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THE ROLE OF GROUP IDENTIFICATION IN THE PERCEPTION OF BRAND COOLNESS

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ABSTRACT: The perception of coolness in products, services, or brands is a relevant variable for market differentiation and for generating positive emotions in consumers, clients, or users. This study examines the perception of coolness in Nike's Jordan Air sneaker brand through a group-level analysis that considers cultural identification and the impact of belonging to subcultures on this perception, as these variables have explanatory potential for the phenomenon. Using the brand coolness scale, its different dimensions were analyzed, focusing on cultural identification as a group-level attribute. The results reveal that cultural identification is the dimension with the greatest variability explained by group membership, with an ICC1 of 0.1908 and an ICC2 of 0.6723, suggesting group-level consistency in perception. This indicates that 19.08% of the variability in cultural identification in the perception of coolness is due to differences between groups, confirming that group membership influences this variable. Thus, including between-group variability would improve research models, suggesting that differences in group membership are relevant to the cultural identification variable of the coolness construct. The contribution of this study highlights that cultural identification is a collective factor influenced by group belonging, justifying the use of multilevel analysis to capture the cultural dynamics that underpin the perception of brand coolness.

Keywords: Coolness, Brand, Marketing, Group.

INTRODUCTION

The perception of coolness in products, services, or brands has captured the attention of marketing research due to its impact on consumer attitudes and behaviors (Ashfaq et al., 2021; Bruun et al., 2016). A brand's ability to be perceived as cool not only fosters loyalty but also differentiation in an increasingly dynamic and competitive marketplace (Warren and Campbell, 2014; Warren et al., 2019). This perception of coolness has been approached from two main theoretical approaches: a) the attribute perspective, which identifies inherent product characteristics as indicators of coolness (Sundar et al., 2014; Rahman, 2013; Warren

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et al., 2019), and the cultural perspective, which associates the perception of coolness with group and cultural identification (O'Donnell and Wardlow, 2000).

From the first perspective, coolness has been conceptualized as a set of perceived attributes of products, services, or brands that reflect originality and authenticity (Rahman, 2013). However, the elements that configure this attractiveness based on the perception that an object is cool vary according to the cultural and temporal context, posing challenges for a structure applicable to all types of context. In contrast to this attribute-based perspective, the cultural perspective suggests that the perception of coolness is a dynamic construct influenced by membership in specific subcultures and social groups, where certain styles, values, or products act as symbols of affiliation (O'Donnell and Wardlow, 2000; Warren et al., 2019). However, it is necessary to consider that this cultural perspective is absorbed by the attribute perspective through the incorporation of a cultural identification dimension in its main measurement scales (Sundar et al., 2014; Warren et al., 2019).

Thus, this second cultural approach posits that the perception of coolness is, to a large extent, socially and culturally constructed, being a reflection of the identity and shared values of a particular community (O'Donnell and Wardlow, 2000). Moreover, this cultural approach was the first to be put forward in the literature at the beginning of this century by O'Donnell and Wardlow (2000), before later developments based on the attribute approach.

With this background, the present study seeks to examine the perception of brand coolness through a group analysis that considers cultural identification and the impact of subculture membership on this perception, contributing to the analysis of the perception of brand coolness by implementing an empirical approach based on group analysis, exploring how collective identification influences the variability and perception of coolness of Nike's Jordan Air sneaker brand, which is a classic product of the Western market.

Using the coolness scale proposed by Warren et al. (2019), which incorporates the dimension of cultural identification and is focused on the brand phenomenon specifically, we examine whether variability in consumer perceptions can be attributed to subculture membership, advancing our understanding of the cultural and group mechanisms that underpin the perception of coolness in brands within specific contexts.

Thus, this study addresses this gap in the theoretical discussion on the conceptualization of the coolness phenomenon through a multilevel approach, examining the variability between groups in different dimensions of brand coolness perception: cultural identification, extraordinary, energy, aesthetics, originality, authenticity, and rebelliousness. The results show that cultural identification is the dimension with the highest group variability. ANOVA and intraclass correlation coefficient analyses indicate statistically significant differences between teams in this dimension ($p < 0.01$), with an ICC1 of 0.1908 and an ICC2 of 0.6723. This suggests that 19.08% of the variability in cultural identification is due to group membership, with high reliability, validating group scores as reliable representations of collective perception. Thus, the inclusion of between-group variability would improve models of analysis of the coolness phenomenon, suggesting that between-group differences are relevant to the cultural identification variable of coolness.

On the other hand, the extraordinary attribute dimension shows a tendency to significance at 90%, reflecting moderate group variability (ICC1 of 0.0771 and ICC2 of 0.4208), while the dimensions of energy, aesthetics, originality, authenticity and rebelliousness show low or no group variability, suggesting that these characteristics are predominantly individual.

Finally, in the overall analysis of the perception of coolness, averaging all its dimensions, there was only a marginal and non-significant trend towards group variability ($p = 0.0965$), with an ICC1 of 0.0773 and an ICC2 of 0.4217, indicating moderate group reliability.

In conclusion, cultural identification emerges as the key dimension where subcultural group membership significantly impacts brand coolness perception, justifying the use of multilevel analysis in this specific context. These findings highlight that, while brand coolness perception is perceived individually in certain aspects, cultural identification as a dimension of coolness is configured as a collective factor influenced by group dynamics.

DEVELOPMENT

The marketing field has established the importance of identifying the attributes that constitute a product, service or brand as cool, due to the impact this phenomenon has on consumer attitudes and behaviors (Ashfaq et al., 2021; Bogicevic et al., 2021; Bruun et al., 2016; Kim and Park, 2019; Kim et al., 2015; Liu and Mattila, 2019; Loureiro et al., 2020; Sundar et al., 2014; Warren and Campbell, 2014; Warren et al., 2019). This has been applied in different fields such as food (Zhang et al., 2021), hospitality (Apaolaza et al., 2021; Bogicevic et al., 2021; Khoi and Le, 2022), technology (Huang et al., 2024; Niu and Mvondo, 2024; Nan et al., 2022), and other particular industries (Cha, 2020; Im et al., 2015; Huang et al., 2021).

In this context, coolnes has been understood as a cognitive experience or an affective experience, depending on the particular research perspective (Chen and Girish, 2023; Huang et al., 2024; Cheny and Chou, 2019; Huang et al., 2021; Wang and Sundar, 2018). In this sense, the phenomenon of coolness has also been established as a process of attribute perception (Sundar et al., 2014; Warren et al., 2019) or as a set of shared meanings within culturally affiliated groups (O'Donnell and Wardlow, 2000). Thus, under the attribute perspective, objective attribute descriptions of what is considered cool are established through surveys (Rahman, 2013; Sundar et al., 2014; Warren et al., 2019). However, the things that are considered cool are variable, changing according to time and place. What is considered cool becomes obsolete depending on the historical moment, geographic area, or generational situation (O'Donnell and Wardlow, 2000).

The alternative perspective to that of attributes, centered on the cultural foundations of the perception of coolness, points out that group identification would create the phenomenon of coolness as a by-product of the affiliation process (O'Donnell and Wardlow, 2000), due to the sharing of cultural meanings. In this way, coolness would be what is normatively established as cool, according to belonging to a certain demographic segment, generating qualifications of coolness according to social variables. This idea was absorbed from the perspective of attributes through the dimensions of cultural identification of the main existing measurement scales (Sundar et al., 2014; Warren et al., 2019).

From this alternative, culture-based perspective, attitudes, behaviors, and lifestyles endorsed by the group would be adopted as a means of indicating cultural affiliation (O'Donnell and Wardlow, 2000). On the other hand, from the perspective of objective attributes, one seeks to identify a general structure that allows identifying cool beyond context (Rahman, 2013; Sundar et al., 2014; Warren et al., 2019). But, paradoxically, what gets reported is what is considered cool as a function of geographic region and moment in time (O'Donnell and Wardlow, 2000), given that different measures will have unavoidable and attributed variability across case studies. The criticism of this attribute perspective is that it tends to be an atheoretical perspective, preferring to address it exclusively as an objective fact empirically, without a process conception, while having unequal methodologies and different scales of measurement (Bruun et al., 2016; Dar-Nimrod et al., 2012; Dar-Nimrod et al., 2018; O'Donnell and Wardlow, 2000; Rahman, 2013; Sundar et al., 2014; Warren et al., 2019).

The alternative culture-based, group-based perspective seeks to understand the process of identity construction and group affiliation that leads to defining a product, service or brand as cool (O'Donnell and Wardlow, 2000), establishing the cause of the variability of what is cool and what is not cool for diverse demographic segments. However, this group perspective has not developed methodological approaches or instruments to empirically address these issues, and there is a weakness in the group perspective in its empirical scope. The closest to these ideas are found as subdimensions in different instruments of the objective attributes perspective, in which a cultural identification parameter is defined. Both Sundar et al. (2014) and Warren et al. (2019), the two main proposals for scales to measure the perception of cool attributes, one focused on technological products and the other associated with brands, establish a cultural dimension related to identity and group affiliation. This dimension establishes that users use the elements perceived as coolness to strengthen their identity and reflect their interests, distinguishing themselves as members of a specific social particularity that differentiates or distinguishes them from the generality, based on subcultures (Kim and Park, 2019; Sundar et al., 2014; Warren et al., 2019).

There is different research that addresses this cultural dimension empirically; for example, there is Kock (2021) who analyzes the tourist attractiveness of cities perceived as cool,

addressing this cultural dimension in his model; Lv et al. (2024) uses the subcultural attractiveness dimension of Sundar et al. (2014) to analyze the purchase of vehicles denominated as new energy or alternative energy to traditional combustion; Nan et al. (2022) also uses the Sundar et al. (2014) scale, which incorporates the subcultural attractiveness dimension to investigate the market for video game consoles; as does Raptis et al. (2017) focusing on mobile devices; and Ashfaq et al. (2021) focusing their research on smart speakers; along with Cha (2020) analyzing customers' intention to use robot services in restaurants; Guerreiro and Loureiro (2023) addressing the interaction of humans and AI-enabled smart voice assistants; Jimenez-Barreto et al. (2022) who investigate how the perception of coolnes enhances customer experience in relation to their community connection to the brand and loyalty; and Khoi and Le (2022) use this dimension to address research in luxury hotels.

For the most part, the research uses the Sundar et al. (2014) proposal, for whom subcultural attractiveness is a relevant attribute to understand the perception of coolness, followed by the Warren et al. (2019) proposal. The first scale of Sundar et al. (2014) is focused on technology, while the second scale of Warren et al. (2019) is oriented to evaluate brands. In the case of the proposal by Warren et al. (2019), this group dimension is also addressed through the category of subculture, proposing that cool brands are associated with specific groups, given that this cultural association generates the satisfaction of social differentiation on the part of customers; for example, there are brands connected to subcultures such as Black Diamond related to mountain climbers, Converse linked to people who listen to alternative music or Nike related to athletes. In this way, it is posited that the research is consistent with the idea that cool brands are associated with specific subcultures (Warren et al., 2019). In this framework of theoretical discussion, it is possible to establish the following proposition about the coolness phenomenon:

Proposition: The implementation of surveys to perceive coolness attributes will generate data amenable to hierarchical or multilevel group analysis, because the variability of responses will be explained by group membership rather than exclusively by individual variability.

METHODOLOGY

The methodology used in this study aimed to examine the perception of brand coolness through a group analysis that considers cultural identification and the impact of subculture membership on this perception. This approach allowed investigating how group membership influences the variability of individual responses, to establish whether the sense of belonging to a subculture contributes significantly to the variability of brand coolness perception.

To measure this perception, the Warren et al. (2019) brand coolness perception scale was used, which comprises ten dimensions, one of which is rated as subcultural and is specifically designed to capture the influence of group identification. With the expectation of finding variability as a function of group membership, a questionnaire was administered that included the original 37 items of this scale, along with an open-ended question so that participants could freely identify with a specific subculture. The items were translated into Spanish using the back-translation technique and were presented to peer experts from the cultural context of the case study for validation. The case study is geographically located in the city of Santiago, Chile, during the year 2024. The participants involved in the study were voluntary higher education students, generating a convenience sample composed of 87 individuals. The scope of this research is exploratory because it tests the theoretical proposition of the research in a particular case, establishing the basis for future research that will allow generalizing these results in different or broader contexts.

The cultural identification responses obtained through the survey-type instrument, associated with group membership, were then coded to enable group analysis using the Intraclass Correlation Coefficient (ICC1 and ICC2). These metrics made it possible to quantify the percentage of variability in responses attributed to group membership, thus providing a measure of group consistency and the relevance of the group variable in the context of perceived coolness explained by group membership.

Before undertaking the group analysis, the reliability and validity of the Warren et al. (2019) instrument was verified. This included an exploratory and confirmatory factor analysis, which allowed identifying the underlying structure of the construct dimensions and corroborating their appropriateness to the study context. Additionally, Cronbach's alpha was

employed to assess the internal reliability of the scale, and a discriminant validity analysis through the extraction of explained variance (AVE), comparing the correlations between dimensions with the square root of the AVE, in order to ensure that each dimension captured distinct elements within the perception of coolness. This comprehensive approach ensured a solid statistical basis for the multilevel analysis, aimed at understanding how subcultural identification may play a relevant role in the collective perception of the coolness of the Jordan Air brand as a function of group membership. The instrument is composed of the original 37 items or propositions available in Warren et al. (2019).

RESULTS

In this research, we seek to examine the perception of brand coolness through a group analysis that considers cultural identification and the impact of belonging to subcultures in this perception of the brand. For this purpose, an online survey was conducted to 87 Chilean people, who were volunteer participants belonging to a higher education institution in the city of Santiago de Chile, who responded to the brand coolness survey of Warren et al. (2019), in relation to the Nike's Jordan Air sneakers brand. In this sense, the sample was made up of voluntary participants, established by convenience.

They were presented with an image of the brand and the sneakers as an initial stimulus, along with the survey instrument, and were asked to categorize themselves in a group culture in which they felt identified. Regarding group identification, the following group identification categories emerged inductively: 1) Animalist; 2) Sportsman; 3) Gamer; 4) Hip Hop; 5) K-Popper; 6) Libertarian; 7) Nerd; 8) Otaku; 9) Reggaetonero; 10) Skater. The detail of the group identification responses is set out in Table 1. The demographic characteristics related to age, gender and place of residence are found in Table 2, 3, 4 and 5. The sample is mainly composed of people who identify themselves as athletes, gamer and k-popper, with an average age of 24.49 years with a standard deviation of 7.489. The places of residence are from the city of Santiago, mainly from the communes of La Florida, Puente Alto and Maipú. This territorial situation could generate limits in the variability of the responses,

understanding that the inhabitants of the city of Santiago are also a cultural group that overlaps the belonging between the different subcultures. This situation is approached exploratorily, generating the need to apply this research in different demographic contexts.

Table 1

Frequency of group identification

		Frequency	Percentage	Cumulative percentage
Group Membership	Animal Lover	7	8,0	8,0
	Athlete	14	16,1	24,1
	Gamer	20	23,0	47,1
	Hip Hop	7	8,0	55,2
	K-Popper	9	10,3	65,5
	Libertarian	6	6,9	72,4
	Nerd	6	6,9	79,3
	Otaku	6	6,9	86,2
	Reggaeton	8	9,2	95,4
	Skater	4	4,6	100,0
	Total	87	100,0	

Note. Prepared by the authors using SPSS.

Table 2

Age frequency

		Frequency	Percentage	Cumulative percentage
Years	18	1	1,1	1,1
	19	1	1,1	2,3
	20	16	18,4	20,7
	21	18	20,7	41,4
	22	17	19,5	60,9
	23	7	8,0	69,0
	24	6	6,9	75,9
	25	3	3,4	79,3
	26	2	2,3	81,6
	27	2	2,3	83,9
	28	2	2,3	86,2
	31	2	2,3	88,5
	32	1	1,1	89,7
	33	1	1,1	90,8
	34	1	1,1	92,0
	36	1	1,1	93,1

	38	1	1,1	94,3
	39	1	1,1	95,4
	45	2	2,3	97,7
	50	1	1,1	98,9
	66	1	1,1	100,0
	Total	87	100,0	

Note. Prepared by the authors using SPSS.

Table 3

Respondent Age Description

	Sample	Age Range	Minimum Age	Maximum Age	Media de Edad	Desv. Error of Mean Age	Age Deviation	Age Variance
Age	87	48	18	66	24,49	,803	7,489	56,090

Note. Prepared by the authors using SPSS.

Table 4

Description of Respondent Gender

		Frequency	Percentage	Cumulative percentage
Gender	Female	39	44,8	44,8
	Male	48	55,2	100,0
	Total	87	100,0	

Note. Prepared by the authors using SPSS.

Table 5

Residential Description of Respondents

Santiago City		Frequency	Percentage	Cumulative percentage
Communes	Antofagasta	1	1,1	1,1
	Buin	2	2,3	3,4
	Cerro Navia	2	2,3	5,7
	Colina	1	1,1	6,9
	Conchalí	1	1,1	8,0
	El Bosque	1	1,1	9,2
	El Quisco	1	1,1	10,3
	Estación Central	1	1,1	11,5
	Huechuraba	1	1,1	12,6
	Independencia	1	1,1	13,8

	La Cisterna	1	1,1	14,9
	La Florida	8	9,2	24,1
	La Reina	1	1,1	25,3
	Lampa	2	2,3	27,6
	Las Condes	2	2,3	29,9
	Lo Barnechea	2	2,3	32,2
	Lo Espejo	2	2,3	34,5
	Lo Prado	2	2,3	36,8
	Los Andes	1	1,1	37,9
	Maipú	10	11,5	49,4
	Melipilla	1	1,1	50,6
	Ñuñoa	1	1,1	51,7
	Padre Hurtado	1	1,1	52,9
	Paine	1	1,1	54,0
	Peñalolén	1	1,1	55,2
	Polpaico	1	1,1	56,3
	Pudahuel	3	3,4	59,8
	Puente Alto	10	11,5	71,3
	Quilicura	4	4,6	75,9
	Quinta Normal	3	3,4	79,3
	Rancagua	1	1,1	80,5
	Recoleta	1	1,1	81,6
	Renca	4	4,6	86,2
	San Bernardo	3	3,4	89,7
	San Miguel	1	1,1	90,8
	Santiago	8	9,2	100,0
	Total	87	100,0	

Note. Prepared by the authors using SPSS.

The application of the Warren et al. (2019) survey is based on a model composed of 10 dimensions. In order to validate this dimensionality in the selected sample of this study, formed by convenience sampling through voluntary participants, different reliability operations are performed, including Cronbach's alpha, exploratory factor analysis, and confirmatory factor analysis, along with discriminant validity analysis using the root of the AVE. In this sense, the Cronbach's alpha of the survey applied as a unidimensional construct that averaged all dimensions reached a high reliability of 0.961. The 37 original items of the instrument were considered in this application.

Regarding the application of the exploratory factor analysis, with a KMO and Bartlett's sphericity test, it is confirmed that there is dimensionality in the data structure, resulting in a Kaise-Meyer-Olkin measure of sampling adequacy of 0.863 and a sphericity test significant

at 0.000. However, in this exploratory factor analysis, the 10 dimensions of the original model of Warren et al. (2019) were not found. The results of the exploratory factor analysis suggest the existence of eight dimensions. However, problems were identified in the iconic dimension, which does not present a defined loading, as well as an overlap between the dimensions of originality and authenticity. In addition, there are some items with low communalities. This is shown in Tables 6, 7, and 8. In spite of this situation, a confirmatory factor analysis is attempted considering the 10 dimensions. However, when testing the original 10-dimensional model, the confirmatory factor analysis results in an RMSA of 0.83. This value exceeds the limit of a good fit. Likewise, when analyzing the discriminant validity, the findings of the exploratory factor analysis are confirmed, in which overlaps between originality and authenticity are observed, as can be seen in Table 9.

By eliminating the iconic dimension -which did not load on any factor in the exploratory factor analysis- and combining the dimensions of originality and authenticity, which presented discriminant validity problems, the fit of the general model is improved. Thus, the eight dimensions originally suggested are maintained, achieving a minimum RMSA value of 0.8. Nevertheless, an overlap persists with the rebelliousness dimension in the discriminant validity analysis, as shown in Table 10. By eliminating the items with weaker loadings in the exploratory factor structure and combining the originality, authenticity and rebelliousness dimensions, which presented discriminant validity problems, a good model fit is achieved, with an RMSA of 0.76, a CFI of 0.932, and adequate discriminant validity between the different dimensions. In addition, this new model structure presents an acceptable reliability, with an average Cronbach's alpha of 0.951 when considering all dimensions. In this sense, the model resulting from the exploratory and confirmatory factor analysis suggests that the seven-dimensional solution, in which originality, authenticity, and rebelliousness are combined and the iconic dimension is discarded, achieves adequate discriminant validity among the dimensions, as shown in Table 11.

Table 6

Communalities

Communalities		
Items	Initial	Extraction
A1: He is exceptional	,903	,841
A2: He is magnificent	,817	,648
A3: He is fantastic	,869	,804
A4: He is extraordinary	,911	,929
B5: He is energetic	,775	,751
B6: He is outgoing	,771	,452
B7: He is lively	,715	,556
B8: He is vigorous	,700	,544
C9: He looks good	,909	,861
C10: He is aesthetically appealing	,926	,894
C11: He is attractive	,896	,866
C12: He has a very pleasing appearance	,856	,823
D13: He is innovative	,826	,668
D14: He is original	,871	,847
D15: He does his own thing	,827	,797
E16: He is authentic	,809	,782
E17: He is true to his roots	,645	,534
E18: He does not seem artificial	,716	,556
E19: He does not try to be something he is not	,431	,172
F20: He is rebellious	,765	,739
F21: He is defiant	,788	,659
F22: He is not afraid to break the rules	,755	,654
F23: He is a nonconformist	,570	,381
G24: He is elegant	,683	,537
G25: He is glamorous	,855	,757
G26: He is sophisticated	,870	,877
G27: He is luxurious	,721	,569
H28: He is liked by most people	,662	,541
H29: He is fashionable	,774	,655
H30: He is popular	,827	,767
H31: He is Widely accepted	,709	,520
I32: It makes people who wear it stand out from others	,636	,549
I33: If I wore it, it would make me stand out from others	,939	,934
I34: It helps people who wear it stand out from the crowd	,943	,913
I35: People who wear this brand are unique	,699	,660
J36: It is a cultural symbol	,759	,739
J37: It is iconic	,785	,704
Extraction method: principal axis factorization.		

Note. Prepared by the authors using SPSS.

Table 7

Factors and Total Variance Explained

	Initial eigenvalues			Sums of squared charges of extraction			Sums of charges squared by rotation		
	Total	% variance	% accumulated	Total	% variance	% accumulated	Total	% variance	% accumulated
1	15,988	43,211	43,211	15,721	42,489	42,489	3,904	10,552	10,552
2	2,724	7,363	50,574	2,424	6,551	49,040	3,620	9,783	20,334
3	2,109	5,699	56,273	1,802	4,870	53,909	3,459	9,349	29,683
4	1,926	5,206	61,479	1,632	4,410	58,319	3,423	9,250	38,934
5	1,549	4,187	65,666	1,251	3,381	61,700	3,080	8,324	47,258
6	1,281	3,462	69,128	1,012	2,736	64,436	3,041	8,218	55,476
7	1,187	3,208	72,335	,866	2,340	66,775	2,785	7,527	63,003
8	1,092	2,950	75,286	,773	2,089	68,865	2,169	5,862	68,865
9	,941	2,543	77,829						

Extraction method: principal axis factorization.

Note. Prepared by the authors using SPSS.

Table 8

Factors and Total Variance Explained

Rotated factor matrix[a]								
Ítems	Factor							
	1	2	3	4	5	6	7	8
A1: He is exceptional							,649	
A2: He is magnificent							,461	
A3: He is fantastic							,613	
A4: He is extraordinary							,701	
B5: He is energetic						,630		
B6: He is outgoing						,392		
B7: He is lively						,535		
B8: He is vigorous	,412					,373		
C9: He looks good		,732						
C10: He is aesthetically appealing		,768						
C11: He is attractive		,735						
C12: He has a very pleasing appearance		,712						
D13: He is innovative	,526							
D14: He is original	,739							
D15: He does his own thing	,610							
E16: He is authentic	,721							
E17: He is true to his roots	,598							
E18: He does not seem artificial	,402							
E19: He does not try to be something he is not						,359		

F20: He is rebellious									,791
F21: He is defiant									,514
F22: He is not afraid to break the rules									,462
F23: He is a nonconformist								,540	
G24: He is elegant							,662		
G25: He is glamorous							,749		
G26: He is sophisticated							,847		
G27: He is luxurious							,509		
H28: He is liked by most people								,643	
H29: He is fashionable								,709	
H30: He is popular								,839	
H31: He is Widely accepted								,608	
I32: It makes people who wear it stand out from others						,623			
I33: If I wore it, it would make me stand out from others						,873			
I34: It helps people who wear it stand out from the crowd						,868			
I35: People who wear this brand are unique						,639			
J36: It is a cultural symbol								,691	
J37: It is iconic					,486				
Extraction method: principal axis factorization. Rotation method: Varimax with Kaiser normalization.									
a. The rotation has converged in 9 iterations.									

Note. Prepared by the authors using SPSS and AMOS.

Table 9

Correlations, AVE and Square Root of AVE of the 10-dimensional model

	A	B	C	D	E	F	G	H	I	J
A	AVE: 0,780 (AVE Root: 0,883)									
B	0,751	AVE: 0,540 (AVE Root: 0,734)								
C	0,718	0,541	AVE: 0,850 (AVE Root: 0,921)							
D	0,725	0,727	0,734	AVE: 0,680 (AVE Root: 0,824)						
E	0,755	0,818	0,705	0,954	AVE: 0,410 (AVE					

					Root: 0,640)					
F	0,760	0,754	0,517	0,752	0,764	AVE: 0,500 (AVE Root: 0,707)				
G	0,654	0,439	0,640	0,645	0,620	0,529	AVE: 0,670 (AVE Root: 0,818)			
H	0,508	0,403	0,572	0,486	0,379	0,381	0,319	AVE: 0,600 (AVE Root: 0,774)		
I	0,631	0,533	0,485	0,511	0,543	0,626	0,474	0,314	AVE: 0,710 (AVE Root: 0,842)	
J	0,676	0,564	0,617	0,766	0,751	0,434	0,608	0,471	0,431	AVE: 0,650 (AVE Root: 0,806)

Note. Prepared by the authors using SPSS.

Table 10

Correlations, AVE and Square Root of AVE of the model with 8 dimensions

	A	**B**	**C**	**D-E**	**F**	**G**	**H**	**I**
A	AVE: 0,790 (AVE Root: 0,888)							
B	0,749	AVE: 0,540 (AVE Root: 0,734)						
C	0,717	0,540	AVE: 0,850 (AVE Root: 0,921)					
D-E	0,730	0,752	0,719	AVE: 0,540 (AVE Root: 0,734)				
F	0,764	0,752	0,518	0,745	AVE: 0,500 (AVE			

					Root: 0,707)			
G	0,655	0,438	0,641	0,629	0,530	AVE: 0,670 (AVE Root: 0,818)		
H	0,502	0,398	0,565	0,437	0,377	0,313	AVE: 0,560 (AVE Root: 0,748)	
I	0,630	0,533	0,484	0,517	0,621	0,474	0,313	AVE: 0,530 (AVE Root: 0,728)

Note. Prepared by the authors using SPSS and AMOS.

Table 11

Correlations, AVE and Square Root of AVE of the model with 7 dimensions

	A	**B**	**C**	**DEF**	**G**	**H**	**I**
A	AVE: 0,790 (AVE Root: 0,888)						
B	0,751	AVE: 0,580 (AVE Root: 0,761)					
C	0,719	0,549	AVE: 0,850 (AVE Root: 0,921)				
D-E-F	0,699	0,737	0,716	AVE: 0,840 (AVE Root: 0,916)			
G	0,632	0,405	0,606	0,524	AVE: 0,890 (AVE Root: 0,943)		
H	0,494	0,371	0,553	0,405	0,258	AVE: 0,630 (AVE Root: 0,793)	
I	0,630	0,537	0,485	0,513	0,432	0,329	AVE: 0,710 (AVE Root: 0,842)

Note. Prepared by the authors using SPSS and AMOS.

DISCUSSION OF RESULTS

In relation to the effects of group identification with a specific subculture, each dimension has a different result. In the case of the cultural identification dimension, the application of an ANOVA indicates that with a p-value of 0.00355, it is statistically significant at 99%, suggesting significant differences in cultural identification between groups, which was expected according to the theoretical discussion. The sum of squares for the group identification factor is 26.85 and with a root mean square of 2.9828. For the residuals, the sum of squares is 75.26, and the root mean square is 0.9774. The F-value of 3.052 indicates the relationship between between-group variance and within-group variance for cultural identification, suggesting that subcultural group membership contributes significantly to the variability of the cultural identification dimension of the Warren et al. (2019) instrument.

In the case of ICC1, 0.1908 is reached. This indicates that 19.08% of the total variability in cultural identification is due to differences between groups. This value is relevant, as it highlights the influence of group identification in the construction of cultural identification, particularly regarding the perception of coolness. Regarding ICC2, a value of 0.6723 is achieved. This indicates good reliability and group coherence in the measure of cultural identification. Thus, the cultural identification variable shows significant differences between the groups identified in the survey, with a high ICC1 and ICC2, indicating that belonging to a team has a relevant impact on the cultural identification scores associated with the perception of brand coolness.

In this way, group measures could be used with reliability when analyzing the cultural identification dimension in the perception of brand coolness. In this sense, when applying a multilevel model, the results indicate an inter-team variance of 0.2898 with a standard deviation of 0.5383. The residual variance is 0.9906, and the standard deviation of 0.9953. These values indicate that there is variation between groups. The group reliability values have a value of 0.6877. This suggests that the reliability of the group scores of cultural identification in the perception of coolness is high in most groups, reflecting internal consistency. Comparing a multilevel model with a fixed effects model, using the likelihood ratio test between the fixed effects model and the random effects model, shows a value of

4.7945 with a p-value of 0.0286. Thus, this is statistically significant at 95%, indicating that the multilevel model fits better than the fixed effects model, suggesting that including between-team variation improves the model fit for the group identification dimension in the perception of brand coolness. In this framework, the inclusion of between-group variability improves the model, suggesting that between-team differences are relevant for the cultural identification variable.

Regarding the dimension perceived attribute of extraordinary, the ANOVA analysis has a p-value of 0.0971. This suggests that the differences between the groups do not reach statistical significance at the 95% level, although it is marginally significant at 90%, suggesting a trend towards variability between teams. The ICC1 value is 0.0771, and the ICC2 value is 0.4208. This indicates that 7.71% of the variability is due to group identification, with a reliability of 0.4208. In relation to the dimension on the perception of brand energy, no variability explained by group identification is identified, reaching an ICC1 of 0.012 and an ICC2 of 0.0954. In this sense, the dimension on the perception of brand energy is explained by the individual condition of people, and not by their group identification. The same is true for the dimension of aesthetic perception, with an ICC1 of 0.016 and an ICC2 of 0.1239. About the dimension that merges the perception of originality, authenticity, and rebelliousness, there is no group variability either, reaching an ICC1 of 0.0797 and an ICC2 of 0.4296. However, a 0.0913 p-value was achieved in the ANOVA application, indicating that there is a tendency for there to be differences between group identification in this dimension, suggesting some variability attributable to the groups. About the dimensions of perception of high status and perception of popularity, there is no variability associated with group identification, nor is a significant ANOVA achieved; these dimensions are completely individual variables as indicated by the data.

About the total set of the brand coolness perception scale, including the 7 dimensions established by the exploratory and confirmatory factor analysis, the ANOVA results indicate a p-value of 0.0965 with a marginally significant level of 90% confidence. The sum of squares between teams is 8.80, with a root mean square of 0.9782. For the residuals, the sum of squares is 43.56, with a root mean square of 0.5657. The F-value of 1.729 indicates the

relationship between the between-team variation and the within-team variation. ICC1 is 0.0773, and ICC2 is 0.4217. This suggests that 7.73% of the variability in perceived coolness is explained by differences between group identification, with moderate reliability and acceptable group coherence. Regarding multilevel modeling, the likelihood ratio test indicates an L.Ratio value of 0.4145 with a p-value of 0.0519. This indicates that there are marginally significant differences between the fixed effects model and the multilevel random effects model, suggesting that the inclusion of random effects could significantly improve the fit of the established model for brand coolness perception. Thus, the average group reliability and within-group consistency is moderate to marginal.

Finally, the main limitation of this research is its sample size and composition. The number of people surveyed is small, transforming this research into an exploratory or pilot study. In addition, the demographic variability is very low, being a sample homogeneously constituted by people from the same city, composed of university students selected by convenience. Thus, this limitation also allows us to assume that there is the potential to find greater group variability in a larger and more heterogeneous sample. For this reason, future research should consider a larger and more demographically diverse sample to test the proposition that the implementation of surveys to perceive coolness attributes will generate data susceptible to hierarchical or multilevel group analysis, since the variability of the responses will be explained by group membership and not exclusively by individual variability.

CONCLUSIONS

Through the analysis of the ICC explained by group membership, it is possible to establish that cultural identification is a dimension with significant variability between groups in the perception of coolness in a brand, in this case, Jordan Air sneakers. ANOVA and multilevel analyses indicate that this dimension presents statistically significant differences between teams. These results underline the impact of subcultural group membership on cultural identification and, consequently, on the perception of brand coolness. Thus, the inclusion of intergroup variability would improve an explanatory model, since differences between groups are relevant to the cultural identification variable.

In conclusion, cultural identification is the dimension in which subcultural group membership has a significant impact on the perceived coolness of a brand, which supports the use of multilevel analysis for this dimension. The other dimensions are mainly individual, reflecting that perceived coolness in these aspects responds more to individual factors than to group dynamics; however, these findings could be biased due to the influence of the demographic variable in that the entire sample is homogeneously from the same city, which would make the variability invisible.

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