Ruggedness	Other
Smith et al., 2006	Australia	X	X	X	X	X	Innovation
Aaker et al., 2001	Japan	X	X	X	X		Peacefulness
Aaker et al., 2001	Spain	X	X		X		Peacefulness, Passion
Koebel & Ladwein, 1999	France			X			Seduction, Conscientious, Expansive, Masculine, Ability
Ferrandi et al., 2015	France	X					Dynamism, Femininity, Robustness, User-friendliness
Bosnjak et al., 2007	Germany						Drive, Conscientiousness, Emotion, Superficiality
Caprara et al., 2001	Italy						Agreeableness and Emotional stability, Extroversion, Openness
Smit et al., 2003	Netherlands		X	X		X	Gentle, Distinction, Annoyance
Sung & Tinkham, 2005	South Korea			X	X	X	Trendiness, Likeableness, Passive likeableness, Ascendancy, Traditionalism
Mishra, 2011	India	X	Exciting & Trendy		X	Tough, Masculine	Corporate
Khandai et al., 2015	India	X	X		X	X	
Chu & Sung, 2011	China		X	X	X		Traditionalism, Joyfulness, Trendiness
Liu et al., 2016	China		X		X	X	Humanity, Wellness
Muniz & Marchetti, 2012	Brazil	Sensitivity	Audacity	Credibility	X		
Supphellen & Gronhaug, 2003	Russia	X	X		X	X	
Toldos-Romero, 2012	Mexico	X			X	X	Success, Hipness/Vivacity, Domesticity, Professionalism
Asadollahi et al., 2015	Iran	X		X	X		Reliance, Mental.
Ranjbar et al., 2010	Iran	X	X	X	X		
Yıldırım, 2007	Turkey		X	X			Conventionalism, Androgenic
Ahmed & Tahir Jan, 2015	Malaysia	X	X	X			Trust; Cooperation, Humbleness
Ariff et al., 2012	Malaysia	X	X	X		X	Diligent, Modern
Rojas-Me´ndez et al., 2004	Chile	X	X	X	X		

Analysis of previous studies shows how suitability of certain dimensions differs depending on the size of a country. Ruggedness was used in such emerging countries as India (Mishra, 2011; Khandai et al., 2015), China (Liu et al., 2016), Russia (Supphellen & Gronhaug, 2003) and Mexico (Toldos-Romero, 2012), but this dimension was not approved for smaller countries. On the contrary, the Competence dimension was noticed in the studies performed in smaller emerging countries like Iran (Asadollahi et al., 2015; Ranjbar et al., 2010), Turkey (Yıldırım, 2007), Malaysia (Ahmed & Tahir Jan, 2015; Ariff et al., 2012) and Chile (Rojas-Mendez et al., 2004).

The above-mentioned sources identify and illustrate one of the shortcomings of the J. Aaker scale, which is associated with its use in different cultures. This shortcoming is eliminated by adapting the scale, which manifests itself by adaptation of the personality dimensions in both quantitative and content senses and by creating a country-specific brand personality scale. However, the analysis has shown that basic dimensions of J. Aaker's brand personality were more stable among emerging economies than developed countries. Moreover, the higher suitability of the dimensions was noticed in smaller emerging countries. Such results stimulate an idea of an even higher suitability of J. Aaker's scale for small emerging countries. Since the majority of research studies were performed in emerging countries with 40 million population and more, some authors stated a need for research that would adopt the scale in a context of a small emerging country (Ahmad & Thyagaraj, 2014; Matzler et al., 2016).

Research methodology

The empirical research was conducted in two stages. The first stage involved a qualitative study; the second – a quantitative study. The qualitative study involved 10 in-depth interviews with the experts. The experts included marketing research and consumer behavior professionals, consumer behavior theorists and psychologists. The main objective of the qualitative study was to develop the J. Aaker brand personality scale so that it would be suitable for Lithuania as an emerging country for measuring brand personalities. The second goal of the qualitative study was to choose categories and two brands from each of the categories for the quantitative study. From the variety of product categories, the experts had to select three categories for the main quantitative study. 27 product categories were included into the study based on KantarTNS Atlas™ survey (2013), with the 45-50% usage among 18-50-year-old Lithuanian population. The second objective was to distinguish two popular and well-known brands in Lithuania in each of the categories chosen by experts; the brands should have distinctive and easily describable brand personalities; the list of brands was provided for each of the category. Hermeneutic analysis was used for the analysis of the qualitative research data.

The scale was developed over the in-depth interviews in several steps. (1) The authors of this article translated this scale from English into Lithuanian. (2) The experts were given the scale both in English and Lithuanian and were asked if they agree or dis-

agree with the translation. They were also asked to recommend their version of translation into Lithuanian and to name the traits that are suitable for description of the brand personality. Most importantly, the experts were asked to name the possible traits that should be included to reflect the context and culture of Lithuania. The scale was refined upon each of the interviews. (3) The scale was sent to an English language translator and translated back into English, and the differences with the original scale were discussed. Finally, some of the traits were removed and several new traits, suggested by the experts, were included. Compared to the original scale, 16 traits such as western, small-town, corporate, real, hard-working, etc., were removed from the scale. According to the experts, these traits are not suitable for the context and culture of Lithuania or are not applicable to describe the brand personality. Moreover, the 1st trait, "professional", was added to the scale, which, according to the experts, is very popular in the Lithuanian culture. Thus, the J. Aaker scale developed after the qualitative study consisted of 27 instead of 42 traits. After conducting interviews with the experts, these categories and brands were chosen for further quantitative study: the category of cars with Mercedes-Benz and Toyota brands; the category of sports apparel with Audimas and Nike brands; the category of mineral water with Vytautas and Neptūnas brands. The set of brands involved both well-known international and Lithuanian brands that allowed testing the J. Aaker brand personality scale for really different brands with various brand personality characteristics.

During the second stage, the main quantitative study was carried out. The research was conducted in Lithuania through the market research company TNS LT (a part of

TABLE 2. **The social-demographic profile of respondents**

Social-demographic characteristics		Category of cars, N=203	Category of sports apparel, N=198	Category of mineral water, N=203
Gender	Men	47.3%	44.9%	45.3%
	Women	52.7%	55.1%	54.7%
Age	25−35	47.2%	47.5%	46.3%
	36−50	52.8%	52.5%	53.7%
Size of city / town	More than 200 thous. residents	58.6%	60.1%	62.6%
	200 thous. residents and less	41.4%	39.9%	37.4%
Education	Secondary, special secondary	9.3%	11.7%	6.9%
	Higher	12.8%	11.1%	15.3%
	Not finished high	8.4%	8.6%	5.4%
	High	69.5%	68.7%	72.4%
Average income per family member	Less than 290 EUR	21.7%	18.2%	20.8%
	291-434 EUR	20.2%	23.4%	22.3%
	435-579 EUR	23.6%	21.8%	17.3%
	580-724 EUR	13.3%	15.7%	20.3%
	725 EUR and more	21.2%	20.8%	19.3%

Kantar Group), which had organized internet consumer panels in three different involvement categories in Lithuania: cars (N=203) with Toyota and Mercedes-Benz brands; sports apparel (N=198) with Audimas and Nike brands; and mineral water (N=203) with Vytautas and Neptūnas brands. Overall, 661 respondents were surveyed, and after the data quality check the questionnaires of 604 respondents were left for analysis. The main study was a representative survey of 25-50-year-old Lithuanian internet users. There was no statistically significant difference between the groups of the three product categories, therefore, the groups could be treated as homogeneous. Each of the three samples consisted of approximately half men and half women. Around 70% of respondents had higher education. The distribution of income is even: 2/5 of respondents have up to 434 EUR per month per 1 family member, 1/5 of respondents – from 435 up to 579 EUR per person per month; and 2/5 of respondents have an income of more than 580 EUR per person per month.

Results

Scale Refinement: Exploratory factor analysis

Confirmatory factor analysis (CFA) was employed to evaluate the psychometric properties of the sport team brand personality scale, using AMOS 23. The structure defined by J. Aaker exhibited a poor fit in the Lithuanian sample (RMSEA = 0.098, CFI = 0.847). This result finds that the dimensionality of the brand personality in Lithuania seems to be different from the dimensionality of the construct in the USA. Thus, an exploratory factor analysis (EFA) was undertaken on the survey data to identify a priori dimensionality of the brand personality scale for each brand in the three categories of products.

The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were computed to assess the appropriateness of factor analyses to the data. The KMO value was 0.93 and 0.88 for both brands of sportswear, 0.89 and 0.94 for the two brands of mineral water, 0.86 and 0.84 for the brands of cars (see Table 3). Bartlett's test was significant at the 0.001 level in each of the cases. The results have demonstrated the factorability of the matrices being considered (Hair et al., 2010). Principal component factor analysis with Varimax rotation was used to identify the underlying dimensions. Items exhibiting low factor loadings (< 0.45), high cross loadings (> 0.50), or low communalities (< 0.30) were candidates for elimination (Hair et al., 2010). After inspection of item content for domain representation, 14 items were deleted. A final 3-factor model was estimated with the remaining 13 items.

The factor solution accounted for approximately 66% of the total variance (in the cases of car brands) and up to 74–75% of the total variance (in the cases of mineral water brands). The three-factor solution was deemed adequate according to (1) the acceptable Eigenvalues, and (2) the satisfactory amount of total variance explained. These findings provide evidence for the construct validity of the scale (Churchill, 1979).

TABLE 3. **Exploratory factor analysis for six brands.**

	Sportswear			Mineral water			Cars		
	Sincerity – Nuoširdumas	Modernity – Modernumas	Competence – Kompetencija	Sincerity – Nuoširdumas	Modernity – Modernumas	Competence – Kompetencija	Sincerity – Nuoširdumas	Modernity – Modernumas	Competence – Kompetencija
Sincere – Nuoširdus	.801/.815			.828/.697	/.416		.887/.780		
Honest – Sąžiningas	.754/.757			.766/.824			.752/.758		
Smooth– Švelnus	.722/.654			.605/	/.716		.603/.727		
Family-oriented – Šeimyniškas	.705/.811	.401/		.814/.703	/.467		.596/.632		
Friendly – Draugiškas	.691/.753			.670/.645	.485/.529		.700/.768		
Contemporary – Šiuolaikiškas		.841/.863			.818/.776			.762/.762	.411/
Young – Jaunatviškas		.787/.761			.875/.709			.409/.579	
Trendy – Madingas		.776/.826			.811/.703			.726/.829	
Up-to-date – Modernus		.726/.763			.768/.755			.735/.639	.409/
Tough – Tvirtas			.812/.774			.791/.901			.781/.809
Leader – Lyderiaujantis			.771/.750			.814/.801			.780/.782
Professional – Profesionalus			.715/770	/.443		.762/.688			.815/.777
Successful – Sėkmingas		.466/	.669/.783	/.505		.848/.604			.757/.740
Eigenvalue	3.39/3.22	3.32/3.12	2.97/2.83	3.32/3.77	3.26/3.07	3.08/2.97	3.23/3.19	2.94/2.89	2.45/2.47
% of variance	26.1/24.8	25.5/24.0	22.8/21.8	25.5/29.0	25.1/23.6	23.7/22.9	24.8/24.6	22.6/22.2	18.9/19.0

Sportswear: Audimas/Nike; mineral water: Vytautas/Neptūnas; cars: Toyota/Mercedes-Benz

Internal reliability refers to whether those items are internally consistent or whether the items that constitute the scale are measured in a single concept (Hair et al., 2010; Lee, 2001). Internal consistency was evaluated by using corrected item-to-total correlation (CITC) and Cronbach's α. Nunnally (1978) suggested that an acceptable level of coefficient alpha to retain an item in a scale is at least 0.70 score. Corrected Item-to-total Correlation (CITC) will be acceptable in above 0.50 score (Lu et al., 2007). The Cronbach's alpha for the Sincerity dimension ranged from 0.79 to 0.89 among the selected brands, for the Modernity dimension the coefficient varied from 0.78 to 0.92 and for the final dimension Competence – 0.85 to 0.90 depending on a particular brand (see Table 4). So, all Cronbach's alphas were above the recommended 0.70 cut-off point. The corrected item-to-total correlation was above pre-established cut-off value as well (except two cases). Though both cases were related to the cars as a product category, nevertheless, they have two different descriptions. 'Smooth' had a marginal cut-off value for most of the brands, since it could be indirectly related with gender. While ‚trendy‘ had low

corrected item-to-total correlation only in the case of Mercedes-Benz car brand, which is not positioned as a trendy car. Overall, the analyses provided support for the internal reliability of the dimensions measuring the brand personality.

TABLE 4. **Corrected Item-Total Correlation and Cronbach's α**

	Audimas	Nike	Vytautas	Neptūnas	Toyota	Mercedes-Benz
Sincerity – Nuoširdumas						
Family-oriented – Šeimyniškas	0.66	0.67	0.74	0.74	0.51	0.53
Sincere – Nuoširdus	0.74	0.74	0.79	0.77	0.74	0.74
Honest – Sąžiningas	0.75	0.69	0.70	0.73	0.63	0.70
Friendly – Draugiškas	0.68	0.65	0.67	0.80	0.59	0.70
Smooth – Švelnus	0.65	0.53	0.52	0.57	0.41	0.52
Cronbach's α	0.87	0.85	0.86	0.88	0.79	0.83
Modernity – Modernumas						
Trendy – Madingas	0.81	0.78	0.83	0.77	0.68	0.67
Young – Jaunatviškas	0.73	0.72	0.81	0.76	0.56	0.39
Up-to-date – Modernus	0.78	0.80	0.80	0.78	0.71	0.60
Contemporary – Šiuolaikiškas	0.88	0.81	0.80	0.81	0.75	0.70
Cronbach's α	0.91	0.90	0.92	0.90	0.84	0.78
Competence – Kompetencija						
Successful – Sėkmingas	0.82	0.75	0.82	0.75	0.75	0.72
Leader – Lyderiaujantis	0.80	0.70	0.74	0.76	0.75	0.69
Tough – Tvirtas	0.73	0.65	0.71	0.73	0.71	0.69
Professional – Profesionalus	0.79	0.65	0.69	0.78	0.74	0.69
Cronbach's α	0.90	0.85	0.88	0.89	0.88	0.85

Scale Validation: Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was performed in order to confirm the factor structure that emerged in the EFA. It was based on a new data sample (Byrne, 2010). Consistent with brand personality studies (Aaker, 1997; Toldos-Romero & Orozco-Gómez, 2015; Leonard & Katsanis, 2013), a representative sample of 604 respondents, each of whom evaluated two brands, made a new sample from 1208 cases. Such a number of cases is good for the anticipated effect size (0.1), statistical power level (0.8), probability level (0.05) and having a number of latent variables (3) and a number of observed variables (13) (Wolf et al., 2013; MacCallum et al., 1996).

Various fit indexes were used to test the adequacy of CFA models. The multiple goodness-of-fit tests/indexes used in CFA were: Normed Fit Index (NFI); Comparative Fit Index (CFI); and Root Mean Square Error Approximation (RMSEA). The values of NFI and CFI, larger than .95, indicate a good fit to the data. The expected value for a good model data fit is possible when RMSEA index value is below .08 (Hu & Bentler, 1999; Schreiber et al., 2006).

We have tested several models – the first one with 13 measurement variables and one latent construct, and the second model with 13 measurement variables and three latent constructs (as it was extracted in the EFA). The model with thirteen measurement variables and one latent variable showed poor fit. Factor loadings from these models suggested that many of them were rather weak, thus it seems that one factor structure is not the best option. In models with sixteen measurement variables and three latent variables the data from the Lithuanian sample showed an adequate goodness of fit (see Table 5). These models differ significantly from the one latent factor models ($\Delta\chi^2$=2470.29–401.21=2069.08), which indicates that the second model is better.

TABLE 5. **Goodness of fit for one and three latent constructs.**

	One latent construct	Three latent constructs
χ^2 (65)	2470.29	401.21
p	<0.001	<0.001
CFI	0.76	0.97
TLI	0.71	0.96
RMSEA	0.18	0.067

The results indicate an acceptable fit of the CFA model with three latent constructs (RMSEA range between 0.061 (LO90) and 0.074 (HI90), CFI=0.97, TLI=0.96. Discriminant validity was tested by examining that the average variance extracted (AVE) exceeded the shared variance (Fornell & Larcker, 1981). AVE for the three latent construct models were: 0.57, 0.68, and 0.68 (see Table 5). The AVE values exceeded 0.50 for all domains (Fornell & Larcker, 1981), which reflects that requirements of discriminant validity were met. Convergent validity was tested by examining the factor loadings. The estimated factor-loading measures are bounded within the range between 0.59 and 0.88 (see Table 6) and all are significant with *t*-values ranging from 15.98 to 22.97, indicating the acceptable convergent validity (Bagozzi, 1981; Hair et al., 2010).

TABLE 6. **Descriptive Statistics for the brand personality scale (n = 1208).**

	Cronbach's α	Composite reliability Joreskog's rho	AVE	Sincerity – Nuoširdumas	Modernity – Modernumas	Competence – Kompetencija
Sincerity – Nuoširdumas	0.86	0.87	0.57		.668	.593
Modernity – Modernumas	0.89	0.90	0.68			.737
Competence – Kompetencija	0.89	0.89	0.68			

The internal consistency of the brand personality subscales was examined using Cronbach's alpha coefficient. Since the coefficient is based on strict assumptions that

are often violated, it may over- or underestimate reliability (Yang & Green, 2011). Therefore, a composite reliability coefficient (Joreskog's rho) was used to test if a single common factor underlies the brand personality. Values of both Cronbach's alpha and Joreskog's rho values were above .70 (Hair et al., 2010), showing the acceptable level of internal consistency (See Table 7).

TABLE 7. **Factor Loadings (n = 1208).**

	Sincerity – Nuoširdumas	Modernity – Modernumas	Competence – Kompetencija
Family-oriented – Šeimyniškas	.724		
Sincere – Nuoširdus	.849		
Honest – Sąžiningas	.782		
Friendly – Draugiškas	.803		
Smooth – Švelnus	.592		
Trendy – Madingas		.846	
Young – Jaunatviškas		.718	
Up-to-date – Modernus		.848	
Contemporary – Šiuolaikiškas		.882	
Successful – Sėkmingas			.879
Leader – Lyderiaujantis			.830
Tough – Tvirtas			.758
Professional – Profesionalus			.822

Final results for the factor loadings have revealed that the brand personality scale is composed of three dimensions: Sincerity (5 traits), Modernity (4 traits) and Competence (4 traits), in total 13 traits.

Discussion and Conclusions

This research has once again confirmed the findings of the previous researchers that the J. Aaker scale must be adapted if it is to be used in markets other than the USA. There are several aspects to that. First of all, previous studies that questioned the generalizability of the brand personality dimensions across cultures have found that all five dimensions suggested by J. Aaker were not consistent. Many authors increased the number of dimensions up to six or seven. Six-factor structures were found by D'Astous and Boujbel (2007), Kaplan et al. (2010), Smith et al. (2006), Chu and Sung (2011), Ahmed and Jan (2015), Sung et al. (2015). Other authors (Musante et al., 2008; Das et al., 2012) claimed to have identified a seven-factor structure. Even a higher number of dimensions (eight-factor structure) was generated by Sweeney and Brandon (2006), while Ambroise et al. (2005) extracted 12 factors, and Thomas and Sekar (2008) – 13 factors. On the other hand, some studies reported a smaller number of dimensions. Bosnjak et al. (2007) and Liu et al. (2012) suggested a four-dimensional structure, while Leonard

and Katsanis (2013) developed a brand personality scale with just two-dimensional structure. The current study has identified three dimensions. Some other researchers like Ekinci and Hosany (2006), Murphy et al., (2007), Rojas-Mendez et al. (2013) have extracted a three-dimensional structure of brand personality as well. The three dimensions extracted in the current research have shown stable results among different product categories – low involvement (food items), medium involvement (sportswear) and high involvement (cars). Moreover, the research has demonstrated high universality, since these three dimensions were the same between two local brands, local and international brands, and between two international brands.

Even though J. Aaker's brand personality scale presented a different number of dimensions, some of them were extracted more often and made a part of the scale in various cultures. The findings of previous studies indicated that two dimensions, Sincerity and Excitement, appeared to have similar meanings with those identified in J. Aaker's (1997) framework in different cultures (Aaker et al., 2001; Ferrandi, 2000; Chu & Sung, 2011; Liu et al., 2012; Sung et al., 2015). The current research has revealed that Sincerity dimension was quite related with J. Aaker's dimensions. Four traits of Sincerity dimension from J. Aaker's scale (Family-oriented, Sincere, Honest and Friendly) were applicable for measurement of the same dimension. In addition, a statement Smooth was more suitable for Sincerity dimension than that of Sophistication. Another dimension – Modernity - had the same four statements as J. Aaker's Excitement dimension. Four traits – Trendy, Young, Up-to-date and Contemporary – were related to that dimension. Thus, we can conclude that both dimensions, Sincerity and Modernity (Excitement) are quite universal and can be used in different cultural environments.

The third dimension was Competence that included such statements as Successful, Leader, Tough, Professional (Rugged). This dimension includes traits from two dimensions – Competence and Ruggedness. The latter dimension was questioned in some previous studies. A number of studies on brand personality found that ruggedness is not strongly associated with it (Rojas-Méndez et al., 2004; Chu & Sung, 2011, J. Aaker et al., 2001). Usually, this dimension was replaced by other, more culture-specific dimensions. In addition, different traits associated with ruggedness are closely related with competence due to the image created by advertising or mass and social media. Thus, two dimensions, Competence and Ruggedness, were aggregated or changed into more specific, culture-related dimensions (Glynn & Widjaja, 2015; Asadollahi et al., 2015).

One more important finding of the research was related to the traits used for the measurement of brand personality. Previous studies have noticed that some of the traits were not applicable for J. Aaker's brand personality construct (Geuens et al, 2009). Ferrandi et al. (2000) had to exclude 9 traits in France, while Bishnoi and Kumar (2016) have noticed that 10 items of J. Aaker brand personality scale were not applicable in Indian context. Chu and Sung (2011) omitted 11 traits for brand personality validation in China, Liu et al. (2012) removed 14 traits in Australia, and Rojas- Mendez et al. (2004) concluded that as many as 26 items of J. Aaker's brand personality scale were not appli-

cable to brand personality in Chile. The current research has shown that 29 traits were not suitable for the measurement of brand personality in a small emerging country. As some traits were not suitable for the Lithuanian culture, 16 of the 42 traits are removed and one trait, "professional", is added, based on expert opinions. The second pre-test was conducted to test the brand personality scale, and further 14 traits were removed from the measurement due to their low factor loadings or communalities, or having high loadings on more than one factor.

Current research has also found that the original J. Aaker's brand personality dimensions are not suitable for a small emerging economy. As a result, J. Aaker's scale is not suitable for the measurement of the brand personality in countries that are different from the country on which the brand personality scale is developed.

Managerial implications and limitations

Though image-linked studies are widely performed and used for business purposes, many of them lack substantial theoretical/methodological background. As a result, marketing professionals use various approaches and scales, therefore, there is little possibility to compare the images of different brands or the studies done by different market research companies. Applying the scale described in this article makes it possible to measure the brand personality involving both a scientific approach and a practical usage of the scale. The developed brand personality scale can describe the brand by three dimensions and a set of 13 traits in general. This is an easily approachable way of testing the brand and its competitive environment. The scale can be used in any quantitative study and further applied for revealing brand character and its changes over time.

One of the limitations of the article is that the scale was developed only on six different brands from three different product categories. Involving more categories and service providers and more brands might result in a more solid background for scale dimensions and traits. Therefore, for future research the scale might be tested on service providers with distinctive brand personalities, such as telecommunication companies, shopping malls and supermarkets, destination places, restaurants and coffee shops.

Another limitation is related to the scale development in only one small emerging country, Lithuania. Involving other emerging countries might prevent any cultural impact on scale development. One of the possibilities for future research is to test and apply the scale in other small emerging countries.

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