

CONSUMER ETHNOCENTRISM AND THE INFLUENCE OF SELECTED DEMOGRAPHIC FACTORS: A COMPARATIVE STUDY AMONG THE COUNTRIES OF SLOVAKIA, THE CZECH REPUBLIC, AND THE PHILIPPINES

POTROŠAČKI ETNOCENTRIZAM I UTJECAJ ODABRANIH DEMOGRAFSKIH ČIMBENIKA: USPOREDNA STUDIJA IZMEĐU SLOVAČKE, ČEŠKE REPUBLIKE I FILIPINA



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Abstract

Purpose – The issue of consumer ethnocentrism is an important component of consumer behavior that must be considered in marketing activities as well as in the creation of strategies in international marketing. However, in a number of scientific studies, international comparison is lacking.

Design/Methodology/Approach – A total of 1478 respondents from the three investigated countries took part in a survey, applying a standardized method to measure consumer ethnocentrism (CETSCALE). Its whose reliability was verified using McDonald's Omega. A one-way ANOVA test and a T-Test were performed for the purpose

Sažetak

Svrha – Potrošački etnocentrizam važna je komponenta ponašanja potrošača koja se treba uzeti u obzir u marketinškim aktivnostima kao i kreiranju strategija u međunarodnom marketingu. Međutim, nedostaje međunarodna usporedba u znanstvenim istraživanjima.

Metodološki pristup – U istraživanju je sudjelovalo ukupno 1478 ispitanika iz tri zemlje. Korištena je standardna metoda mjerenja potrošačkog etnocentrizma (CETSCALE), čija pouzdanost je provjerena uz pomoć McDonald'sove omega. Za provjeru postavljenih hipoteza korišteni su jednosmjerni ANOVA test i T-test. Pritom nije ispitano samo postojanje nego i veličina učinaka.

of verifying the established hypotheses on the basis of the research goal. At the same time, not only the existence but also the size of the effects was examined.

Findings and Implications – The basic goal was to investigate international differences in ethnocentric tendencies. Results of the survey point to differences in the rates of consumer ethnocentrism in selected countries. Likewise, the influence of demographic factors manifests itself differently.

Limitations – The study used a convenience sample, hence evidently lacking population structure. Although native speakers were consulted regarding the translation of the scale, there may have been some misunderstanding of the statements.

Originality – This study reveals differences in the level of consumer ethnocentrism in three countries as well as the possible influence of selected demographic factors. The international comparison represents a shift in the understanding of possible connections within ethnocentric consumer behavior.

Keywords – consumer ethnocentrism, CETSCALE, Slovakia, Czech Republic, Philippines

Rezultati i implikacije – Osnovni je cilj istraživanje međunarodnih razlika u etnocentričnim sklonostima. Rezultati upućuju na razlike u stopama potrošačkog etnocentrizma u odabranim zemljama. Isto tako, različito se očituje utjecaj demografskih čimbenika.

Ograničenja – Korišten je prigodan uzorak. Zbog toga je razvidno da uzorak nema strukturu populacije. Iako su za prijevode ljestvice konzultirani izvorni govornici, možda je došlo do pogrešnog razumijevanja izjava.

Doprinos – Radom su otkrivene razlike u razini potrošačkog etnocentrizma u tri zemlje kao i mogući utjecaj odabranih demografskih čimbenika. Međunarodna usporedba predstavlja pomak u razumijevanju moguće povezanosti unutar etnocentričnog ponašanja potrošača.

Ključne riječi – potrošački etnocentrizam, CETSCALE, Slovačka, Češka Republika, Filipini

1. INTRODUCTION

The concept of ethnocentrism originates in social psychology, which generally examines ethnicities. In 1906, American psychologist William Graham Sumner described the concept of ethnocentrism in his work *Folkways: A Study of the Sociological Importance of Usages, Manners, Customs, Mores, and Morals*. Sumner (1906) defined ethnocentrism as “a technical name for looking at a situation where, for an individual, the group to which he belongs (referred to as an in-group) is the centre of everything and uses that group as an ideal in evaluating other groups (referred to as out-groups).” In Sumner’s study, in-groups refer to social groups united by the same thinking and culture but whose behavior is based on folklore. In addition, an in-group serves as an evaluation factor for other groups. As such, it looks for common and different features in individual out-groups. While the in-group positively evaluates certain common features, different features are negatively assessed, irrespectiv of whether they are unfavorable for the group. A positive aspect of this definition is its versatility, which creates the opportunity for different applications. On the other hand, its limits may arise from a mere naming of the phenomenon. Depending on the subject characterized by the group, ethnocentrism can be linguistic, racial, regional, and/or consumer-related, among others.

Identifying ethnocentric tendencies in consumer behavior is essential in developing business strategies, as consumer ethnocentrism influences and shapes consumer behavior (Jiménez-Guerrero, Gázquez-Abad & Linares-Agüera, 2014). Consumer ethnocentrism is viewed from two main perspectives: domestic and foreign. Therefore, the issue concerns domestic companies and those interested in entering new markets or operating in other markets which, thanks to information on the degree of consumer ethnocentrism, are able to estimate the interest in domestic and foreign production and the success of entering a foreign market.

Consumers with a high degree of consumer ethnocentrism tend to prefer domestic products (De Nisco, Massi & Papadopoulos, 2020; Dmitrovic, Vida & Reardon, 2009; Lu Wang & Xiong Chen, 2004) and reject foreign products (Huang, Phau, Lin, Cung & Lin, 2008; Ishii, 2009; Klein, Ettenson & Krishnan, 2006). From the point of view of the theory of consumer ethnocentrism, the reason for this change in behavioral intention is the effort to improve the economic situation of one’s home country (e.g., increasing employment by buying a domestic product, supporting the domestic economy).

In selected Southeast Asian countries, only a few scholars have attempted to examine the influence of consumer ethnocentrism on consumer behavior. Hamin and Elliott examined the influence of consumer ethnocentrism and the country-of-origin effect in Indonesia (Hamin & Elliott, 2006). In addition, Hulland, Todiño, and Lecraw (1996) examined the effect of the country of origin on the conditions in the Philippines. However, no study is known to have measured consumer ethnocentrism based on the CETSCALE in the Philippines. Moreover, only a few studies dealing with the measurement of consumer ethnocentrism have been conducted in Slovakia and the Czech Republic. In light of this, the researchers of the present study worked in three countries, namely the Philippines, Slovakia, and the Czech Republic, to identify the degree of consumer ethnocentrism in each country.

The objectives of this study are as follows: (1) to determine the degree of consumer ethnocentrism based on the CETSCALE in Slovakia, the Czech Republic, and the Philippines; (2) to identify potential international differences among the selected countries; and (3) to analyze and characterize the significant differences and influence with respect to consumer ethnocentrism in each country and their respective demographic segments.

The degree of consumer ethnocentrism in each country was measured using a standardized tool called the CETSCALE, which contains

seventeen (17) statements. The researchers collected information about the age and gender of the respondents and utilized the demographic segments to determine the impact on the level of consumer ethnocentrism.

2. THEORETICAL BACKGROUND AND DEVELOPMENT OF HYPOTHESES AND RESEARCH QUESTIONS

The concept of consumer ethnocentrism has its foundations in social psychology, with the Polish sociologist Ludwig Gumpłowicz (Gumpłowicz, 1879, 1881) and the American psychologist William Graham Sumner (Sumner, 1906, 2007) considered to be pioneers in the understanding of ethnocentrism. Since then, ethnocentrism has been applied in many scientific disciplines, leading to the creation of adaptations such as consumer ethnocentrism. In 1987, Shimp and Sharma pointed out that ethnocentrism plays an important role as one of the components of consumer behavior, calling the phenomenon consumer ethnocentrism. Consumer ethnocentrism is defined “from the point of view of ethnocentric consumers. The purchase of imported products is unfavourable because they think it negatively affects the home country’s economy, causes job regulation, and acts non-proprietary. Hence, imported products are therefore unacceptable from the point of view of a highly ethnocentric consumer” (Shimp & Sharma, 1987).

Several scholars and experts have addressed the topic of consumer ethnocentrism. Many experts have tried to measure ethnocentrism with their tools (Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950; Chang & Ritter, 1976; Warr, Faust & Harrison, 1967), but the CETSCALE, developed by Shimp and Sharma (1987), was adopted as a universal scientific tool for measuring consumer ethnocentrism. The CETSCALE was developed from the original twenty-five (25) proposed claims, which were eventually reduced to seventeen (17) claims. However, the authors also

reported reducing the instrument from seventeen (17) statements to ten (10) statements. While the instruments are substitutes from the point of view of the factors they capture, the original instrument achieves a higher degree of reliability estimation (Čvirik, 2022).

Although consumer ethnocentrism applies to different degrees, multiple factors need to be considered in the evaluation. Several studies suggest the need for future research to examine the validity and reliability of the CETSCALE in other countries (Lindquist, Vida, Plank & Fairhurst, 2001; Netemeyer, Durvasula & Lichtenstein, 1991; Shimp & Sharma, 1987).

Considering the geographical spread of the CETSCALE, it was used in the original 17-item version in various countries around the world, such as Turkey (Kaynak & Kara, 2002), Israel (Shoham & Brencic, 2003), Spain (Luque-Martínez, Ibáñez-Zapata & del Barrio-García, 2000), Canada (Saffu & Walker, 2005), Russia (Saffu & Walker, 2005), the US (Yoo & Donthu, 2005), Greece (Chrysochoidis, Krystallis & Perreas, 2007), Cyprus (Nadiri & Tümer, 2010), Malaysia (Mavondo & Tan, 1999; Teo, Mohamad & Ramayah, 2011), Iceland (Bandyopadhyay, 2012), Poland (Bryła, 2021; Marcoux, Filiatrault & Chéron, 1997), Columbia (Correa & Parente-Laverde, 2017), Slovakia (Čvirik, 2021a, b; Saffu, Walker & Mazurek, 2010), France (Javalgi, Khare, Gros & Scherer, 2005), Australia (Acharya & Elliott, 2003), Brasil (Strehlau, Ponchio & Loebel, 2012), India (Joshi & Joshi, 2021), Oman (Mbagi, Al Abri, Bose & Boughanmi, 2018), and the Czech Republic (Čvirik, 2021a).

Following from the above, the following research questions (RQ) arise:

RQ1: How can the degree of consumer ethnocentrism (based on the CETSCALE) be characterized in selected countries (Slovakia, the Czech Republic, the Philippines)?

RQ2: How can differences in consumer ethnocentrism between countries be characterized?

Insights from a number of studies suggest that, in addition to ethnic factors, demographics have a significant impact. The possible influence

of age and gender on the degree of consumer ethnocentrism is largely pointed out.

As far as age is concerned, the persistent view is that older consumers are more consumer ethnocentric (Bawa, 2004; Caruana & Magri, 1996; Čvirik, 2021a; Good & Huddleston, 1995; Grundey & Bąkowska, 2008; Han, 1988; Chrysochoidis et al., 2007; Klein & Ettensoe, 1999; Shimp & Sharma, 1987; Vida & Fairhurst, 1999; Watson & Wright, 2000). Conversely, some studies point to higher levels of consumer ethnocentrism among younger consumers (Bannister & Saunders, 1978; Schooler, 1971). However, the effect of age on the degree of consumer ethnocentrism explored in several studies (Correa & Parente-Laverde, 2017; Festervand, Lumpkin & Lundstrom, 1985; Kottasz & Bennett, 2006; Nijssen & Douglas, 2004; Saffu & Walker, 2005; Sharma, Shipm & Shin, 1995) has not been confirmed. The age limits of the segments vary between authors and are often undefined, which may explain differences in the results. It should also be noted that some studies used a modified CETSCALE tool, and some even completely different tools to measure consumer ethnocentrism.

Gender, as a second potential factor influencing consumer behavior, has been studied by a number of experts (Balabanis, Diamantopoulos, Mueller & Melewar, 2001; Bruning, 1997; Bryła, 2021; Caruana & Magri, 1996; Čvirik, 2021a; Sharma et al., 1995), who have arrived to varying conclusions. While some studies have shown higher rates of consumer ethnocentrism in either women or men, others have even shown that gender is not a significant factor. There is a general perception that women are more consumer ethnocentric than men (Balabanis et al., 2001; Bruning, 1997; Han, 1988; Howard, 1990; Javalgi et al., 2005; Sharma et al., 1995; Vida & Fairhurst, 1999; Watson & Wright, 2000). Bit a study conducted by Bannister and Saunders (1978) shows British men achieving a higher degree of consumer ethnocentrism than women. Furthermore, various studies (Caruana & Magri, 1996; Correa & Parente-Laverde, 2017; Chrysochoidis et al., 2007; Kottasz & Bennett, 2006; Nijssen &

Douglas, 2004; Saffu & Walker, 2005) have found no significant effect of gender on the degree of consumer ethnocentrism.

Good and Huddleston (1995) suggest that gender may play a role in the context at hand, concluding that women were more consumer ethnocentric in their Polish sample, with no significant gender impact demonstrated in the Russian sample. The same difference can be observed in Čvirik's (2021a) studies, which identified gender significance with respect to ethnocentric consumer behavior, with women being more consumer ethnocentric in the author's Slovak sample, and men showing greater ethnocentrism in the Czech sample.

On the basis of the above, the following research question (RQ) has been formulated:

RQ3: How can the influence of selected demographic factors (age and gender) on the level of consumer ethnocentrism in selected countries (Slovakia, the Czech Republic, the Philippines) be characterized?

3. METHODOLOGY

This study uses several philosophical and scientific methods (analysis, synthesis, deduction, induction, scientific abstraction, and comparison) at all levels to address the issue at hand. Mathematical-statistical methods, both descriptive and inductive statistics, are also used.

In light of a gap in the academic literature, the following three research questions also arise:

RQ1: How can the degree of consumer ethnocentrism (based on the CETSCALE) be characterized in selected countries (Slovakia, the Czech Republic, the Philippines)?

RQ2: How can differences in consumer ethnocentrism between countries be characterized?

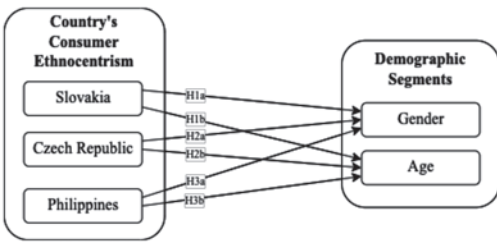
RQ3: How can the influence of selected demographic factors (age and gender) on the level of consumer ethnocentrism in selected countries (Slovakia, the Czech Republic, the Philippines) be characterized?

The first research question (RQ1) is not supported by a hypothesis. The second research question (RQ2) is related to one hypothesis:

H0: There is a significant difference between the degree of consumer ethnocentrism in Slovakia, the Philippines, and/or the Czech Republic.

In examining the degree of consumer ethnocentrism, the researchers considered two (2) demographic segments and three (3) countries – Slovakia, the Czech Republic, and the Philippines (see Figure 1).

FIGURE 1: Conceptual framework of the differences in consumer ethnocentrism and the influence of demographic segments



As visualized in the conceptual framework (Figure 1), the hypotheses were stated in an alternative form and read as follows:

H1a: There is a significant difference between the degree of consumer ethnocentrism and age in Slovakia.

H1b: There is a significant difference between the degree of consumer ethnocentrism and gender in Slovakia.

H2a: There is a significant difference between the degree of consumer ethnocentrism and age in the Czech Republic.

H2b: There is a significant difference between the degree of consumer ethnocentrism and gender in the Czech Republic.

H3a: There is a significant difference between the degree of consumer ethnocentrism and age in the Philippines.

H3b: There is a significant difference between the degree of consumer ethnocentrism and gender in the Philippines.

3.1. Samples

The present study is supported by a primary survey, which was conducted in three countries: Slovakia, the Czech Republic, and the Philippines. The choice of countries was not random. Based on the literature, it can be assumed that countries sharing a cultural and historical connection (the Czech Republic and Slovakia together formed one country until 1993) will report similar data (Wall & Heslop, 1986; Venkatesh, 1995; Klein, 2002). As consumer ethnocentrism requires a national context, the definition of the basic population was formulated for Slovakia as “consumers of Slovak nationality,” for the Czech Republic as “consumers of Czech nationality,” and for the Philippines as “consumers of Filipino nationality.” Based on the above, it can be stated that three samples were used in the study, with sampling done in an online environment (convenience samples). The Slovak sample consisted of 867 respondents (the maximum statistical error with a 95% confidence probability is around 3.3%), the Czech sample of 193 respondents (the maximum statistical error with a 95% confidence probability is around 7%) and the Philippine sample of 418 respondents (the maximum statistical error with a 95% confidence probability is around 4.8%). The characteristics of the samples were similar to those of the populations but were not the same due to the self-selected sample, which is characteristic of online surveys.

The researchers adhered to research ethics guidelines in gathering the data by informing the respondents of the objective of the study and obtaining their consent before collecting responses to the survey questionnaire. The researchers strictly enforce the anonymity of the respondents and the confidentiality of their responses.

3.2. Measuring Consumer Ethnocentrism

The measurement of consumer ethnocentrism was performed on the basis of the original CETSCALE (Shimp & Sharma, 1987). However, the statements were modified to match the respective countries. Since the original version of the CETSCALE contained statements adapted for Americans, it was necessary to adjust the statements to the nationalities of the countries surveyed and also to ensure adequate translation into the official languages of the respective countries.

The CETSCALE is a scale tool consisting of 17 statements to which the respondents respond on the Likert scale. In our research, we used a

five-point Likert scale (1 – strong disagreement; 5 – strong agreement). By summarizing the reactions to individual statements, the overall degree of consumer ethnocentrism of the respondents can be determined. As this is a foreign instrument, it was necessary to examine its reliability in the context of the individual countries examined. To verify the reliability, we used McDonald’s ω as the reliability estimation coefficient. In the case of McDonald’s Omega, the reliability should be above 0.700 in order for the tool to be acceptable from the point of view of reliability (Hair, Prentice & Cano, 1999). Moreover, it is necessary to exclude a statement from the tool in order to increase reliability. The results of McDonald’s ω , even with the “if item deleted” method, are shown in Table 1.

TABLE 1: Estimate of CETSCALE reliability rate in selected countries

CETSCALE Item	Philippines*	Slovakia**	Czech Republic***
CET1	0.913	0.919	0.925
CET2	0.916	0.921	0.927
CET3	0.917	0.923	0.930
CET4	0.914	0.922	0.929
CET5	0.912	0.919	0.928
CET6	0.910	0.917	0.925
CET7	0.913	0.918	0.927
CET8	0.911	0.918	0.924
CET9	0.913	0.919	0.925
CET10	0.913	0.917	0.925
CET11	0.910	0.917	0.925
CET12	0.916	0.919	0.928
CET13	0.913	0.924	0.929
CET14	0.912	0.920	0.929
CET15	0.914	0.919	0.929
CET16	0.912	0.918	0.924
CET17	0.912	0.919	0.927

* Total McDonald’s ω for tool = 0.918 (CI 95% = < 0.904 – 0.930 >).

** Total McDonald’s ω for tool = 0.924 (CI 95% = < 0.915 – 0.931 >).

*** Total McDonald’s ω for tool = 0.931 (CI 95% = < 0.916 – 0.943 >).

Source: Own calculations in Jasp (Ver.0.17.1.0).

The results in Table 1 indicate a high degree of CETSCALE reliability in the countries under scrutiny. At the same time, it can be stated that no

statement needs to be discarded in any country for the purpose of increasing reliability on the basis of McDonald’s ω .

4. RESULTS

The following part of the study will focus on the results of the primary survey in the context of the formulated research questions and hypotheses for the purpose of fulfilling the research goal.

RQ1: How can the degree of consumer ethnocentrism (based on the CETSCALE) be characterized in selected countries (Slovakia, the Czech Republic, the Philippines)?

The measurement of consumer ethnocentrism was performed using the CETSCALE consisting of 17 statements to which the respondents responded on a 5-point Likert scale (1 – strong disagreement; 5 – strong agreement). The average values measured and standard deviation for individual statements in specific countries are shown in Table 2, with the mean value of the selected five-point scale representing three (3) points.

TABLE 2: Basic parameters of descriptive statistics for individual statements by countries

CETSCALE Item	Philippines		Slovakia		Czech Republic	
	Mean	St. dev.	Mean	St. dev.	Mean	St. dev.
CET1	3.84	0.99	3.41	1.20	3.09	1.27
CET2	3.83	1.11	3.35	1.26	3.02	1.30
CET3	4.66	0.67	4.21	0.86	3.77	1.11
CET4	4.29	0.87	3.44	1.07	3.30	1.21
CET5	2.88	1.14	1.91	1.03	1.79	1.08
CET6	2.67	1.12	2.39	1.11	1.99	1.07
CET7	3.70	1.03	2.08	1.11	1.95	1.13
CET8	3.96	1.01	3.39	1.18	3.00	1.30
CET9	4.06	0.95	3.20	1.12	2.68	1.19
CET10	3.76	1.03	2.96	1.15	2.31	1.02
CET11	2.90	1.11	2.56	1.10	2.17	0.99
CET12	3.28	1.13	2.54	1.19	2.10	1.12
CET13	4.02	0.93	3.44	1.07	3.27	1.15
CET14	2.53	1.10	1.64	0.84	1.58	0.96
CET15	3.43	1.15	2.20	1.11	1.89	1.03
CET16	3.75	1.07	3.00	1.28	2.54	1.26
CET17	2.69	1.34	2.18	1.03	1.81	0.96

Source: Own calculations in Jasp (Ver.0.171.0).

As shown in Table 2, the Philippines achieved higher values in the average evaluation of individual statements than the Czech Republic and Slovakia. The Czech Republic and Slovakia achieved an almost identical average rating in some statements, although Slovakia achieved a higher average value in several statements. It is very interesting to make individual statements in the context of country affiliation. Certain trends can be observed in individual statements, with average values decreasing or rising in all countries.

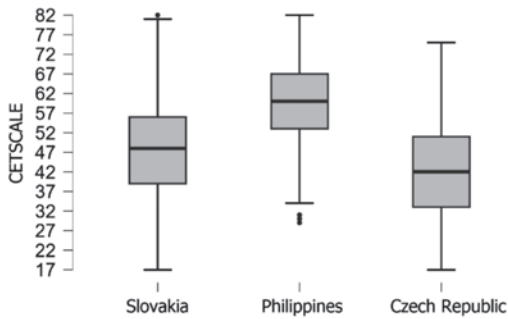
When it comes to the number of statements and the grades of the evaluation scale, it can be stated that the results of the overall evaluation of the degree of consumer ethnocentrism are in the range of 17 to 85 points (min = 17; max = 85; middle value of the scale = 51). The basic parameters of descriptive statistics for measuring consumer ethnocentrism in individual countries are shown in Table 3. For the sake of clarity, Graph 1 is presented below in the form of boxplots for the individual countries examined.

TABLE 3: Basic parameters of descriptive statistics for individual countries

Parameter	Philippines	Slovakia	Czech Republic
Mean	60.25	47.90	42.23
Standard Error	0.57	0.43	0.95
Median	61	48	42
Mode	65	49	39
Standard Deviation	11.66	12.51	13.15
Range	56	68	58
Minimum	29	17	17
Maximum	85	85	75
Count	418	867	193

Source: Own calculations in R.

GRAPH 1: Boxplot for selected countries



Source: Own processing in R.

Based on Table 3 and Graph 1, it can be concluded that the average measured value of consumer ethnocentrism in the Philippines is 60.25 points (median = 61 points, mode = 65 points). The maximum measured value in the Philippines represents the maximum possible value of the scale. The interval of measured values (range = 56) in the context of the standard deviation (st. dev. = 11.66) indicates a relatively consistent measurement. The boxplot (Graph 1) shows the strongest data consistency compared to the other countries examined. Outliers in the form of low values can also be observed. In general, we rate the level of consumer ethnocentrism measured in the Philippines as above average (above the middle value of the scale), indicating the impact of consumer ethnocentrism.

In Slovakia, the average measured value is 47.90 points (median = 48 points, mode = 49 points). Regarding the interval depth of measured values (range = 68) and standard deviation (st. dev. = 12.51), a high diversity in measurements can be identified. This is also confirmed by the fact that both the lowest possible value of the scale (17 points) and the highest possible value (85 points) were measured. Based on the boxplot (Graph 1), considerable variability in the measurements is visible. At the same time, an outlier (maximum) value can be observed. This phenomenon points to a high diversity of consumer ethnocentrism in Slovakia. In general, we rate the consumer ethnocentrism of Slovaks as average to below average (below the middle value of the scale).

The Czechs achieved an average measured level of consumer ethnocentrism of 42.23 points (median = 42 points, mode = 39 points). The depth of the interval of the obtained measurements per individual and the standard deviation indicate the diversity of values. In general, a below-average level (below the middle value of the scale) of consumer ethnocentrism in the Czech Republic can be identified.

RQ2: How can differences in consumer ethnocentrism be characterized?

H0: There is a significant difference between the degree of consumer ethnocentrism in Slovakia, the Philippines, and/or the Czech Republic.

As demonstrated above, certain differences can be observed with respect to the individual countries. However, these results are only indicative. We used a one-way ANOVA test to examine the differences between countries. This test was chosen due to the nature of the data as well as its high robustness. Based on the initial results of the one-way ANOVA test, it can be stated that there is a significant difference between at least two out of the three countries (alpha = 0.05; p-value = <0.001). In addition to the test, we examined the effect size using Omega squared (ω^2). The result ($\omega^2 = 0.205$) indicates a large effect size (Field, 2013). In short, it can be concluded that the differences in the average values of consumer ethnocentrism are not only statistically but also interpretatively significant.

Subsequently, we continued with the analysis in the form of post hoc tests for examining pairwise differences. A significant difference was observed between the average value of consumer ethnocentrism in Slovakia and the Czech Republic (alpha = 0.05; p-value = <0.001), Slovakia and the Philippines (alpha = 0.05; p-value = <0.001), and the Czech Republic and

the Philippines (alpha = 0.05; p-value = <0.001). In addition, the Tukey test was significant for all comparison combinations. We again examined the effect size, this time with the help of Cohen's d due to the use of the T-Test as a post hoc test for the ANOVA. The results again demonstrated a large effect size among all the countries studied.

The results point to significant differences in averages in terms of the level of consumer ethnocentrism. It can therefore be expected that, on average, there will be a higher rate of consumer ethnocentrism in the Philippines than in Slovakia, and a higher rate of consumer ethnocentrism in Slovakia than in the Czech Republic.

RQ3: How can the influence of selected demographic factors (age and gender) on the level of consumer ethnocentrism in selected countries (Slovakia, the Czech Republic, the Philippines) be characterized?

When examining the impact of selected demographic factors, certain differences in terms of average values emerged among the individual countries (Table 4).

TABLE 4: Average values with respect to country and demographics

Demographic Segments	Subvariables	Slovakia	Czech Republic	Philippines
Age	up to 25 years old	46.58	40.49	60.50
	26-40 years old	46.33	41.18	59.67
	41-55 years old	51.95	43.13	59.09
	above 55 years old	58.31	51.31	57.67
Gender	male	44.77	40.90	58.76
	female	49.77	43.31	60.90

Source: Own calculations in R.

Even though certain differences within individual countries can be identified, these results are only indicative and need to be statistically verified. We have therefore developed hypotheses. As shown in Table 4, two values for gender (male, female) and four age groups were examined. In view of the above, as well as in view of the examination of the data and their

characteristics, we used the T-Test (independent samples T-Test) to examine the differences in gender and the ANOVA test (one-way ANOVA test) to examine the differences in age groups.

The key results of the ANOVA test for the investigation of age differences in individual countries are shown in Table 5.

TABLE 5: Basic one-way ANOVA test results

	alpha	p-value	ω^2
H1a	0.05	< 0.001	0.062
H2a	0.05	0.022	0.049
H3a	0.05	0.745	-

Based on Table 5, it can be concluded that there are differences in the average degree of consumer ethnocentrism in at least the two investigated age intervals identified in Slovakia (H1a) and the Czech Republic (H1b). On the contrary, in the Philippines, it can be expected that there will be no significant differences in the degree of consumer ethnocentrism in the studied age intervals. In addition, we also examined the size effect based on ω^2 (see Table 5). While, in the Czech Republic, the effect of age on the measure of consumer ethnocentrism can be interpreted as small, in Slovakia it can be interpreted as medium (Field, 2013). This made us consider a partial investigation of differences within individual age groups. We used post-hoc tests to ensure correct results. In the Czech Republic, a significant difference was observed

between groups with an age categorization of up to 25 years and over 55 years, and groups of 25-40-year-olds and those over 55 years of age. The other groups did not demonstrate a significant difference. When these findings are placed in context with the average measured values (Table 4), it can be concluded that the group of over 55 years of age achieved a higher level of consumer ethnocentrism on average. In the case of Slovakia, post-hoc tests were also performed, finding significant differences between the groups, except for the group of respondents under 25 and the group of 26-40-year-olds. This indicates that the two groups do not differ significantly. However, significant and interpretable differences can be seen among the other groups. It can be concluded that age as a factor of consumer ethnocentrism, examined in the context of age groups, has different characteristics in the examined countries.

Gender was also examined as a factor in the differences in consumer ethnocentrism. The key results of the T-Test for the investigation of gender differences in individual countries are shown in Table 6.

TABLE 6: Basic independent samples T-Test results

	Levene test (p-value)	alpha	T-Test (p-value)	Cohen's d
H1b	0.561	0.05	< 0.001	0.407
H2b	0.043	0.05	0.210	-
H3b	0.001	0.05	0.176	-

As part of the analysis of differences, we first checked for equality/difference in variances using Levene's test to correctly determine which type of T-Test to use (Student's or Welch's T-Test). The results of the T-Test indicate that gender manifests itself as a significant factor only in Slovakia. In other words, if we were to create a selection an infinite number of times, we would identify 95% of the differences between men and women in the average value

of consumer ethnocentrism in Slovakia. At the same time, we also examined the factual interpretation using the size effect, in this case Cohen's d (Cohen's d = 0.407; 95% CI for effect size <0.268 – 0.546>), which pointed to a large effect (Cohen, 1988). The results show that women are, on average, more consumer ethnocentric than men. In the other countries studied, gender did not appear to be a significant factor in consumer ethnocentrism.

5. DISCUSSION

The issue of consumer ethnocentrism is gaining more and more importance, which intersects in several areas. From the point of view of the country's domestic companies, it is essential to know the degree of consumer ethnocentrism as well as possible demographic influences in market segmentation, the creation of marketing activities, and marketing strategies. From the perspective of international trade and international marketing, this information is crucial when expanding to other countries. Of course, the study of consumer ethnocentrism is also important for government organizations and institutions aiming to promote the prosperity of domestic production, improve the country's economic situation, increase interest in domestic products, and increase the living standards and well-being of the country's population. It can also be stated that, under certain conditions, consumer ethnocentrism has a stronger effect than the influence of price and quality (Siamagka & Balabanis, 2015; Čvirik, 2023).

The measurement of consumer ethnocentrism on the basis of the standard tool, that is, the CETSCALE, points to significant differences in the countries under scrutiny. It should be noted that the high reliability rate of the original version of the CETSCALE was estimated for all countries. The higher value was measured, on average, in the Philippines (degree of consumer ethnocentrism approximately 63.6%), the lower value in Slovakia (degree of consumer ethnocentrism approximately 45.41%), and the lowest in the Czech Republic (degree of consumer ethnocentrism approximately 37.1%). At the same time, these differences were found to be significant. This finding contradicts previous research, which showed that the Czech people are more consumer ethnocentric than the Slovaks (Čvirik, 2021a). One should keep in mind, however, that the degree of consumer ethnocentrism changes over time as it responds to developments in the country and in the world (Baber, Upadhyay, Baber & Kaurav, 2023). The reasons for the differences can be several, including cultural

influences, the economic situation of the country, patriotism, cosmopolitanism, and attitudes towards domestic and imported products (Lindquist et al., 2001; Čvirik, 2021a).

This study has also focused on examining the influence of selected demographic factors, namely age and gender. Even in this context, differences among the countries can be observed. In Slovakia, age and gender have a significant impact on the level of consumer ethnocentrism. In the Czech Republic, only age has a significant effect (gender has not been confirmed). Neither age nor gender have a significant impact on the level of consumer ethnocentrism in the Philippines. Again, there can be several reasons for this, including the position of men and women in society, purchasing roles in the context of gender, or economic awareness in individual countries. Age and generation specificities may differ in different countries. It should also be noted that the countries have a different population distribution in terms of age (different demographic structure), a different education system, and so on. The results obtained can shed some light on why there is no agreement in the literature on the effect of the demographic factors studied, and on the fact that it is largely a question of the country in which consumer ethnocentrism is measured. Therefore, claims about the influence of consumer ethnocentrism cannot be generalized for the whole world universally.

6. CONCLUSION

The aim of the present research study was threefold: (1) measurement of consumer ethnocentrism based on CETSCALE17; (2) examination of possible international differences; and (3) examination of the influence of selected demographic factors on the measured level of consumer ethnocentrism. Based on the measurement of consumer ethnocentrism (using the CETSCALE tool), it can be stated that the average measured value in the Philippines was above the average level of the instrument, in

Slovakia, the average value was roughly at the average level of the scale instrument, and in the Czech Republic, it was below the CETSCALE level. By examining the differences observed, we concluded that there are statistically significant differences in the values measured in individual countries. An examination of the impact of selected demographic factors (age and gender) also showed differences with respect to the countries concerned. While the results for Slovakia demonstrated a significant influence of both factors, and only age factors proved to be significant in the Czech Republic, in the Philippines, no significant influence as to the demographic variables examined was observed. Based on the above, it can be stated that the set goals have been met. The results represent an important source of information for various scientific disciplines such as marketing, international marketing, international trade, behavioral economics, psychology, and others.

In future research, it would be worthwhile to explore possible effects on the degree of consumer ethnocentrism. Based on the measurement of consumer ethnocentrism using the CETSCALE, examining the existence of latent variables that may be contained in the CETSCALE would be an appropriate research avenue.

This study also contains certain limitations. Namely, samples were obtained using online questionnaires and represent a convenient sample, thus evidently pointing to a lack of population structure. This limitation was partially removed by using inductive statistical methods. Measurements were performed on three samples in different countries, with a mother tongue translation used in each country. Although native speakers were consulted for the translation, there may have been some misunderstanding of the statements.

The results can be used both in the field of consumer behavior for the creation of marketing activities and as a basis for further scientific research. The findings represent information sources for professional practice in the context of international trade, as well as domestic trade,

marketing, psychology, and the like. Namely, research results highlight consumer ethnocentrism as a significant factor to be considered when formulating strategic marketing objectives. It should be noted, however, that the degree of consumer ethnocentrism as well as the influence of demographic factors vary in the countries under scrutiny. Specifically, the findings may also be used by marketing managers when creating a marketing mix or when placing products on the market as part of product policy. Namely, a high degree of consumer ethnocentrism significantly strengthens the acceptance of products from the home country and, conversely, the rejection of foreign products. Likewise, considering the influence of age and gender identified in the study, a customer profile can be created that will rather emphasize and even demand domestic products. In connection with the results of the study, women (Slovak women) and older consumers can be identified as the segments that will accept or demand more products in the Slovak context, while this is true for the segment of older consumers in the case of the Czech Republic. The Philippines is characterized by a high level of consumer ethnocentrism in all the studied segments, which can greatly complicate the import of foreign products into this country. In terms of price policy, a higher degree of willingness to buy domestic products can be expected even at a higher price. It is necessary to state that, in the context of international trade and marketing, ethnocentrism is a significant element but not the only one that needs to be taken into account.

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REFERENCES

1. Acharya, C., & Elliott, G. (2003). Consumer Ethnocentrism, Perceived Product Quality and Choice – An Empirical Investigation. *Journal of International Consumer Marketing*, 15(4), 87-115.
2. Adorno, T. W., Frenkel-Brunswik, E., Levinson, D., & Sanford, N. (1950). *The Authoritarian Personality*. Boston, MA: Harper & Brothers.
3. Baber, R., Upadhyay, Y., Baber, P., & Kaurav, R. P. S. (2023). Three Decades of Consumer Ethnocentrism Research: A Bibliometric Analysis. *Business Perspectives and Research*, 11(1), 137-158.
4. Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. C. (2001). The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies. *Journal of International Business Studies*, 32(1), 157-175.
5. Bandyopadhyay, S. (2012). Ethnocentrism in Icelandic Consumers and Its Consequences. *International Business & Economics Research Journal*, 11(3), 307.
6. Bannister, J. P., & Saunders, J. A. (1978). UK Consumers' Attitudes towards Imports: The Measurement of National Stereotype Image. *European Journal of Marketing*, 12(8), 562-570.
7. Bawa, A. (2004). Consumer Ethnocentrism: CETSCALE Validation and Measurement of Extent. *Vikalpa: The Journal for Decision Makers*, 29(3), 43-58.
8. Bruning, E. R. (1997). Country of origin, national loyalty and product choice: The case of international air travel. *International Marketing Review*, 14(1), 59-74.
9. Bryła, P. (2021). Selected Predictors of Consumer Ethnocentrism in the Food Market (Gender Differences). *Energies*, 14(22), 7667.
10. Caruana, A., & Magri, E. (1996). The effects of dogmatism and social class variables on consumer ethnocentrism in Malta. *Marketing Intelligence & Planning*, 14(4), 39-44.
11. Chang, E. C., & Ritter, E. H. (1976). Ethnocentrism in Black College Students. *The Journal of Social Psychology*, 100(1), 89-98.
12. Chrysochoidis, G., Krystallis, A., & Perreas, P. (2007). Ethnocentric beliefs and country-of-origin (COO) effect: Impact of country, product and product attributes on Greek consumers' evaluation of food products. *European Journal of Marketing*, 41(11/12), 1518-1544.
13. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. New York, NY: Routledge.
14. Correa, S., & Parente-Laverde, A-M. (2017). Consumer Ethnocentrism, Country Image and Local Brand Preference: The Case of the Colombian Textile, Apparel and Leather Industry. *Global Business Review*, 18(5), 1111-1123.
15. Čvirik, M. (2021a). Consumer Ethnocentrism: Comparison of Slovakia and the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 69(2), 259-266.
16. Čvirik, M. (2021b). The Impact of Consumer Ethnocentrism and the Patriotism on Judgement for Selected Domestic Products: The Case of Slovakia. *Central European Business Review*, 10(3), 1-17.
17. Čvirik, M. (2022). Suitability of Measuring Consumer Ethnocentrism Based on Cetscale10 and Cetscale17 in Slovakia. *Interdisciplinarity in Theory and Practice: Journal for Presentation of Interdisciplinary Approaches in Various Fields*, 24, 14-18.
18. Čvirik, M. (2023). Perceived Price and Quality of Food of European Union Countries of Origin by Slovaks: The Influence of Ethnocentric Tendencies. *Central European Business Review*, 12(1), 97-114.
19. De Nisco, A., Massi, M., & Papadopoulos, N. (2020). Partners or Foes? Cross-Country Consumer Animosity, Ethnocentrism, and Nationalism in Times of International Crisis. *Journal of Global Marketing*, 33(3), 207-222.
20. Dmitrovic, T., Vida, I., & Reardon, J. (2009). Purchase behavior in favor of domestic products in the West Balkans. *International Business Review*, 18(5), 523-535.

21. Festervand, T. A., Lumpkin, J. R., & Lundstrom, W. J. (1985). Consumers' perceptions of imports: An update and extension. *Akron Business and Economic Review*, 16(1), 31-36.
22. Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock "N" Roll*. 4th ed. Los Angeles, CA: Sage.
23. Good, L. K., & Huddleston, P. (1995). Ethnocentrism of Polish and Russian consumers: Are feelings and intentions related. *International Marketing Review*, 12(5), 35-48.
24. Grundey, D., & Bąkowska, S. (2008). Consumer Economics: Brand Awareness among Polish Consumers. *Transformations in Business & Economics*, 7(2), 186-199.
25. Gumpłowicz, L. (1879). *Das Recht der Nationalität und Sprachen in Oesterreich-Ungarn*. Berlin: Wagner'schen Universitäts-Buchhandlung.
26. Gumpłowicz, L. (1881). *Rechtsstaat und Socialismus*. Berlin: Wagner'schen Universitäts-Buchhandlung.
27. Hair, J., Prentice, E., & Cano, D. (1999). *Análisis multivariante de datos*. New York, NY: Prentice Hall.
28. Hamin, & Elliott, G. (2006). A less-developed country perspective of consumer ethnocentrism and "country of origin" effects: Indonesian evidence. *Asia Pacific Journal of Marketing and Logistics*, 18(2), 79-92.
29. Han, C. M. (1988). The role of consumer patriotism in the choice of domestic versus foreign products. *Journal of Advertising Research*, 28, 25-32.
30. Howard, D. G. (1990). Understanding How American Consumers Formulate Their Attitudes About Foreign Products. *Journal of International Consumer Marketing*, 2(2), 7-24.
31. Huang, Y-A., Phau, I., Lin, C., Chung, H-J., & Lin, K. H-C. (2008). Allocentrism and Consumer Ethnocentrism: The Effects of Social Identity on Purchase Intention. *Social Behavior and Personality: An International Journal*, 36(8), 1097-1110.
32. Hulland, J., Todiño, H. S., & Lecraw, D. J. (1996). Country-of-Origin Effects on Sellers' Price Premiums in Competitive Philippine Markets. *Journal of International Marketing*, 4(1), 57-79.
33. Ishii, K. (2009). Nationalistic Sentiments of Chinese Consumers: The Effects and Determinants of Animosity and Consumer Ethnocentrism. *Journal of International Consumer Marketing*, 21(4), 299-308.
34. Javalgi, R. G., Khare, V. P., Gross, A. C., & Scherer, R. F. (2005). An application of the consumer ethnocentrism model to French consumers. *International Business Review*, 14(3), 325-344.
35. Jiménez-Guerrero, J. F., Gázquez-Abad, J. C., & Linares-Agüera, E. del C. (2014). Using standard CETSCALE and other adapted versions of the scale for measuring consumers' ethnocentric tendencies: An analysis of dimensionality. *BRQ Business Research Quarterly*, 17(3), 174-190.
36. Joshi, R. N., & Joshi, Y. C. (2021). Construction and Validation of Indian Consumer Ethnocentrism Scale: The Ice-Scale. *Gadjah Mada International Journal of Business*, 23(2), 173.
37. Kaynak, E., & Kara, A. (2002). Consumer perceptions of foreign products: An analysis of product-country images and ethnocentrism. *European Journal of Marketing*, 36(7/8), 928-949.
38. Klein, J. G. (2002). Us Versus Them, or Us Versus Everyone? Delineating Consumer Aversion to Foreign Goods. *Journal of International Business Studies*, 33(2), 345-363.
39. Klein, J. G., & Ettensoe, R. (1999). Consumer Animosity and Consumer Ethnocentrism: An Analysis of Unique Antecedents. *Journal of International Consumer Marketing*, 11(4), 5-24.
40. Klein, J. G., Ettenson, R., & Krishnan, B. C. (2006). Extending the construct of consumer ethnocentrism: When foreign products are preferred. *International Marketing Review*, 23(3), 304-321.
41. Kottasz, R., & Bennett, R. (2006). Ethnocentric tendencies amongst arts audiences. *International Journal of Nonprofit and Voluntary Sector Marketing*, 11(4), 303-317.
42. Lindquist, J. D., Vida, I., Plank, R. E., & Fairhurst, A. (2001). The modified CETSCALE: Validity tests in the Czech Republic, Hungary, and Poland. *International Business Review*, 10(5), 505-516.

43. Lu Wang, C., & Xiong Chen, Z. (2004). Consumer ethnocentrism and willingness to buy domestic products in a developing country setting: Testing moderating effects. *Journal of Consumer Marketing*, 21(6), 391-400.
44. Luque-Martínez, T., Ibáñez-Zapata, J., & del Barrio-García, S. (2000). Consumer ethnocentrism measurement – An assessment of the reliability and validity of the CETSCALE in Spain. *European Journal of Marketing*, 34(11/12), 1353-1374.
45. Marcoux, J-S., Filiatrault, P., & Chéron, E. (1997). The Attitudes Underlying Preferences of Young Urban Educated Polish Consumers Towards Products Made in Western Countries. *Journal of International Consumer Marketing*, 9(4), 5-29.
46. Mavondo, F., & Tan, A. S. K. (1999). *Reconceptualizing the CETSCALE (Consumer Ethnocentric Tendency Scale)*. Proceedings of Australia New Zealand Marketing Academy Conference.
47. Mbagi, M. D., Al Abri, L. S. K., Bose, S., & Boughanmi, H. (2018). Omani Consumer's Ethnocentrism and Demand for Locally Produced Products. *American Journal of Industrial and Business Management*, 8(6), 1440-1459.
48. Nadiri, H., & Tümer, M. (2010). Influence of Ethnocentrism on Consumers' Intention to Buy Domestically Produced Goods: An Empirical Study in North Cyprus. *Journal of Business Economics and Management*, 11(3), 444-461.
49. Netemeyer, R. G., Durvasula, S., & Lichtenstein, D. R. (1991). A Cross-National Assessment of the Reliability and Validity of the CETSCALE. *Journal of Marketing Research*, 28(3), 320.
50. Nijssen, E. J., & Douglas, S. P. (2004). Examining the animosity model in a country with a high level of foreign trade. *International Journal of Research in Marketing*, 21(1), 23-38.
51. Saffu, K., & Walker, J. H. (2005). An Assessment of the Consumer Ethnocentric Scale (CETSCALE) in an Advanced and Transitional Country: The Case of Canada and Russia. *International Journal of Management*, 22, 556-571.
52. Saffu, K., Walker, J. H., & Mazurek, M. (2010). The role of consumer ethnocentrism in a buy national campaign in a transitioning country: Some evidence from Slovakia. *International Journal of Emerging Markets*, 5(2), 203-226.
53. Schooler, R. (1971). Bias Phenomena Attendant to the Marketing of Foreign Goods in the U.S. *Journal of International Business Studies*, 2(1), 71-80.
54. Sharma, S., Shimp, T. A., & Shin, J. (1995). Consumer ethnocentrism: A test of antecedents and moderators. *Journal of the Academy of Marketing Science*, 23(1), 26-37.
55. Shimp, T. A., & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280-289.
56. Shoham, A., & Brencic, M. M. (2003). Consumer Ethnocentrism, Attitudes, and Purchase Behavior. *Journal of International Consumer Marketing*, 15(4), 67-86.
57. Siamagka, N-T., & Balabanis, G. (2015). Revisiting Consumer Ethnocentrism: Review, Reconceptualization, and Empirical Testing. *Journal of International Marketing*, 23(3), 66-86.
58. Strehlau, V. I., Ponchio, M. C., & Loebel, E. (2012). An Assessment of the consumer ethnocentric scale (CETSCALE): Evidences from Brazil. *Brazilian Business Review*, 9(4), 103-126.
59. Sumner, W. G. (1906). *Folkway: A Study of the Sociological Importance of Usages, Manners, Customs, Mores, and Morals*. London: Ginn and Company.
60. Sumner, W. G. (2007). *Folkways: A study of mores, manners, customs and morals*. Bern: Cosimo Inc.
61. Teo, P-C., Mohamad, O., & Ramayah, T. (2011). Testing the dimensionality of Consumer Ethnocentrism Scale (CETSCALE) among a young Malaysian consumer market segment. *African Journal of Business Management*, 5(7), 2805-2816.
62. Venkatesh, N., A. (1995). *Ethnoconsumerism: A New Paradigm to Study Cultural and Cross-Cultural Consumer Behavior*. V Marketing in the Multicultural World (s. 26-67).

63. Vida, I., & Fairhurst, A. (1999). Factors underlying the phenomenon of consumer ethnocentricity: Evidence from four central European countries. *International Review of Retail, Distribution and Consumer Research*, 9(4), 321-337.
64. Wall, M., & Heslop, L. A. (1986). Consumer attitudes toward Canadian-made versus imported products. *Journal of the Academy of Marketing Science*, 14(2), 27-36.
65. Warr, P. B., Faust, J., & Harrison, G. J. (1967). A British Ethnocentrism Scale. *British Journal of Social and Clinical Psychology*, 6(4), 267-277.
66. Watson, J. J., & Wright, K. (2000). Consumer ethnocentrism and attitudes toward domestic and foreign products. *European Journal of Marketing*, 34(9/10), 1149-1166.
67. Yoo, B., & Donthu, N. (2005). The Effect of Personal Cultural Orientation on Consumer Ethnocentrism: Evaluations and Behaviors of U.S. Consumers Toward Japanese Products. *Journal of International Consumer Marketing*, 18(1/2), 7-44.