

Transmission of family identity and consumer response: do consumers recognize family firms?

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Abstract

Purpose – Communicating the identity of a family business generates positive results in consumer response. The paper aims to understand how the efficient transmission of family identity can influence consumer behavior is essential for designing family firms' marketing communication strategies.

Design/methodology/approach – An experimental study based on the eye-tracking technique was designed to determine how attention to (familiar vs non-familiar) visual stimuli on a website influences consumer recognition of a family firm status and how it influences consumer behavior. A sample of 212 individuals was exposed to (simulated) websites of family and non-family firms in the hospitality industry to capture information about their eye movements and measure visual attention to specific stimuli that communicated family identity.

Findings – Visual attention has a direct and positive influence on recognizing family firm's identity (FFI). Through FFI, visual attention has an indirect positive effect on trust in the company and attitude toward the brand (BraAtt). Trust in a firm positively affects purchase intention (PurInt).

Originality/value – It is known that consumers can perceive a FFI; however, there is no study on the sensory mechanisms operating in consumers' perceptions of family identity. The study contributes to understanding how consumers can perceive a FFI. This study proposes a novel method for evaluating consumer responses by transmitting family business identity on digital platforms.

Keywords Family firm identity, Visual attention, Eye-tracking, Consumer responses, Identity transmission, Family firm reputation, Family firm branding

Paper type Research paper

Introduction

According to the branding theory, communicating FFI produces positive results in consumer response (Binz *et al.*, 2018; Micelotta and Raynard, 2011; Schellong *et al.*, 2019). Similarly, the reputational theory points out that family identity is an asset with a high strategic value that provides advantages for these firms' positioning (Alonso-Dos-Santos *et al.*, 2019; Deephouse and Jaskiewicz, 2013). Thus, understanding the strategies and mechanisms that allow the efficient transmission of a FFI is valuable from a theoretical and managerial viewpoint (Micelotta and Raynard, 2011). Capturing consumers' attention is the starting point of the purchase decision process (Van Loo *et al.*, 2015; Solomon *et al.*, 2012). Therefore,

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understanding the effect of visual attention (VisAtt) on the efficacy of family identity transmission and consumer response is critical in positioning the firm (Trabulsi *et al.*, 2015).

Significant progress has been made in the transmission of family identity and consumer response. Orth and Green (2009) show that consumers believe that family businesses deliver better services and generate greater trust, satisfaction and loyalty. Binz *et al.* (2013) note that promoting FFI enhances the positive effect of reputation on consumer preferences. In a web-based research study, Alonso-Dos-Santos *et al.* (2019) find that communicating family identity positively affects attitudes toward the web and buying intention. Other studies support the positive effect of communicating the FFI on consumer perceptions (e.g. Beck and Kenning, 2015; Diéguez-Soto *et al.*, 2017; Beck and Prügl, 2018; Schellong *et al.*, 2019).

According to the marketing literature, people's perceptions are strongly linked to the level of attention the communicational stimuli capture (Krishna, 2012; Sample *et al.*, 2020). Studies have established a direct relationship between visual attention and the volume of information consumers perceive from a communicational stimulus (Ferretti and Marchi, 2020; Ladeira *et al.*, 2019). Similarly, empirical evidence also shows that visual attention influences cognitive aspects related to decoding and understanding messages (Breuer and Rumpf, 2012; Rumpf *et al.*, 2020). Overall, the above evidence calls for attention to the sensory dimension of marketing communication in family firms. Human senses (e.g. visual and auditory) are key to understanding consumer perceptions, judgments and behavior (Hultén *et al.*, 2009; Krishna, 2012; Petit *et al.*, 2019).

Incorporating sensory elements is critical for evaluating the efficiency of communicational stimuli (Alonso-Dos-Santos *et al.*, 2018; Sample *et al.*, 2020). In family businesses, this would allow an understanding of how specific aspects of visual stimuli would influence cognition and consumer behavior (Barroso *et al.*, 2019; Sample *et al.*, 2020). There is a broad agreement on the strategic value of using the FFI in marketing communication (Alonso-Dos-Santos *et al.*, 2019; Beck *et al.*, 2020; Botero *et al.*, 2019; Sageder *et al.*, 2018). However, there is no study assessing consumer response by incorporating sensory aspects to the best of our knowledge. Therefore, this study seeks to answer the following questions. How does visual attention to web stimuli influence consumers' ability to recognize a FFI? Moreover, how does the FFI perception influence consumer response (in terms of BraAtt, trust in the firm [Trust], perceived quality [PerQua] and attitude toward the web [WebAtt])?

An experimental study was designed to assess people's eye movements when exposed to (simulated) websites of family and non-family businesses in the hotel industry to close this gap. Visual attention to the headings of different websites was similar to the experiment performed by Cortinas *et al.* (2019) and George (2005). In this way, it was found that visual attention to the web stimulus (header) positively and directly influences the recognition of the FFI. Through the FFI, visual attention indirectly affects consumer response in terms of BraAtt and Trust. FFI positively influences brand attitude, Trust, PerQua and WebAtt. It also has an indirect influence on PurInt through PerQua. Finally, Trust positively influences consumers' PurInts.

This paper is organized as follows: The following section develops the theoretical discussion that supports the hypotheses under analysis. Section 3 explains the study design and methodological aspects of the study. Section 4 presents the results and analyzes them based on the hypotheses raised. Section 5 presents a discussion and informs the conclusions in light of the study results and previous literature. Section 6 provides the theoretical, methodological and practical implications of this study. Finally, the last section proposes ideas for future studies based on the acknowledged study limitations.

Theoretical framework and hypothesis support

Visual attention and family firm identity transmission

Organizational identity relates to the distinctive and socially significant characteristics perceived, shared and maintained by its members (Albert and Whetten, 1985; Dutton and

Dukerich, 1991; Ravasi and Schultz, 2006; Zavyalova *et al.*, 2017). They represent an essential resource, which can be communicated to different stakeholders and plays a fundamental role in the business' brand positioning (Koporcic and Halinen, 2018; Zachary *et al.*, 2011). In the family firm context, organizational identity is strongly connected to the controller's family identity (Botero *et al.*, 2013; Tagiuri and Davis, 1996; Vincent *et al.*, 2019). This identity is related to the family presence in the firm and family history, symbols, traditions and values (Blodgett *et al.*, 2011; Blombäck and Brunninge, 2013; Micelotta and Raynard, 2011; Urde *et al.*, 2007).

Family businesses communicate their identity by differentiating themselves from competitors by exploiting the uniqueness of their identity (Beck, 2016; Craig *et al.*, 2008; Whetten *et al.*, 2014). It has been reported that communicating family identity can generate both positive (e.g. trusted) and adverse (e.g. small and resourceful) associations in those who receive these communicational stimuli (Botero *et al.*, 2018). However, empirical evidence confirms ample benefits (rather than costs) in terms of consumer response such as Trust, BraAtt, WebAtt and PurInt (Alonso-Dos-Santos *et al.*, 2019; Beck and Kenning, 2015; Binz *et al.*, 2013; Lude and Prügl, 2018). Thus, family firms must communicate their family identity to consumers and other stakeholders efficiently. Figure 1 shows the theoretical integration of the family firm branding theory and reputation theory. The schema presents the principal issues involved in the relationship between FFI transmission and consumer response and the role of visual attention as a mechanism to encourage consumers' perceptions of visual stimuli in marketing communication.

To successfully transmit a firm's identity, the ability of communicational stimuli (e.g. visual attention) to generate sensory responses is critical (Artacho *et al.*, 2020; Ebrahim *et al.*, 2016; Kastenholz *et al.*, 2020). These sensory responses express an individual's cognitive connection with a message (Chung *et al.*, 2016; Hagtvædt, 2020; Lee *et al.*, 2018). According to Zanon *et al.* (2019), family businesses show visual cues, such as family names and images, to communicate their family identity through multiple communicational channels; the firm's website is one of them. Previous study suggests that website headers are a focal point that contribute to brand recognition (Cortinas *et al.*, 2019). Therefore, headers are critical in this type of web platform performance, as they are extremely effective in capturing people's attention (Bucher and Schumacher, 2006; Loyola *et al.*, 2015).

Attention to visual stimuli (header, particularly in this case) is necessary for better cognitive processing and message understanding (Breuer and Rumpf, 2012; Fotea *et al.*, 2019; Rumpf *et al.*, 2020). Empirical evidence shows that greater attention to focal points increases subsequent brand recognition (Bucher and Schumacher, 2006; Cortinas *et al.*, 2019; Loyola *et al.*, 2015). There is also evidence of a positive relationship between attention and brand recall (Sutcliffe and Namoune, 2008). There is a broad agreement that higher levels of attention to focal points (such as website headers) improve the understanding of communicational messages (Amatulli *et al.*, 2016; Hwang and Lee, 2018; Khachatryan *et al.*, 2018). This suggests the hypothesis as follows:

- H1. Consumers' visual attention to the header of a website has a direct positive influence on consumers' recognition of the FFI.

Visual attention would have a positive and direct influence on the firms' ability to achieve brand recognition, which is critical in understanding communicational messages (Alonso-Dos-Santos *et al.*, 2020a,b; Hwang and Lee, 2018). It has been reported that greater attention to the focal points of specific communicational stimuli has a direct and indirect positive influence on consumer perceptions about businesses (Rumpf *et al.*, 2020; Vriens *et al.*, 2020). Studies on family firms report a direct and positive influence of family identity communication on people's perceptions of them in several ways (Alonso-Dos-Santos *et al.*, 2019; Barroso *et al.*, 2019; Beck and Prügl, 2018). Accordingly, as attention positively

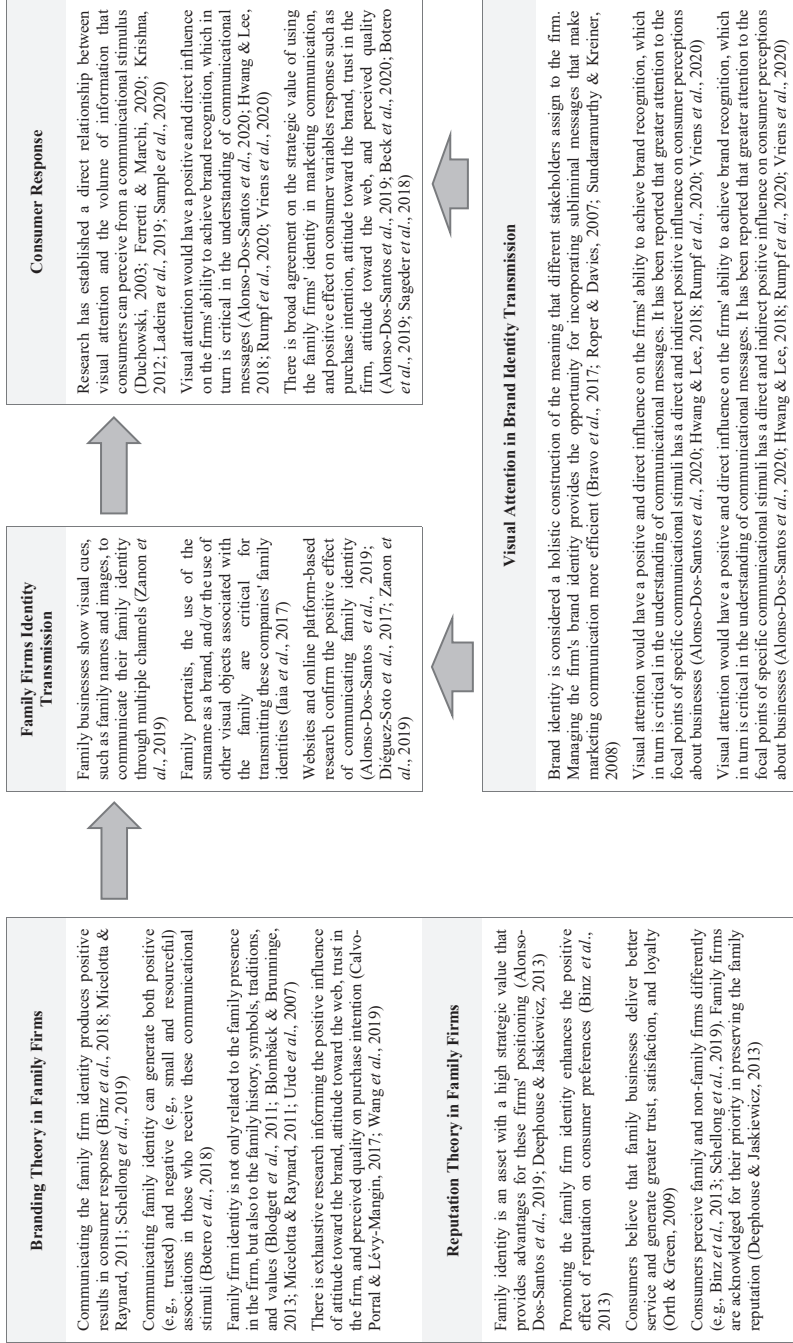


Figure 1. Theoretical integration of family identity transmission

influences consumers' recognition of FFI and communication positively influences consumers' responses, it is expected that visual attention will have an indirect effect on consumer response variables. This suggests the hypothesis as follows:

- H2. The visual attention of consumers to the header of a website has a positive-indirect influence through the family identity of the company on (1) the BraAtt, (2) the Trust, (3) the PerQua and (4) the WebAtt.

Recognizing family firms' identity and consumer response

The transmission of brand identity includes analyzing a set of subliminal elements in its communication (Amatulli *et al.*, 2016; Laeng *et al.*, 2016; Zajonc, 2001). In family businesses, a firm's identity is closely related to the family, its history, vision and values (Vincent *et al.*, 2019). Brand identity is considered a holistic construction of the meaning different stakeholders assign to a firm (Bravo *et al.*, 2017; Roper and Davies, 2007). Managing a firm's brand identity provides the opportunity to incorporate subliminal messages that make marketing communication more efficient (Sundaramurthy and Kreiner, 2008). Family portraits, the use of the surname as a brand and/or other visual objects associated with the family are critical for transmitting these companies' family identities (Iaia *et al.*, 2017). However, although extensive evidence confirms the positive effect of communicating family identity on consumer response (e.g. Beck and Kenning, 2015; Beck and Prügl, 2018; Lude and Prügl, 2018), its measurement integrates the effect of visual attention is not yet clear.

Consumers perceive family and non-family firms differently (Binz *et al.*, 2013; Schellong *et al.*, 2019). Family firms are acknowledged for their priority in preserving their family reputations (Deephouse and Jaskiewicz, 2013). Similarly, there is a study indicating the positive impact of communicating family identity on consumer response. In this way, Beck and Prügl (2018) found that communicating family identity positively influences consumer confidence and PurInt. Lude and Prügl (2018) confirm this and add authenticity as a moderator of this relationship. Binz and Smit (2013) conclude that companies' proximity to their consumers leads them to be perceived as more responsible and committed to their environment. However, recent studies create controversy, suggesting that it would not be true in all cases. Shen and Tikoo (2021) found that communicating familiar identity in a package does not positively affect consumers' perceived product quality.

Websites and online platform-based research confirm the positive effect of communicating family identity. Thus, Diéguez-Soto *et al.* (2017) found that hotels that communicate their family identity on booking platforms have higher popularity levels than those that do not communicate this information. Alonso-Dos-Santos *et al.* (2019) confirmed the effectiveness of this stimulus on attitudes toward the web and PurInt. Similarly, Zanon *et al.* (2019) affirm that the family business identity in social networks directly impacts the brand's perceived authenticity, improving the level of consumer identification with the family brand. Although the models tested in the works discussed above do not include the effect of visual attention, they provide ample evidence of the positive influence (direct and indirect) of communicating the family business identity on consumer response. This supports the hypothesis as follows:

- H3. Consumers recognize that the FFI has a positive and significant influence on (1) BraAtt, (2) Trust, (3) PerQua and (4) WebAtt.

Exhaustive studies inform the positive influence of BraAtt, WebAtt, Trust and PerQua on PurInt. Calvo-Porrall and Lévy-Mangin (2017) found that PerQua is strongly related to the PurInt of the store's brands. Wang *et al.* (2019) confirm that PurInt formation depends on a positive brand attitude. Thus, it is expected that a better BraAtt, Trust, PerQua and WebAtt will result in higher buying intention in any firm, particularly in family firms. Similarly,

because of the positive influences of these factors on PurInt and the positive influence of FFI transmission on them, it is expected that they would mediate the relationship between FFI communication and PurInt. This supports the hypotheses as follows:

- H4. (1) BraAtt, (2) Trust, (3) PerQua, (4) WebAtt and (5) FFI positively and significantly affect PurInt.
- H5. Consumers recognize that FFI influences positively, significantly and indirectly through (1) BraAtt, (2) Trust, (3) PerQua and (4) WebAtt regarding PurInt.

Figure 2 presents the proposed direct influences of the conceptual model.

Methods

Research design

This study uses an experimental method implemented by creating four simulated websites of companies in the hotel industry, mainly associated with sensory stimuli and family identity. The experimental design has an inter-subject factor: type of company (family vs non-family). The family business website includes visual elements that communicate a firm's family component in different locations, including text and images. The non-family website was designed to control without incorporating visual objects (text and images) linked to the family. The particular interest in this experiment is to measure the visual attention on the website header, as it is one of the objects that captures the most attention on a site (Gibbs and Bernas, 2009; Muñoz-Leiva et al., 2019). Espigares-Jurado et al. (2020), in an eye-tracking study of hotel websites, found that the image at the top of a website (header) is more effective than at other places on the home page. Muñoz-Leiva et al. (2019) found that online users fixed for longer and more often to the site header (fixation duration and number of fixations), using the eye-tracking technique.

Stimuli

The websites were created in WordPress using the same template for all, consisting of a link-free website with five images and seven text boxes. Two images and four text boxes were manipulated, incorporating visual objects that communicate the family component into three websites; in the non-family site, these elements correspond to a non-family business. The websites' design and content were qualitatively evaluated before the experiment, considering

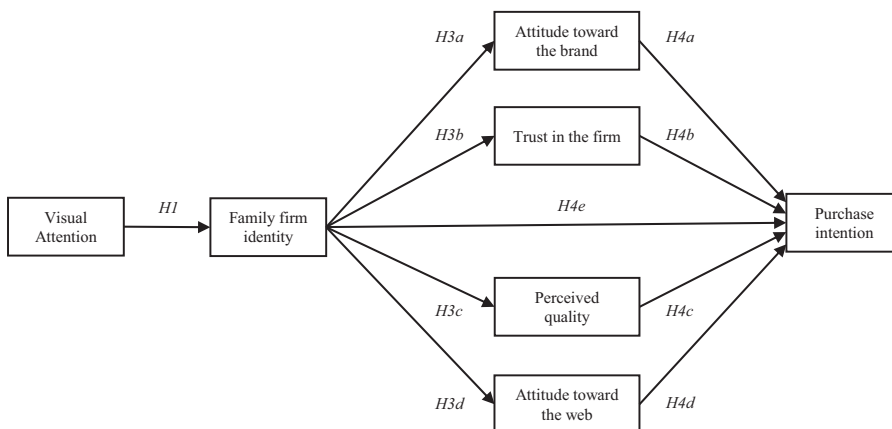


Figure 2. Conceptual model: direct effects

personal interviews and observations for validation. The evaluating subjects considered that the information on each website was helpful. The navigation was intuitive and straightforward; the content was appropriate; the overall composition of the website was consistent and the company represented appeared to be a real (not simulated) company. On average, it took users 90 s to interact with the website. Therefore, an exposure (browsing) time of 90 s was established for the experiment. [Figure 3](#) presents an example of a website designed for the experiment.

Sample and procedures

Study participants were recruited from passersby in the downtown area of an important Chilean city. A total of 240 observations were collected, of which 28 were discarded for recording invalid eye-tracking information. The 212 subjects were randomly assigned to the family and non-family website groups. Age and gender balance criteria were used in the random assignment of participants to the groups. The subjects' ages ranged from 18 to 66 years (mean [M] = 29.30; standard deviation [SD] = 12.32). Participants with a high school diploma represented 23% of the sample and 71% had some college education or were college graduates. The percentage of women was 46.6%. The income range was US\$1,000,000–1,500,000 Chilean peso (CLP) per month (US\$1,500–2,230).

The participants were accommodated in a room conditioned for scientific experimentation according to the recommendations of the [International Telecommunication Union \(2002\)](#). During exposure to the stimulus, the full fixation time in milliseconds was recorded as a visual attention measure ([van der Laan et al., 2015](#); [Sung et al., 2019](#)). The Eye Tribe 60 Hz eye-tracking system tracked and recorded participants' eye movements with a latency of 20 milliseconds with an average accuracy of 0.5 degrees visual angle and a spatial resolution of 0.1 degrees. This tracking device has been widely used in marketing research experiments ([Ooms et al., 2015](#); [Popelka et al., 2016](#)). The Open Gaze and Mouse Analyzer (OGAMA) software was used to store information obtained from the eye-tracking device. This software has been successfully used in other visual care marketing studies ([Al-Azawai, 2019](#); [Joe Louis Paul et al., 2019](#)).

Questionnaire

At the end of the experimental session, each of the subjects answered a self-reported questionnaire on paper. The questionnaire included questions about the study variables (WebAtt, BraAtt, trust in firm, PerQua, PurInt and FFI) and demographic variables. The scale of PurInt is an adaptation of the [del Barrio-García and Luque-Martínez \(2003\)](#), previously adapted from [Miniard et al. \(1993\)](#). The FFI scale was adapted from [Beck and Kenning \(2015\)](#). The WebAtt was adapted from [Carlson and O'Cass \(2010\)](#). The perceived quality (PerQua) scale was adapted from [Wells et al. \(2011\)](#) and from [Boulding and Kirmani \(1993\)](#); [Rao et al. \(1999\)](#). In the case of the BraAtt, the scale was adapted from [del Barrio-García and Luque-Martínez \(2003\)](#), which was previously formulated by [Mitchell and Olson \(1981\)](#). Regarding Trust, the scale was adapted from [Astrachan et al. \(2014\)](#). For the manipulation check, a three-item scale was used to measure the amount of information about the family that owns the company (Check). The items were as follows: "The website I visited has much information about the owner family of the company;" "The website I visited has much information about the history of the family owner of the company" and "The website I visited shows the owner family of the company in an important position within the business."

Method

To reveal and justify the cluster of items included in each proposed scale, an exploratory factor analysis (EFA) was conducted ([Hair et al., 2010](#)). A varimax rotation was used and the



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El hotel tiene la mejor oferta a su disposición



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Región del Bío Bío

A los pies de la cordillera de la costa, podrás disfrutar de hermosos valles y animales del campo chileno.



Restaurante
Cocina autóctona

Gastronomía del lugar con el mejor servicio.



Arquitectura
Arquitectura del pasado para el futuro

La hacienda familiar construida en la época colonial ha sido restaurada con todas las comodidades para brindar la mejor experiencia a nuestros clientes.

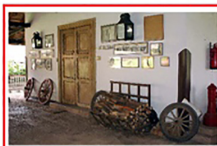
Sobre Nosotros

Un hotel familiar en un ambiente privilegiado rodeado de naturaleza

Tradición familiar

Nuestra familia al servicio del cliente

El origen de la hacienda se remonta al siglo XVI. El hotel familiar, que ha pasado de generación en generación, es una atracción en sí misma. Los jardines románticos son una característica importante del ambiente agradable y pintoresco de este hotel.



Evolución de la empresa

Sociedad y trabajo

Aun hoy estamos ilusionados por formar parte de la vida de nuestros clientes. En este tiempo hasta hoy hemos trabajado con esfuerzo por mantener viva la ilusión de nuestro hotel.



Contacta con nosotros

Tenemos redes sociales y correo electrónico



Facebook



Instagram



Twitter

Figure 3. Example of a family hotel website designed for the experiment

items were grouped in each factor in the same way that the scales were originally designed by previous studies. The EFA results are presented in [Table 1](#). The Kaiser–Meyer–Olkin (KMO) is over 0.700, except for WebAtt (KMO = 0.500); however, the scale was retained since the factor loads and the Barlett test was adequate ([Garson, 2013](#)). In all cases, the Barlett test shows good fit measures ($p = 0.000$), and the factor loads were over 0.800 ([Fabrigar and Wegener, 2012](#)). Therefore, the latent variables were suitable for subsequent analyses. A structural equation model using partial least squares (PLS-SEM) is used to test the proposed hypotheses, similar to that implemented by [Steinhauser et al. \(2019\)](#) and [Monteiro et al. \(2019\)](#) in the analysis of experimental data obtained through the eye-tracking technique. According to [Hair et al. \(2017a,b\)](#), the observed heterogeneity was tested by multi-group analysis; it was found that this study’s results are not conditioned by the observed heterogeneity, as there are no significant differences in VisAtt between treated and untreated (familiar vs non-familiar). Therefore, the proposed model’s analysis as a single model with the aggregate-level data is supported ([Hair et al., 2017a,b](#)). The reliability and validity of the measurement scales and the structural model are evaluated using SmartPLS software ([Ringle et al., 2015](#)). The use of SEM is appropriate since the model presents multiple relationships and combines the observed and latent variables. PLS-SEM allows modeling of the relationships between observed and latent variables (measurement model) and the relationships between latent variables (structural model) ([Hair et al., 2014](#); [Richter et al., 2016](#); [Shiau et al., 2019](#)). In this study, direct and indirect effects are analyzed; therefore, the simultaneous estimation of multiple effects through PLS-SEM avoids exaggerating the correlation associated with each intervening variable ([Matthews et al., 2018](#)). PLS-SEM is especially useful for this study since it comprises many constructs (>5) and many path

Construct	Items	KMO	Barlett test		Factor loads
			χ^2	Sig	
Check	<i>Check 1</i>	0.721	256.495	0.000	0.878
	<i>Check 2</i>				0.850
	<i>Check 3</i>				0.892
FFI	<i>FFI 1</i>	0.743	443.954	0.000	0.920
	<i>FFI 2</i>				0.910
	<i>FFI 3</i>				0.944
BraAtt	<i>BraAtt 1</i>	0.799	630.631	0.000	0.842
	<i>BraAtt 2</i>				0.925
	<i>BraAtt 3</i>				0.903
	<i>BraAtt 4</i>				0.892
Trust	<i>Trust 1</i>	0.727	479.441	0.000	0.930
	<i>Trust 2</i>				0.953
	<i>Trust 3</i>				0.897
PerQua	<i>PerQua 1</i>	0.721	256.495	0.000	0.878
	<i>PerQua 2</i>				0.850
	<i>PerQua 3</i>				0.892
WebAtt	<i>WebAtt 1</i>	0.500	282.415	0.000	0.966
	<i>WebAtt 2</i>				0.966

Table 1.
Exploratory factor
analysis

Note(s): Kayser-Meyer-Olkin measure

relationships (Sarstedt et al., 2014). The causal modeling proposed in this study reinforces PLS-SEM's convenience as an appropriate method in this case (Hair et al., 2011).

Results

Manipulation check

The amount of family information on the website was used to test whether individuals can distinguish a family business from a non-family business. The Check variable complies with the psychometric properties established in the literature. Specifically, Cronbach's $\alpha = 0.859$, the rho_A indicator was 0.865, and the average variance extracted (AVE) was 0.779. The analysis of variance (ANOVA) shows significant differences between the means of the group exposed to the family website and the group that interacted with the non-family website. Family business websites were recognized by the subjects as providing the most family information ($F(1,209) = 51.240, \rho = 0.000; \eta^2 = 0.197$).

The composite reliability indicator (CR) was used to evaluate the model's internal consistency (above 0.900). The average coefficient of AVE is over 0.700. As shown in Table 2, the fit measures for all the evaluation parameters of model consistency, validity and reliability are satisfactory (Hair et al., 2014, 2019).

Evaluation of the structural model

The multiple correlation coefficient ($R^2 = 0.412$) and Stone–Geisser's predictive relevance test ($Q^2 = 0.376$, blind-folding procedure, omission distance = 7) indicate that the structural model is relevant and predictive (Chin, 1998, 2010). The standardized root mean square residual coefficient (SRMR = 0.045) is at an appropriate adjustment level (Hu and Bentler, 1998). Since the model's fit measures show appropriate levels and predictive capacity ($R^2 = 0.412; Q^2 = 0.376; SRMR = 0.045$), it is possible to confirm the significance of the model (Hair et al., 2017a,b).

The results (Table 3) support hypothesis 1 ($\rho < 0.05$), i.e. consumers' VisAtt to the header of a website has a positive-direct influence on consumers' recognition of FFI. Concerning hypothesis 2, consumers' VisAtt to the header of a website is found to have a positive-indirect influence, through FFI, on BraAtt ($\rho < 0.05$) and Trust ($\rho < 0.05$). Thus, hypothesis 2 is partially supported. Consumers' recognition of FFI has a positive-direct and significant influence on BraAtt ($\rho < 0.01$), Trust ($\rho < 0.01$), PerQua ($\rho < 0.01$) and WebAtt ($\rho < 0.01$); therefore, hypothesis 3 is supported. The results indicate that Trust ($\rho < 0.05$) and PerQua ($\rho < 0.05$) directly and positively influence PurInt; thus, hypothesis 4 is partially supported. Consumers' recognition of FFI positively and significantly influences PurInt through PerQua ($\rho < 0.05$). In this case, hypothesis 5 is partially supported. The hypothesis testing on direct effects in the conceptual model is shown in Figure 4.

Construct	A	Rho_A	CR	AVE
Check	0.859	0.865	0.914	0.779
FFI	0.915	0.917	0.946	0.855
BraAtt	0.913	0.917	0.939	0.794
Trust	0.918	0.925	0.948	0.859
PerQua	0.844	0.850	0.906	0.763
WebAtt	0.928	0.933	0.965	0.933

Note(s): Cronbach's alpha (α), composite reliability (CR), average variance extracted (AVE) and factor loadings *** $\rho < 0.01$

Table 2.
Evaluation of
measurement model

Hypothesis testing	Measures	Path	f^2	R^2	Q^2	SRMR
<i>Direct effects</i>						
H1a	VisAtt → FFI	0.144**	0.021			
H2a (i)	FFI → BraAtt	0.304***	0.102			
H2a (ii)	FFI → Trust	0.358***	0.147			
H2a (iii)	FFI → PerQua	0.203***	0.043			
H2a (iv)	FFI → WebAtt	0.232***	0.057			
H3 (i)	BraAtt → PurInt	0.034	0.001			
H3 (ii)	Trust → PurInt	0.176**	0.021			
H3 (iii)	PerQua → PurInt	0.403***	0.119			
H3 (iv)	WebAtt → PurInt	0.117	0.008			
H3 (iv)	FFI → PurInt	-0.029	0.001			
<i>Specific indirect effects</i>						
H1b (i)	VisAtt → FFI → BraAtt	0.044**				
H1b (ii)	VisAtt → FFI → Trust	0.052**				
H1b (iii)	VisAtt → FFI → PerQua	0.029*				
H1b (iv)	VisAtt → FFI → WebAtt	0.033*				
H2b (i)	FFI → BraAtt → PurInt	0.010				
H2b (ii)	FFI → Trust → PurInt	0.063*				
H2b (iii)	FFI → PerQua → PurInt	0.082**				
H2b (iv)	FFI → WebAtt → PurInt	0.027				
	Family firm identity			0.021		
	Attitude toward the brand			0.092		
	Trust in the firm			0.128		
	Perceived quality			0.041		
	Attitude toward the web			0.054		
	Purchase intention			0.412	0.376	
	Common factor model					0.045

Note(s): Bootstrapping = 5,000. * $\rho < 0.10$; ** $\rho < 0.05$; *** $\rho < 0.01$

Table 3.
PLS-SEM results

Discussion and conclusions

This study aimed to determine how visual attention to web stimuli influences consumers' ability to recognize a FFI and how the FFI perception influences consumers' response. The

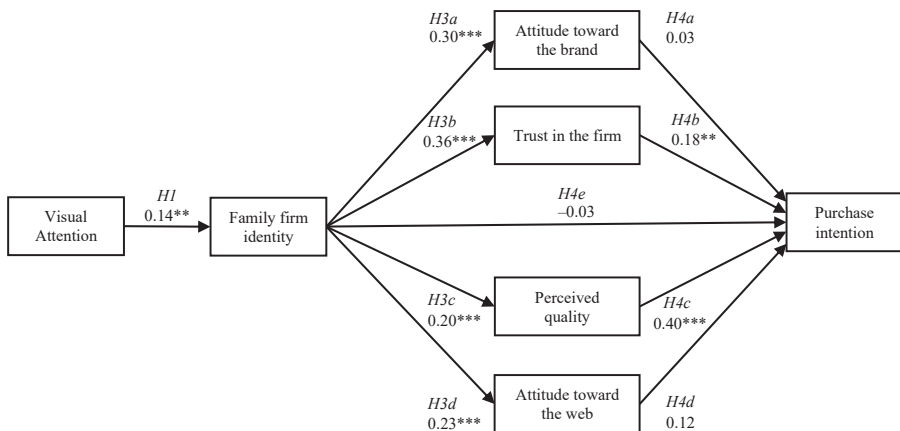


Figure 4.
Hypothesis testing:
direct effects

PLS-SEM analysis shows adequate fit measures and supports most of the hypotheses. The importance of visual attention in people's ability to understand communicational messages was proven in line with [Amatulli et al. \(2016\)](#), [Khachatryan et al. \(2018\)](#) and [Cortinas et al. \(2019\)](#). This study shows that greater attention to key objects (header) on a website directly and positively influences consumers' ability to recognize the FFI. This study further supports [Beck and Prügl \(2018\)](#) and [Lude and Prügl \(2018\)](#), confirming that communicating FFI improves consumers' response. Thus, as family businesses choose to communicate their identity to differentiate themselves from competitors ([Beck, 2016](#); [Craig et al., 2008](#); [Whetten et al., 2014](#)), the results of this study suggest that capturing consumers' attention would be a central element in efficiently managing their identity communicational strategy.

Previous studies report direct and indirect effects of visual attention on consumer response variables such as brand recognition, brand recall and consumer choice ([Cortinas et al., 2019](#); [Sutcliffe and Namoune, 2008](#); [Vriens et al., 2020](#)). The results of this study confirm the above but just for the indirect influence case. Given the importance of family identity in defining the distinctiveness and social significance of these businesses ([Albert and Whetten, 1985](#); [Botero et al., 2013](#); [Dutton and Dukerich, 1991](#); [Ravasi and Schultz, 2006](#); [Vincent et al., 2019](#); [Zavyalova et al., 2017](#)), the effects of visual attention on consumer response, in this case, operate through the FFI. This study shows that visual attention positively influences the FFI, BraAtt and Trust. No evidence was found regarding its effect on PurInt.

The literature on reputation and branding in family firms has widely demonstrated that family identity significantly affects consumer response variables ([Beck and Kenning, 2015](#); [Binz et al., 2013](#); [Lude and Prügl, 2018](#)). Although recent studies have brought to researchers' attention that it would not be the case for all types of family firms ([Shen and Tikoo, 2021](#)), this work provides additional empirical evidence on the positive effect. It was found that a FFI positively and directly influences BraAtt, Trust, PerQua and WebAtt.

The literature on FFI transmission and consumer's response is its influence on consumer PurInt, either directly or indirectly, through key variables such as those included in this study. This study shows that Trust and PerQua directly and positively influence consumers' PurInts. The results support [Neumann et al. \(2021\)](#) and [Kim et al. \(2017\)](#), who provide similar results concerning the influence of trust on PurInt. Similarly, this study's findings are also in line with [Wang et al. \(2020\)](#) and [Kourtesopoulou et al. \(2019\)](#), who report similar results for analyzing the influences of PerQua on the intention to buy. This study also reports an indirect influence of FFI on PurInt through Trust. These findings confirm what was previously reported by [Beck and Prügl \(2018\)](#) and [Lude and Prügl \(2018\)](#), which found similar results assessing the mediating effect of trust and confidence when assessing PurInt.

Overall, the results confirm previous studies regarding the positive influence of transmitting the FFI on consumer response (e.g. [Beck and Kenning, 2015](#); [Beck and Prügl, 2018](#); [Diéguez-Soto et al., 2017](#); [Schellong et al., 2019](#)). In addition, the importance of visual attention as a central element in people's cognitive processes enables them to recognize a company's family identity ([Breuer and Rumpf, 2012](#); [Rumpf et al., 2020](#)). These findings emphasize the value of conveying a company's family identity adequately and highlight the importance of correctly integrating visual stimuli to achieve this goal.

Contributions to theory and practice

This study makes the following three contributions from the theoretical and methodological viewpoints. First, it contributes to the family business branding theory by providing additional evidence on the positive effects of communicating the FFI on consumer response ([Binz et al., 2018](#); [Lude and Prügl, 2018](#)). Notably, in this study, we found evidence indicating that a family business brand's capability to influence consumers' responses positively will be, at least, partially determined by the communication stimulus of capturing people's attention. In this vein, it was known that customers can perceive a firm's family identity and positively influence

consumer response. However, the mechanisms through which consumers could distinguish family firms from non-family firms were not clear. The findings in this study revealed that the consumer could perceive the FFI through a visual stimulus that explicitly communicates the family status of the firm, and this perception positively affects the consumer response. Second, it contributes to the theory of family business reputation, as it sheds light on how these firms can appropriate their reputational advantages (Alonso-Dos-Santos *et al.*, 2020a,b; Deephouse and Jaskiewicz, 2013). In this line, our results indicate the importance of capturing consumer attention to take advantage of a family firm's reputational advantage. In this line, our study shows the effectiveness of heading in reaching this goal. Using visual stimulus, family firms can shape the way consumers perceive their identity; therefore, they can choose the most salient aspects of their identity in marketing communication and monetize their reputation. Moreover, our study demonstrated the importance of the contents in the focal points of websites and how these messages can influence consumers' perceptions. Finally, from a methodological point of view, this study contributes by making an original approach to assessing the sensory aspects (visual attention) of marketing communication in family businesses (Sung *et al.*, 2019). Neuroscience tools have been widely used and are very useful in other areas of communication and marketing research (e.g. Alonso Dos Santos *et al.*, 2020a,b; Vriens *et al.*, 2020; Zuschke, 2020). Using them in the study of family firms' marketing and communications strategies contributes to a better understanding of consumers' response to specific stimuli of this type of company.

From a practical point of view, family business owners and managers can benefit from this work by understanding the high value of correctly communicating their companies' family identities. They must understand that the correct visual stimuli can design a critical aspect of identity communication in family firms. Specifically, regarding website design, this study's results highlight the importance of headers (of such pages) and their greater ability to capture consumers' attention. Such headers are critical for effectively transmitting the FFI and for the recipients to decode the messages on their websites correctly. In this way, managers can take advantage of designing web pages that efficiently use focal points, such as headers, which (according to this study) have a great ability to capture the consumer's attention. This article helps managers understand that identifying the correct focal point and communicational stimulus to increase people's attention is critical to achieving positive consumer response in web environments. Perhaps capturing the consumer's attention can be the most challenging task, since customer interest can depend on several factors, such as product type, seeking behavior and social expectations. Conversely, visual stimuli can help consumers perceive FFI and achieve a positive consumer response. In this vein, branding managers of family firms can extend visual stimuli from the website to other platforms, such as community and social networks, creating an integrated strategy based on visual communication of family business status.

From a communicational strategy viewpoint, the manager will be aware of the positive impact of using the family identity of a firm as a cornerstone of its communicational strategy. Practitioners can implement marketing strategies oriented to show the family firm's nature, such as family portraits, family values disclosure and headers on websites that highlight the family presence in the firm. The design of the family business website should consider that the message in the header should communicate the family firm's status and capture the consumer's attention. By focusing on the website header, managers can optimize the communication of a company's family identity.

Limitations and future research

This study has some limitations. One of them is the fact that the sample includes only potential consumers from Chile. Culture strongly influences consumer behavior (Henthorne *et al.*, 2018; de Mooij and Hofstede, 2011). Similarly, family businesses differ in their

capabilities and characteristics depending on the cultural context in which they operate (Colli *et al.*, 2003). Based on these differences, subsequent studies can expand the sample or consider diverse cultural contexts to support or discuss this study's results. Another limitation is the exclusive focus on websites. Social networks are currently highly and widely used (Alves *et al.*, 2016; Felix *et al.*, 2017; Mukherjee, 2019). Accordingly, new studies based on platforms such as blogs, Facebook and Instagram would be interesting. Specifically, platforms such as TripAdvisor, Booking and Airbnb are highly relevant to the hotel industry. Regarding the type of sensory stimulus, this study focuses only on visual attention. Although this represents significant progress in this type of study in family firms, future studies could include other types of sensory stimuli, such as auditory (radio) or audio-visual (video). The website's header is one part of the entire page; therefore, it is interesting to explore how others' visual stimuli and locations on the website may affect the consumer's visual attention and FFI perception. The experiment was formulated for the hospitality industry; however, this methodological approach can extend to other sectors, such as banking, fashion apparel, automotive and luxury goods. Consumers' perceptions may differ between industries, and each sector may need a different strategy to capture consumers' visual attention.

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