



Original Article

An assessment of the visual appropriateness of selected brand logos

Seçilen marka logolarının görsel uygunluğunun değerlendirilmesi

Afeez BABATUNDE SIYANBOLA

Fine and Applied Art Department, Faculty of Environmental Design, Olabisi Onabanjo University, Ibojun Campus, Ogun State, Nigeria

ARTICLE INFO

Article history

Received: 24 October 2020

Accepted: 13 June 2021

Key words:

Logo, simplicity, memorability, versatility, distinctness, appropriateness.

Anahtar kelimeler:

Logo, sadelik, akılda kalıcılık, çok yönlülük, farklılık, uygunluk.

ABSTRACT

This paper focuses on assessing the appropriateness of selected logos of popular brands. The paper enunciates the relevance of logos to the public perception of brands. Logos function as signifiers, denotative, point of contact and identifiers. The visual components of logos and the suggestive meanings of shapes which are the building blocks of the pictorial contents are articulated in this study. Thirty (30) logos of popular brands were purposively selected and subjected to the analysis of Eighty (80) constituting of thirty (30) formally trained practicing graphic designers, ten (10) experienced printers and forty (40) individuals whom are familiar with the selected brands. The collated data were analyzed using the Statistical Package of Social Science (SPSS). Findings revealed that logos are visual seals that communicate brand promises to the targeted audience, viewers recall simple logos more easily and logos crammed with colours are not appealing. The study recommended that visual contents of logos should resonate balance, application colours in logos should be limited to two and logos design should be a product of a sound brand strategy.

ÖZ

Bu makale, bazı popüler markaların logolarının bir değerlendirmesidir ve logonun kamunun marka algısıyla ilişkisini açıklamaktadır. Logolar, markanın sembolü ve tanımlayıcısı işlevi görür; hedef kitleye bir anlayış iletirler. Bu çalışmada bir logonun görsel bileşenleri ve görselin önerdiği anlamlar eklenmiştir. Popüler markaların 30 logosu seçildi ve 80 gözden geçirenin analizine tabi tutuldu: 30 resmi eğitimli grafik tasarımcı, 10 deneyimli matbaacı ve seçilen markalara aşina olan 40 tüketici. Derlenen veriler SPSS Statistics yazılımı (IBM Corp., Armonk, NY, USA) kullanılarak analiz edildi. Bulgular, izleyicilerin basit logoları daha kolay hatırladığını ortaya koydu; çok fazla renge sahip karmaşık bir logo çekici değildi ve bu nedenle akılda kalıcı değildi. Bulgular, bir markanın görsel imajının dengeli, 2 renkle sınırlı olması ve tasarımın dikkatle araştırılmış bir marka stratejisinin ürünü olması gerektiğini göstermektedir.

Cite this article as: Babatunde Siyanbola A. An assessment of the visual appropriateness of selected brand logos. Yıldız J Art Desg 2021;8:1:1–11.

*Corresponding author.

*E-mail address: afeezsegun@yahoo.com



INTRODUCTION

Logos are mainly vector graphics that forms an integral part of the visual communication strategies developed for individuals, groups and businesses. Logos are simplest form of brand identity usually represented by a mark or icon. Businesses are identified and differentiated by their visual identities. Logo is the single graphic design application that appears in all the brand design application (Landa, 2010). The competitiveness amongst businesses for public attention and patronage necessitates the need for a strong dynamic visual representation. Logos function as signifiers, denotative, point of contact and identifiers. Historically, logos emanated from the need to create recognizable patterns for identification. Animals were marked with unique symbols so that the owner could lay claims to them when the need arises. The practice involved heating a branding iron that was fashioned into a symbol, letter or name, in a fire, which would then be pressed against the hide of an animal, burning the hair and skin and leaving a permanent scar on the body (Regan, 2007). Also, the social revolution led to the establishment of forgery, counterfeiting, and fraud laws in 1905 for civil protection against use of logo trademarks without authorization within the United Kingdom (West, 1978).

Logos communicate a sense of assurance and project organizations positively to the public. Logo positioning improve brand recognition and leverages an all-inclusive brand equity. The consistent utilization of logo across brand's communicative channels for a good period of time elicits high recall of the brand by the public. Brand value is gained when visual identity arouses public memories and communicates a perception of excellence. Therefore, logo is a sign of promise and fulfilment to the audience. It represents and embodies the entirety of a brand, group or individual it signifies. Logos are often used exclusively in outdoor advertisements due to space and time constrains. Logos can be wordmark which are wholly typographic constituting the nomenclature of the brand; or, symbolic. Symbolic logos combine pictorials with typography depending on the concept. The different categories of symbolic logos are highlighted as follows:

- i. Letterform: These logos are developed using the initials of the company
- ii. Symbol: symbolic logos are either pictorial or abstract.
- iii. Non-objective Logos: These logos are outrightly invented and not visually influenced persons, place or object
- iv. Character icon: Character icon showcases the personality of a brand, cause, or group
- v. Emblem: a combination of words and images that are always seen together, never separated (Landa, 2010).

The components of logo refer to the graphic elements that constitute the content of logos and the style of presentation. Graphic contents are defined by colours and the idea being conveyed by the concept. Integration of colours in logo creates visual balance. The colour composition can be monochrome, two, three or four colours. Aslam (2006),

Table 1. Suggestive meaning of shapes

Geometric shape	Suggestive induction
Circle	Perfection and balance
Square	Stability and power
Rectangle	Duration, Progress
Ellipse	Continue searching
Triangle	Harmony, urge towards
Spiral	Advancement, detaching
Sphere	Perfection, finality

Source: Adir, Adir and Pascual (2012).

emphasizes the importance of colour in corporate and marketing communication as follows:

Color is the medium of communication and is an integral element of corporate communications, it induces emotion and moods, impacts on consumers' perceptions, behavior and differentiate organizations from competitors.

However, the core values of individuals, businesses or groups drives the development of an effective logo. The design processes are guided by insight and intuition, information gathered and interpreted to align with the core values of the group or business. Aesthetic value and visual quality are essential in stimulating an enabling high recognition of the logo. Also, simplicity of style in logo design facilitate seamless and faster mental processing of the logo contents. According to Clark's study, people remember simple figures more easily than complex ones (Lawless, 1978). Geometric shapes are often utilized as the building blocks of logos. Shapes are the expression of the concept rationale imbued in the brand image. These shapes have suggestive meanings that corresponds with the spelt-out core values of brands. Adir, Adir and Pascual (2012) highlight the suggestive visual meanings of selected shapes as shown in the Table 1:

This study reviewed the previous survey studies relating to logo use and consumer perception of logos and hypothesis was generated. The research methodology adopted is quantitative, and the data collected from the field was analyzed using descriptive statistics. The results were discussed. Hence, conclusion recommendation and areas of further research were highlighted.

LITERATURE REVIEW

The rising need of identity design by individuals, group and companies has attracted the interest of scholars and researchers in exploring the consumer's perception of logos. Researches focused on understanding the appropriateness of logo contents. Prior studies have shown that the presentation of the graphical contents influences consumers perception of the brand. Janiszewski and Meyvis (2001), investigated the effects of brand logo on processing fluency and judgement. Janiszewski and Meyvis (2001) posited

Table 2. Mean values of brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	1.8	1.9	0.50404
	Memorable	2.0		
	Distinct	2.1		
	Versatile	1.7		
	Simple	1.9	2.1	1.19822
	Memorable	2.4		
	Distinct	2.3		
	Versatile	1.8		
	Simple	2.5	2.3	1.2934
	Memorable	2.0		
	Distinct	2.6		
	Versatile	2.1		
	Simple	1.0	1.48	0.12376
	Memorable	1.4		
	Distinct	1.6		
	Versatile	1.9		

Source: Researchers fieldwork (2020); SD: Standard deviation.

that expressive stimulus in logos expectedly improve conceptual fluency existing and creating a meaning-based representation of stimulus to facilitate easy encoding. Luffarellin, Stamatogiannakis and Yang (2018) explored the visual asymmetry effect of logo design and brand personality on brand equity, the researchers posited that asymmetric logos improve consumers' evaluations of brands with stimulating personality and positively influence the market's financial valuation of the brands. The descriptiveness of logos has been emphasized by many researchers studying the pictorial contents of logos. Mahmood, Luffarellin, Mukesh, (2019) noted that descriptive logos positively influence brand evaluations, purchase intentions and brand performance. Bayunitri and Putri (2016) espoused that pictorial contents of logos indicative of brands business are more effective. Mahajan (2014) revealed that complex descriptiveness of logo pictorials makes it appealing to customers. Pimentel (1996), showed colored pictorials in geometric patterns to respondents whom were asked to evaluate the content and visual quality. The outcome showed that the respondents placed stronger emphasis on content. From the foregoing discussions on literature review, inference and research structure, this study developed a null hypothesis stating that descriptive logos are more appropriate than simple non descriptive

brand logos. Based on the position of previous researches in this area, Apparently, the results of previous researches enunciated in this study revealed that descriptive and expressive brand logos are more favoured by the public. These researches were mostly done by marketing professionals with minimal inputs from graphic designers. Evidence have shown that expressive logos are often not scalable, flexible and timeless (Cass, 2017; Haviv, 2019). Landa (2010) posited that the characteristics of a good logo are memorability, versatility, timeless, coherence, simplicity and flexibility.

Criteria for Visual Appropriateness of Logos

The criteria for measuring the visual appropriateness of logo are anchored on five characteristics. These characteristics are significant in the conceptualization and development of brand logos that are considered to be efficient and effective in communicating brand personalities and potentials. Haviv (2019), asserted that a good logo communicate a feeling of appropriateness which is a function of simplicity, memorability, distinctiveness, and versatility. These four criteria are discussed as follows:

a. Simplicity

Simplicity of logos makes it easily recognizable and versatile. Simple logos instantly catches the attention of the intended audience at a glance. According to the Portu-

Table 3. Mean values of brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	1.2	1.5	1.10122
	Memorable	1.7		
	Distinct	1.9		
	Versatile	1.35		
	Simple	1.52	1.6	1.06963
	Memorable	2.12		
	Distinct	1.5		
	Versatile	1.2		
	Simple	3.9	3.3	0.65854
	Memorable	3.2		
	Distinct	2.5		
	Versatile	3.6		
	Simple	2.3	2.3	1.21071
	Memorable	1.9		
	Distinct	2.0		
	Versatile	3.0		

Source: Researchers fieldwork (2020); SD: Standard deviation.

guese lexical online dictionary (<http://www.lexi-co.pt/simplicidade/>), simplicity is a feminine substantive that may signify three qualities; quality of what is easy to understand or do, luxury absence: to live with simplicity; natural, spontaneity: to speak with simplicity. Simplicity enhances brand visibility and clarity amongst competing brands. Ray (2019) noted that simple logo design clearly communicates to the potential customers and nudge them towards embracing the brand

b. Memorability

Memorable logos oscillate between the thin line of familiarity and uniqueness, the image is simple to be easily recalled and unusually persist in the minds of the viewers (Stewart Design, 2020). Branded in Memory (2020) revealed that most participants struggled to recall exactly via their drawings the logos of globally renowned brands such as Apple, Addidas and Domino Pizza. Memorable logos have simple and unique visuals which strategically convey brands message.

c. Distinctiveness

Distinctive features in logo design implies strong visual content, that are differentiable and edgy. Distinct cannot be confused with other brand trademarks-; visual concepts of distinct logos are original and identifiable. The quality of visuals in distinctive logos are engaging and bold.

d. Versatility

Versatile logos are scalable and easily reproducible on all communicative platforms. Scalability of logos implies that the visual element maintains proportion when resized. Logos are reproduced on different media platforms being the seal of brand communication. Versatile logos are designed to be reversible on light or dark backgrounds.

METHODOLOGY

The research design for this study is quantitative. Thirty logo identities of businesses in the Telecommunication, Information Technology, Food/Beverage and Fashion were purposively selected based on the notability of the brands in the Nigerian market. The selected logos were subjected to the analysis of eighty respondents (80) constituting of thirty (30) formally trained graphic designers and ten (10) practicing printers based in Somolu and Mushin area of Lagos Metropolis and forty 40 consumers resident in Lagos that are familiar with the selected brands were also sampled. Lagos is the economic capital of Nigeria and reputed for being the advertising and printing hub in Nigeria. Selected logos were further categorized into renowned brands and small-scale brands based on their market reach within and outside Nigeria. The determination of appropriateness of the selected logos was measured using the

Table 4. Mean values of small scale brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	3.5	3.5	0.50404
	Memorable	4.0		
	Distinct	3.1		
	Versatile	3.5		
	Simple	2.7	2.7	1.19822
	Memorable	2.9		
	Distinct	2.5		
	Versatile	2.8		
	Simple	3.0	3.0	1.2934
	Memorable	2.8		
	Distinct	2.7		
	Versatile	3.6		
	Simple	1.4	1.6	0.12376
	Memorable	1.2		
	Distinct	1.7		
	Versatile	1.9		

Source: Researchers fieldwork; SD: Standard deviation.

criteria of appropriateness as articulated by Haviv (2019). These criteria are simplicity, memorability, distinctness and versatility. Therefore, the average mean of the criteria indicates the appropriateness of the logos.

The statistical analysis of this study utilized five (5) point Likert scale formats Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree to collect data from the study population. The data collected were analyzed using mean. The nominal scores and records were attained using Likert scale model: Strongly Agree =5, Agree=4, Undecided=3, Disagree=2, and, Strongly Disagree=1. These were calculated as $5+4+3+2+1 = 15/5 = 3$ (Likert Scale Criterion). The score of each item was summed and the arithmetic mean calculated for each item. The mean is compared with the Likert Scale criterion above (Angyol, 2015). If mean is equal to or above (greater than) the Likert criterion (3.0) then the item is accepted and if the mean is lower than the Likert Scale criterion of (3.0) then the item is rejected. The mean scores and standard deviation values were calculated using the Statistical Package of Social Science (SPSS). Therefore, the average mean score of (3.0) indicate appropriateness of each of the logos.

One null hypothesis was formulated and tested in the study. The hypothesis was tested using the pair sampled t-test to test the significant difference between two independent variables. All hypothesis formulated were tested using α (0.05) level of significance.

RESULTS

The results of the survey are presented in the Tables 2–9:

Simplicity

Some of the brand logos resonate simplicity while others do not. However, it was observed that logos of some small-scale brands looks complex (Fig. 1). The common misconception about logo is that it should be a medium of showcasing the form of business rather than being a simple business identifier.

Memorability

The Logos of sampled renowned brands are more memorable than the small-scale brands as shown in Figure 2.

Distinct

The quality of visuals in distinctive logos are engaging and bold. Figure 3 show that most of the renowned brand logo are distinctive in comparison to small-scale brand logos.

Versatility

Versatility of logos is referred to the scalability and reproducibility properties of logos. Simple logos are scalable and reproducible. The renowned logos are mostly versatile as shown in Figure 4.

Table 5. Mean values of brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	1.9	1.8	0.50404
	Memorable	1.2		
	Distinct	2.1		
	Versatile	1.9		
	Simple	1.3	1.775	0.39426
	Memorable	2.2		
	Distinct	2.3		
	Versatile	1.3		
	Simple	2.5	2.6	1.2934
	Memorable	2.2		
	Distinct	2.6		
	Versatile	3.0		
	Simple	3.5	3.7	0.12376
	Memorable	4.0		
	Distinct	3.0		
	Versatile	4.3		

Source: Researchers fieldwork; SD: Standard deviation.

Table 6. Mean values of brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	1.3	1.55	1.01235
	Memorable	2.1		
	Distinct	1.5		
	Versatile	1.3		
	Simple	3.5	3.3	0.48771
	Memorable	2.7		
	Distinct	3.0		
	Versatile	3.9		
	Simple	3.0	3.5	0.85484
	Memorable	3.1		
	Distinct	4.0		
	Versatile	3.7		
	Simple	4.2	4.2	0.65824
	Memorable	4.3		
	Distinct	4.1		
	Versatile	4.23		

Source: Researchers fieldwork (2020); SD: Standard deviation.

Table 7. Mean values of B logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	4.1	1.8	1.19822
	Memorable	3.8		
	Distinct	4.3		
	Versatile	4.4		
	Simple	4.4	4.3	0.57334
	Memorable	3.6		
	Distinct	4.2		
	Versatile	4.4		
 <small>Guaranty Trust Bank</small>	Simple	4.0	3.8	1.2643
	Memorable	3.2		
	Distinct	4.3		
	Versatile	3.3		
	Simple	4.3	2.1	1.29822
	Memorable	4.1		
	Distinct	3.4		
	Versatile	4.4		

Source: Researchers fieldwork (2020); SD: Standard deviation.

Table 8. Mean values of brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	4.1	4.15	0.39426
	Memorable	3.8		
	Distinct	4.3		
	Versatile	4.4		
	Simple	4.4	4.2	0.57334
	Memorable	3.6		
	Distinct	4.2		
	Versatile	4.4		
	Simple	4.0	3.7	1.2643
	Memorable	3.2		
	Distinct	4.3		
	Versatile	3.3		
	Simple	4.3	4.1	0.65854
	Memorable	4.1		
	Distinct	3.4		
	Versatile	4.4		

Source: Researchers fieldwork (2020); SD: Standard deviation.

Table 9. Mean values of renowned brand logos

Brand logos	Criteria	Mean	Appropriateness (Average mean)	SD
	Simple	3.2	3.5	0.39426
	Memorable	3.3		
	Distinct	4.1		
	Versatile	3.4		
	Simple	4.1	3.8	0.57334
	Memorable	3.5		
	Distinct	4.4		
	Versatile	3.3		
	Simple	4.5	4.025	1.2643
	Memorable	4.3		
	Distinct	3.4		
	Versatile	3.9		
	Simple	3.4	3.6	0.65854
	Memorable	3.2		
	Distinct	3.8		
	Versatile	3.9		

Source: Researchers fieldwork; SD: Standard deviation.

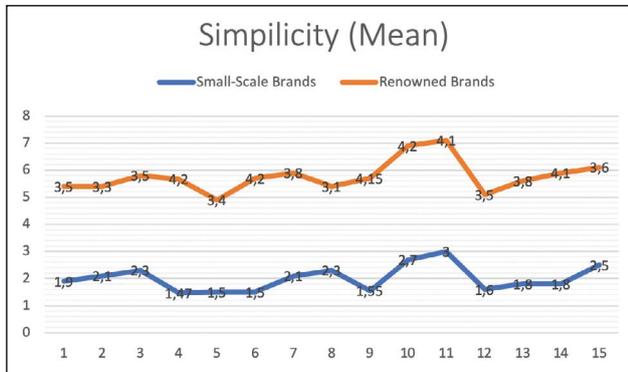


Figure 1. Simplicity in logo [Source: Researchers fieldwork (2020)].

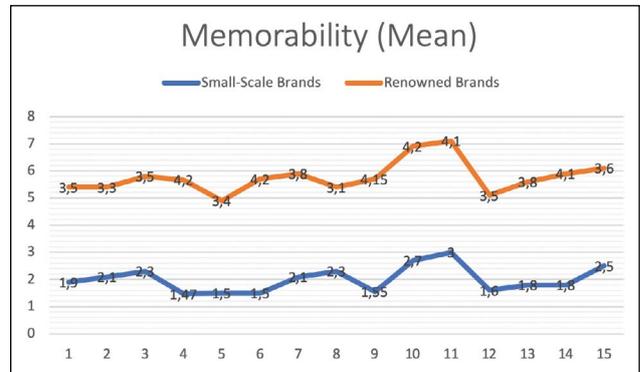


Figure 2. Memorability in logo [Source: Researchers fieldwork (2020)].

Appropriateness

The average mean value of (3.0) and above is an indication of appropriateness of a logo while (2.9) and below represent a non-appropriateness of a particular logo. Figure 5 shows that just two logos amongst the small-scale brand logo can be classified as being appropriate. While the renowned brand logos are all appropriate.

Testing of Null Hypotheses

Hypothesis One:

Ho: Descriptive brand logos are more appropriate than Simple and non-descriptive brand logos

Table 10 shows that the mean and standard deviation of descriptive logos and non-descriptive/simple logos are 1.9 and 3.7 and 0.71 respectively. The $t_{cal}=6.16 > t_{crit}=1.97$ and the $p_{value}=0.0001 < 0.05$. Simple brand logos are more appropriate than descriptive brand logos. Therefore, the null hypothesis is rejected.

DISCUSSIONS AND THEORETICAL CONTRIBUTIONS

The average mean results of each of the evaluated criteria are discussed in relation to the visual appropriateness of the brand logos. The average mean values of

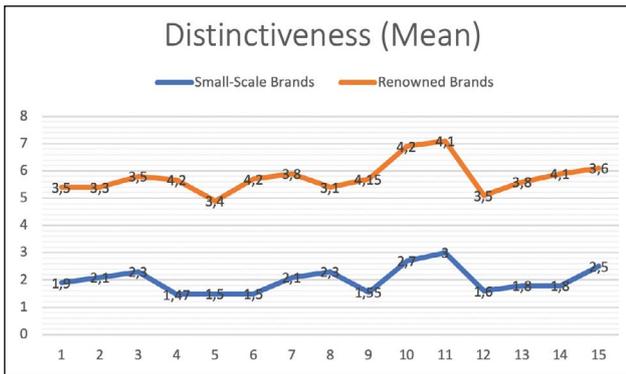


Figure 3. Distinctness in logo [Source: Researchers fieldwork (2020)].

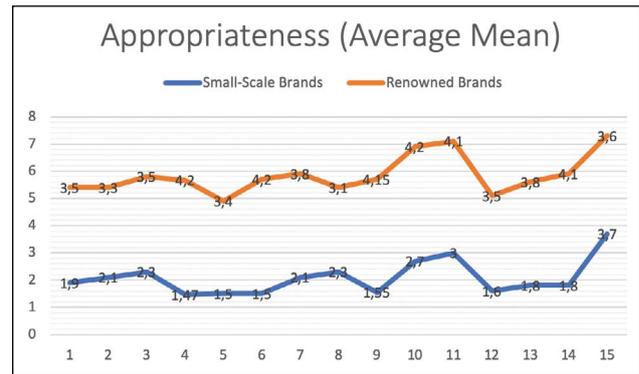


Figure 5. Appropriateness of logo [Source: Researchers fieldwork (2020)].

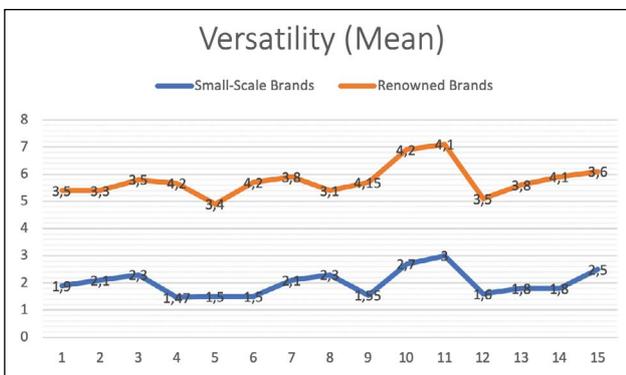


Figure 4. Versatility of logo [Source: Researchers fieldwork (2020)].

3.8 and 2.0 indicates the simplicity that characterize the sampled brand logos. Simplicity is an essential feature of logos. Simple logos are easily processed by the public and communicates the vitality of brands. Complex logo designs possess multiple signals that leads to the confusion in viewer’s minds (Ray, 2019). Simplicity of logos enable easy recognition of logos and make them endure for a long period of time. The sampled logos that are descriptive do not resonate simplicity because the logos are complex and crammed with different design elements. An average mean value of 1.9 and 3.8 indicate the memorability of logos of the sampled brands. Simple logos are memorable; memorable logos are less crammed with colours and pictorial contents.

The average mean values of 4.0 and 1.8 shows the distinctiveness of logos of the brands. Small-scale logos are not versatile because of their descriptive nature,

they are complex and loses qualities when resized. This is evident in the average mean values of 3.8 and 2.0 revealing the versatility of the logos. This study measured appropriateness as the average of the mean values of the specified criteria, this position is informed by the assertion of Haviv (2019). The outcome of this study reflects the processes often adopted by brands in the creation of their logos. Observably, expressive and complex logos are not versatile, reproducible and memorable. Multinational brands engage established Advertising/Design firms who go through the thorough procedure of conducting brand strategy which is fundamental to logo development. The procedure is mostly devoid of personal sentimentalities of the business owners which enable the Design firms to create an appropriate logo for the client. However, some brand owners often wants the visual content to express there nature of business. They miscontrue logos to be a medium of communication rather than identification and this misconception is reflected in quality of logos developed for the small-scale businesses.

Implication for Practice

This study provides a dynamic approach to the conceptualization and development of logos. It enunciates the fundamental features that constitute the perceived appropriateness of logos. Logos are very important to brands because that is the visual element that considerably influence consumer perception and acceptability of brands. Logos are visual seals that communicate brand promises to the targeted viewers. The professionals in the advertising field who are saddled with the responsibility of creating logos for businesses, individual or group are

Table 10. Summary of paired sample t-test for hypothesis one

Variable	N	Mean	S.D	DF	T _{cal}	T _{crit}	P _{value}	Remark
Descriptive logo	40	1.9	0.93	311	6.16	1.97	0.0001	Significance
Simple/non-descriptive logo	40	3.7	0.71					

*: Significant at p≤0.05; Source: Researcher’s fieldwork, (2020).

expected to consider the factors highlighted below when developing a logo:

- i. The visual contents of logos should resonate good spacing and balance.
- ii. Application colours in logos should be limited to two.
- iii. Logos design should be a product of a sound brand strategy.
- iv. The pictorial contents of logos should be less visually descriptive.
- v. Expressive logos are less memorable and versatile.
- vi. Logos should retain their uniqueness irrespective of colours or size.

CONCLUSION

Logos represent a significant aspect of brand strategies and campaigns. The perception of brand logos communicate a feeling of brand value to the public. Logos that are simple, distinct, memorable and versatile are considered appropriate. Appropriate logos are timeless and suitable for a medium of brand communication without being distorted or reworked. Globally renowned brands are reputed for their enduring visual identities and timeless logo. Inappropriate logos are susceptible to change which hurts the emotional connection existing between the loyal customers and the brand. Logo designers need to ensure that the visual contents of logos are created in such a way that they are reversible on light and dark backgrounds. The expressiveness and depiction in the visual contents of logos creates multiple signals and visual complexities that makes the brands less valuable. Appropriate logos are sustainable visual flags that connects the public to the brand.

Areas of Further Research

Further researches need to focus on evaluating the psychological and cultural perception of colours used in logos. The psychological impact of colour are often indicative of the services offered by brands, it could also be reflective of the target demography of audience. Apparently, the logo constitutes the visual liveries of brands. Also, the perception of colours are dependent on cultural implication which varies according to the tradition and custom of different societies. Hence, the choice of colours for brand logo could also be determined by the culture of the target audience.

Ethics: There are no ethical issues with the publication of this manuscript.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Financial Disclosure: The author declared that this study has received no financial support.

REFERENCES

- Adir, Adir and Pascual (2012). Logo design and the corporate identity. *Procedia - Social and Behavioral Sciences* 51 (2012) 650 – 654
- Angyol, M. A. (2015). Development of Alphabet Multimedia Instructional Materials to Enhance Pre-Primary Pupils Education in Samaru Zaria, Kaduna State Nigeria. An Unpublished Masters Dissertation Department of Industrial Design, Ahmadu Bello University Zaria.
- Aslam M. (2006). Are You Selling the right Colour? A cross-cultural review of colour as a marketing cue. *Journal of Marketing Communication* 12(1) 15-30.
- Bayunitri B and Putri S. (2016). The Effectiveness of Visualization the Logo Towards Brand Awareness. *Procedia-Social and Behavioural Sciences* 219(2016) 134-139. www.sciencedirect.com
- Branded in Memory (2020). 10 Iconic Logos. 156 Americans. 80 hours of drawing from memory. Retrieved from signs.com/branded-in-memory on 05/09/2020
- Cass J. (2017). Logo Simplicity. Retrieved from justcreative.com on 24/09/2020
- Haviv W (2019). What makes a Logo Great and Iconic. An online interview retrieved from thefutur.com on 14/07/2020.
- Janiszewski C and Meyvis T (2001). Effects of Brand Logo Complexity, Repetition, and Spacing on Processing Fluency and Judgement. *Journal of Consumer Research* 28(1):18-32. Doi: 10.1086/321945.
- Landa, R. (2010). *Graphic Design Solutions*. Wadsworth Cengage Learning, Boston, USA.
- Lawless H. (1978). Recognition of common odors, pictures, and simple shapes. *Perception & Psychophysics* 1978,24 (6),493.495
- Luffarellin J, Stamatogiannakis A. and Yang H. (2018) The Visual Asymmetry Effect: An Interplay of logo design and Brand Personality on Brand Equity. *Journal of Marketing Research*. <https://doi.org/10.1177/0022243718820548>.
- Luffarelli J. Mukesh M. and Mahmood A. (2019). Let the Logo do the Talking: The Influence of Logo Descriptiveness on Brand Equity. *Journal of Marketing Research*. <https://doi.org/10.1177/0022243719845000>.
- Mahajan N. (2014). An Exploration of Impact of Logo Redesign and Brand Image. *Global Journal of Finance and Management*. Volume 6, Number 3(2014), pp. 209-216. Research India Publication
- Pimentel, R W. (1996). I don't know much about design, but I know what I like: An exploratory study of preference for visual images. Working paper, University of Central Florida.
- Ray H. (2019). Simplicity, A Huge Contributing factor to Logo Design. Retrieved from designhill.com on 7/09/2020

-
- Regan, A. (2011): A brief history of branding. Retrieved at <http://www.articlesbase.com/branding-articles/a-brief-history-of-branding-252518.html>, on 12/06/2018.
- Stewart Design (2020). Principle of Effective Logo Design: Memorable (Part II). Retrieved on 2/09/2020 from sdi-identity.com
- Walsh, F, Page K, and Mittal V. (2006), “Logo Redesign and Brand Attitude: The Effect of Brand Commitment” ACR 2006 Conference, September Orlando, Florida.
- West, E. G. (1978) “Literacy and the Industrial Revolution”, *Economic History Review*, 31(3); 369-383