Designing the best avatar to reach millennials: gender differences in a restaurant choice

Miguel Angel Gonzales-Chávez and Natalia Vila-Lopez

Marketing Department, Faculty of Economics, University of Valencia, Valencia, Spain

Abstract

Purpose – The two major purposes of this paper are as follows: first, to identify those appropriate key attributes that a commercial avatar promoting a leisure service must have in terms of likeability, expertise, credibility and attractiveness, with the final purpose of stimulating millennials' acceptance (emotions, buying intentions and electronic word of mouth [eWOM]) and second, to compare if men and women expect the same attributes in a successful avatar.

Design/methodology/approach – A three avatar designs were prepared for this experiment. Then, they were presented to the respondents to be evaluated changing the order of appearance for avoiding biases: (attractive/likeable, expert/credible and normal/basic avatars). The participants were recruited using an online procedure. The final sample size was 104 consumers. They provided 302 valid responses about the three different avatars. A restaurant chain Chili's in Peru was used to define this experiment.

Findings – Findings of the study indicated that the design attributes of an avatar and the desired effects were related terms. Second, an expert/credible avatar worked better than an atractive/likeable one and also better than a common avatar, especially among the feminine target.

Originality/value – This paper tries to develop a guide for executives or entrepreneurs immersed in the gastronomic field in Peru, to enable them to make appropriate decisions regarding the definition of an attractive and disruptive web page design with an innovative tool: efficient commercial avatars.

Keywords Avatars, Online marketing, Desired effects

Paper type Research paper

Introduction

With the increasing usage of digital media by consumers, more companies are using digital marketing to reach their target markets. Web pages became a great ally of companies worldwide because it allows them to carry relevant information about their products and services with the ease of having a computer.

But what happens in this time in which people are over-exposed all day long to many distractions? Survey research suggests that the most significant inhibitors of online shopping are the absence of pleasurable experiences, social interaction, and personal consultation by a company representative (Barlow, Siddiqui & Mannion 2004; G&J Electronic Media Services 2001; Holzwarth, Janiszewski & Neumann, 2006). Nowadays, it is more difficult than ever to retain the

attention of visitors to a web page for a long time. Design plays a preponderant role and to that must be added new tools that encourage the increase of visiting time. Webpages use methods to draw the attention of their visitors through "pop-ups", "widgets" and other tools but human beings live a time of "immediacy". The problem is that these tools are increasingly ignored, so companies must look for new ways to retain the visitor.

It is from this point, in which reference is made to a new instrument able to stimulate sales: the presence of an avatar (virtual characters with human characteristics created by technology) that helps a consumer surfing in the network. However, reaching the surfer is an extremely complicated task, so that the avatar must be appropriately designed to increased web site "socialness" perceptions, customer pleasure and arousal, as well as patronage intentions (Wang et al. 2007, 2010; Pentina & Taylor, 2010). That is, a well-designed avatar allows visitors to spend more time on the website interacting, therefore more time to sell the products or services. In the same vein, Gefen and Straub (2004) found a positive association between an individual's perceptions of social presence, trust, and web site loyalty for online retailers utilizing avatars.

Even more, the segment of the population selected to be part of this research is that of the millennials, because there has been little academic research focused on what types of digital marketing strategies are preferred by millennials and which ones influence their behavior (Taken Smith, 2011). As Ramírez-Correa, Grandón & Arenas-Gaitán (2019) remark, the concept of generation is important because it symbolizes three connotations: "the biological reality of the individual, the historical reality of life and the epistemological problem of knowledge" (p. 795). Millennial generation have been identified as a driving force behind online shopping- This generation wants to have input regarding all aspects of a product, even its promotion (Taken Smith,

2011). As Moreno, Lafuente, Carreón & Moreno (2017) have demonstrated, millennials tend to spend their budget quickly, and more using the web to get information or even to buy. As they explain, the are currently between 17 and 37 years old, they are a large group with different behaviors compared to other generations and they represent a research priority for academics and companies.

In this framework, the aim of this paper can be synthetized in two main points: (i) to identify those key appropriate attributes that a commercial avatar promoting a leisure service must have in terms of likeability, expertise, credibility and attractiveness with the final porpoise of stimulating millennials' acceptance (emotions, buying intentions and eWOM) and (ii) to compare if men and women expect the same attributes in a successful avatar. The relevance of investigating leisure services among millennials has been remarked by previous literature (Bilgihan, 2016).

In this framework, the main theoretical contribution of the present work is to discover how commercial avatars should be designed to increase consumers' responses. These are a totally new element that gives the web page of a certain project or business a vanguardis image in technology and marketing strategies; mainly in leisure services target to millennials in the tourism industry. Also, and given that gender differences could exist, a second contribution of this paper is to analyze the possible existence of differences between men and women in order to recommend whether (or not) to adapt the digital marketing strategy.

More specifically, from a managerial approach, this paper tries to develop a guide for executives or entrepreneurs immersed in the gastronomic field in Peru, to enable them to make appropriate decisions regarding the definition of an attractive and disruptive web page design with an innovative tool: efficient commercial avatars.

Compared to previous studies, the added value of the present work can be summarized into two main points. Until now, several studies have been interested in studying avatars design (Holzwarth, Janiszewski & Neumann, 2006), however, literature about the link between avatars proprieties and desired effects in the restaurant industry is scarce. Second, the study of avatars has been carried on in low context cultures such as EEUU (Mull, Wyss, Moon & Lee, 2015), but little investigation exist in high context cultures such as Peru.

Literature review

Designing the best avatar: the source effect theory in the virtual context

The present research framework is based on the Source Effect Theory, which posits that in the communications literature the perceived expertise or competence of a source is a major determinant of the effect of any communication" (Selnes, 1998). So, from this approach, the source of a message becomes a key element to succeed, understanding success as obtaining a positive response from the client (in emotional and behavioural terms).

In the digital world, new virtual sources are emerging with the potential to communicate the benefits of a company, such as commercial avatars. The basis of commercial avatars can be found in the Source Effect Theory. In 1982, Harmon & Coney conducted a study about the persuasive effects of source credibility. Their results demonstrated that a highly expert and truthful seller of a high technology product does not encourage persuasion in all buying situations. Definitely this can be a great revelation for various executives as it is a paradigm present over many years (Harmon & Coney, 1982). In the same vein, Eisend (2006) performs a study to analyze source credibility dimensions in marketing communication. As he concludes, a company or its

representatives (e.g., salespersons) are the sources, whereas the consumer is the receiver of the message (Eisend, 2006). As the author concludes, a generalized conceptualization is quite complex, considering that marketing is very dynamic and, above all, human beings are very different, with different desires, interests and tastes.

In the new digital era commercial avatars are created by companies to communicate their benefits. A commercial avatar is a virtual character created to accurately perform the actions that a human tells it to do, the difference lies in the fact that textual representations are excluded. It is extremely important that the commercial avatar have an image of a human being and interchanges with the customers who visit the web page in order to provide information and generate a "call to action", which may be to encourage a visit to a place (e.g. a restaurant), click on a link that will take you to receive more information about a particular topic or, in the best case, close a sale. What is more interesting about the use of commercial avatars with the aforementioned purposes, is that these characters are active 24 hours a day, 7 days a week.

In this framework, a question arises: is it possible to define general patterns that can form a referential route to an objective? Or, what is the same, which is the most effective virtual source? Figure I explains the bases our proposal, as it illustrates the resulting model for salesperson credibility from the study made by Eisend (2006). Based on this study, developed with human sellers, two discriminant factors are the basis for success in the direct communication strategy: (i) credibility and (ii) attraction. These two key factors to build salesperson credibility could be translated at the present time to the virtual sphere to obtain an avatar with the best profile in terms of credibility and attractiveness, to reach the desired business results.

(Figure 1)

On one side, human sellers have demonstrated that they are key agents to improve retailers' performance if they focus on consumers' satisfaction, improving their attitudes towards retailers' products and augmenting their intention to buy them (Webster 1968). An avatar can reach the same results if its well-designed. Following previous literature, and as indicated in previous lines, two key attributes of an avatar's design have been identified: ***likeability/attractiveness, expertise/credibility*** (Zimmerman, 2015, Marshall & Weatherson (2018). That is extrinsic proprieties such as likeability and attractiveness and intrinsic proprieties such expertise and credibility (Zimmerman, 2015). So, two main groups of key designing variables can be used to define the perfect avatar: variables related to the form (attractiveness/likeability) and variables related to the content (expertise/credibility).

On another side, the effectiveness of a traditional salesperson (achieving emotions in a client and provoking his response) (Eisend, 2006) are transferred to the virtual scene, so that the effectiveness of an avatar if it's designed properly could be materialized in achieving emotions in an Internet user and provoking his response (purchase and eWom).

Avatars' design to reach effectiveness: physical/extrinsic attributes (attractiveness/likeability) and cognitive/intrinsic attributes (expertise/credibility)

At this point of the document, the literature related to the key attributes of an avatar's design has been reviewed. The conclusion of that part of the document is that the key attributes are four:

- Extrinsic/physical attributes: *Attraction* and *Likeability*

- Intrinsic/cognitive attributes: *Expertise* and *Credibility*.

Both groups of design attributes must be defined cautiously particularly among the millennial target, because millennials have been identified as a driving force behind online shopping (Taken Smith, 2011). Although globalization is present some decades ago, its growth in the last decade has been explosive considering the revolution represented by social networks. The Internet, social networking, and inter-active technologies are empowering millennials to be more active in the creation and advancement of products and brands. Word-of-mouth and Electronic WOM goes around the world these days. This generation wants to have input regarding all aspects of a product, even its promotion (Taken Smith, 2011). Therefore, when designing an avatar, this audience is decisive. What do they prefer? Attractive-likeable avatars or expert-credible ones?

First, regarding *attractiveness* effects, we want to remark that this is not a new topic especially in the offline territory, since decades studies have been carried out about how the attractiveness of the source of the message affects the perceptions of receiver. The attractiveness effect has captivated social psychologists' attention for years. The claim of Dion et al. (1972) that ''what is beautiful is good'' has guided many subsequent investigators, most of whom have agreed that the attractiveness stereotype is a strong and general phenomenon (Eagly et al., 1991). Among the results this research stream has generated are as the following: attractive people are judged more socially and intellectually competent than unattractive people (Eagly et al., 1991); attractive communicators induce more opinion change in a persuasion effort (Snyder & Rothbart, 1971); and attractive people are perceived as more decisive, informed, motivated and logical than their unattractive counterparts (Dipboye et al., 1977) (Ahearne, Gruen & Burke Jarvis, 1999). As you can see from these results, these answers are based on judgments and perceptions, which are the result of many years of similar thinking among human beings. In sum, given that diverse studies

have demonstrated that physically attractive salespersons perform better than their otherwise equivalent but unattractive counterparts (DeShields et al., 1996; Reingen &Kernan, 1993; Ahearne, Gruen & Burke Jarvis, 1999), especially among younger audiences (Li, Van Nguyen, Cheng & Teng, 2018); it is expected that increases in avatar attractiveness would improve firm results (Holzwarth, Janiszewski & Neumann, 2006), for example young people loyalty to the firm (Li, Van Nguyen, Cheng & Teng, 2018).

Strongly related to attractiveness, the source of the message must be likeably. In this vein, literature has defined ***likeability*** as a propriety linked with empathy that a real/virtual person can have which could also play an important role in the persuasion of the people. For example, Swan, Trawick, and Silva (1985) concluded that trust in the seller improves when customers perceive it as honest and likeable (Liu & Leach, 2001). In the same vein, Alves & Soares (2013) remarked that consumers' perceptions towards online sellers improve when a *likeable* avatar able is used to create empathy with the internet user. If there are no avatars, or they are poorly designed, perceptions get worse. All these works lead us to conclude that likeable avatars are decisive in stimulating online transactions. As we can see, likeability is closely linked with empathy, which in the world of sales has always played an important role when it comes to specifying a sale.

Second, ***regarding expertise***, this has been identified as another major factor that affects performance. In this case it's referred to the performance held by the sales representative. Previous literature has defined expertise as a mix of knowledge and skills (e.g., Bedard 1991; Bonner, Baumann & Dalal 2002; Liu &Leach 2001). Other studies define expertise as an ability to develop task-specific knowledge (e.g., Marchant 1989). However, one of the most notable expertise frameworks defines expert as an individual who displays special skill or task-specific knowledge

in a specific domain (Shanteau 1992; Shanteau and Stewart 1992) (Ko & Dennis, 2004). Nowadays, globalization allows young people with a great desire to learn to have more expertise than people with a lot of time doing the same, so, it's expected that they will search for information from expert/credible avatars. As companies know, sales expertise improves performance, and millennials buyers are not an exception to this rule. The study conducted by Holzwarth, Janiszewski & Neumann (2006) demonstrated that the manipulation of the avatar's attractiveness and expertise works better for potential consumers highly involved with the product, that want to get more information.

Strongly related to expertise, the source of the message must be honest and responsible (Doney & Cannon, 1997; Sirdeshmukh et al., 2002; Malshe, 2010). These points are related to *credibility*. Credibility has been defined as the truthfulness that underlies the partner's objectives and messages (i.e. Cugelman et al, 2009; Alves Soares, 2013). Previous studies talk about two determinants of "source credibility": perceived expertise and trustworthiness (Dholakia & Sterntha 1977; Liu & Leach, 2001). Credibility, which precedes trust (Cugelman et al, 2009), refers to a perceived quality of a source, media or message, may or may not result in associated trusting behaviors (Rieh & Danielson, 2007, p. 6) as Alves, Soares (2013) have remarked. The link between credibility and the level of persuasion, with other desired effects have been demonstrated by previous literature. That is, persuasion is an outcome of credibility and can be operationalized, for instance, by message acceptance (Rieh & Danielson, 2007; Alves, Soares, 2013), which leads to positive emotions, purchase intension and intention to share the message. In sum, it can be inferred that credibility allows to persuade and, therefore, facilitates the acceptance of a message, interact and, possibly, generate the desired effects by the company. Studies focused on source credibility

have concluded that, when a source presenting a product is considered credible, emotions towards the explained product get better (Gotlieb & Sarel 1991) and the intention to buy it augment (Liu & Leach, 2001). That's because, as Messinger, Ge, Smirnov, Stroulia and Lyons, (2019) suggest, young people relay on realistic avatars, no in idealized avatars. Based on previous comments, our null hypothesis will be:

H0: All avatars will be equally effective in terms of (a) emotions (pleasure, arousal and dominance) (b) purchase intentions and (c) and eWOM

Customers segments preferences for online assistants: millennials perceptions'.

Personal characteristics, such as age, are considered important to understand online behaviors (Ramírez-Correa, Grandón & Arenas-Gaitán, 2019). As these authors remark, "the gender variable is considered crucial to explain inequalities and identities in modern society" (p. 796). Messinger, Ge, Smirnov, Stroulia & Lyons's (2019) review details the characteristics of the millennials, and how they affect their behavior. This justify why sellers must send explicit messages as well as efficient technology to attend their particular needs. However, this group of millennials consumers is not homogenous. Different segments could be identified related to gender, age groups and levels of online shopping experience (McGoldrick, Keeling & Beatty, 2008).

Regarding online consumer patterns, Weiser (2000) followed the Socialization Theory to explain gender bias among young consumer regarding the use of computers and the Internet. Following this approach, among the different segmentation criteria applicable to understand millennials' preferences, gender was used in the present work. In this vein, Cummings & Dennis (2018) review, previous research has found that gender can impact a person's interpretation of

social networks profiles and, consequently, the way the way they process the same avatar. That's because females differ from males on social needs in electronic interaction and the perceived risk associated with e-commerce (Fallows 2005). Females use more features associated with the maintenance of rapport and intimacy than males during electronic interactions (Colley & Todd 2002) (McGoldrick, Keeling & Beatty, 2008). It is worth taking into account that a restaurant can be visited by any person, regardless of the genre but their interests could vary.

Also, women have different spatial ability than men, which significantly influences how they interpret the proprieties of the same scenario (Bailey, Blackmore, Sutton, Licumba, Zhong, Wang... & Stocks, 2017),

With respect to differences in shopping preferences between women and men, the literature also shows that it is important to establish distinctive patterns to obtain the preferences of one or the other gender. As Following Hu & Jasper (2004) remark, there are similarities in men's and women's shopping behavior but there are also some differences. With the incorporation of women into the labor market, men's involvement in the purchase of household products has increased. To appeal to men, it is important to include values, not only monetary but also experiential, to enhance the shopping experience (Hu & Jasper, 2004).

With the aforementioned, it is possible to argue that there are differences in preferences between men and women regarding their online perceptions and behaviors. It is for this reason that the following is stated:

R1: *¿Do men and women differ in the key attributes that an avatar should have to promote a leisure service?*

R11. *¿Do women will evaluate better attractive/likeably avatars than men?*

R11: ¿Do men will evaluate better credible/expert avatars than women?

Methodology

Population and sample

The millennial generation, also known as Generation Y, born (1980-95) (Smith, 2015), are an essential ingredient in the development of e-commerce. Having grown up socializing and making purchases online, this generation's usage of e-commerce will continue to grow along with its discretionary income. They have interests and preferences different from those of other generations, such as, for example, in the appropriate form in which companies must reach them. As Taken Smith (2011) concluded, millennials do not like pop-up advertising, but graphics are highly effective in grabbing their attention. So, avatars have a strong potential among this target.

The participants were recruited using an online procedure. The final sample size was 104 consumers, 63% of whom were men and 37% of whom were women. They provide us 302 valid responses about three different avatars. The participants were between ages 23 and 38 years, it is important to remember that millennials, also known as Generation Y, are born between 1980 and 1995 (C. Smith, 2015). The participants' experience writing reviews in the social networks about their experiences in restaurants / bars is high since 81% indicates that at least they have done it once, while the percentage is reduced to 42% when considering those people who have done it twice or more. The sample size is adequate for this kind of experimental studies with avatars. For example, Bailey, Blackmore, Sutton, Licumba, Zhong, Wang... & Stocks (2017) did their study about gender differences in avatars' perceptions with 50 participants (56% male and 44% female). Messinger, Ge, Smirnov, Stroulia & Lyons (2019) recruited the opinions of 167 undergraduates

from a major North American university. In a second experiment, focused on Second Life platform, the used the opinions from 97 residents. Peña, Hancock & Merola (2009) contacted fifty-one communication students from a large northeastern university to carry on their first experiment (34 women and 17 men) and one eighty-eight in the second one (8 men and 50 women). As these works explain, experimental samples of reduce groups of well-prepared interviewed are recommended to test avatars' effectiveness.

Procedure

Three avatar designs were prepared for our experiment. Then, they were presented to the respondents to be evaluated changing the order of appearance for avoiding biases following Peña, Hancock & Merola (2009), although our experiment was static: (i) the first one was the feminine and masculine image of an ATTRACTIVE / LIKEABLE avatar; (ii) later the feminine and masculine image of an EXPERT / CREDIBLE avatar was shown and, (iii) finally, the feminine and masculine image of a NORMAL / BASIC avatar (Figure 2).

(Figure 2)

A restaurant chain Chili's in Peru was used as a reference so that the respondents could identify with the survey more easily. Then, participants saw an introduction to the survey: "*Imagine that you are visiting the Chili's WEB PAGE and one of these avatars appears to explain you about the place, dishes, drinks and other benefits of visiting the restaurant, assess each one of the THREE TYPES of avatars according to the following questions*".

Each of the avatars was presented with the following words:

✓ **ATTRACTIVE / LIKEABLE avatar**:

"Hello, we welcome you to Chili's, we are in charge of ensuring you a great experience. We hope you visit us soon"

✓ **EXPERT / CREDIBLE avatar**:

"Hello, we welcome you to Chili's, we are heads of cuisine and in charge of preparing these fantastic dishes. We hope you visit us soon."

✓ **NORMAL / BASIC avatar:**

"Hello, we welcome you to Chili's, we will make sure you have a great experience. We hope you visit us soon".

Scales Used to Measure Each Concept

These diverse avatars were evaluated on several items. All items in the questionnaire were adapted from published works that were relevant to our study, as shown in Table 1. The use of this kind of Likert-type scale to evaluate avatars can be seen, for example, in Peña, Hancock & Merola (2009). The Appendix shows the physical version of the virtual survey.

(Table 1)

Analytical Technique

First, the existence of potential differences between the means obtained for the three avatars in terms of desired proprieties and expected results were calculated using an ANOVA test. The authors listed in Table 1 support this tool for this type of comparative analysis.

Second, to better understand to what extent different avatars were associated with different proprieties and results, a perceptual map was obtained through Factorial Correspondence Analysis.

The use of this tool is a novel point in avatars studies. Its use is highly recommended for representing in a same dimensional perceptual space both, the stimuli to be compared (three avatars in our study) and the attributes on which they are compared (designing proprieties and desired results).

Finally, to solve our research questions, ANOVA tests were carried on in order to compare men and women perceptions' of the three used avatars: (i) attractive/likeable; (ii) expert/credible and (iii) common avatar. Bailey, Blackmore, Sutton, Licumba, Zhong, Wang... & Stocks (2017) applied also this tool to analyzed gender differences in avatars' perceptions regarding realism levels, eeriness and attractiveness

Results and discussion

Differences between avatars: key designing properties and avatar effectiveness

Our null hypothesis should be rejected, given that different avatars are associated with different properties leading to different results. That is, all the avatars do not perform equally. More specifically, the results of Table 2 show how the three avatars differ significantly from one another in **likeability** average (F: 57.06 **), **attractiveness** (F:24,47**), **experience (F=59,64**)** and **credibility** (F=49,19**). The EXPERT/CREDIBLE avatar obtains the best values in the four designing proprieties, while the ATTRACTIVE/LIKEABLE avatar obtains the lowest values in almost all of the cases.

(Table 2)

The other analysis to be performed is that related to avatar effectiveness. This can be seen in table 3. Once again, the EXPERT/CREDIBLE avatar outstands in effectiveness: pleasure, arousal and dominance, buying intention and eWOM.

(Table 3)

It is striking that in the comparison of the avatar ATTRACTIVE/LIKEABLE vs the COMMON, the ATTRACTIVE/LIKEABLE has been overcome in almost all the evaluated points with the exception of two: experience (3,12 vs 2,81) and dominance (3,37 vs 3,10). All the remaining evaluations were in favor of the COMMON avatar. On the other hand, we must highlight in all the evaluations made there is a clear winner that is the EXPERT/CREDIBLE avatar, highlighting above all in likeability (4,23), experience (4,23), credibility (4,12) and pleasure (4.08), all with values above 4 points.

To better understand how each of the three avatars were associated with different proprieties and desire results, a perceptual map was calculated following a Correspondence Factorial Analysis. As this map shows, both dimensions (X and Y) explain the whole variability of the data. The first factor (X) explains 79% of the data, while the second one explains the remaining 21% .

(**Map 1**)

If we analyse the how each dimensions (X and Y) contributes to the variability of each point (Table 4), we can conclude the following points.

First, the horizontal dimension, opposes the ATTRACTIVE avatar (on the left) versus the COMMON one (on the right). The attractive avatar is associated with attractiveness (4) and with dominance emotions (18 and 19), while the COMMON avatar is related to some proprieties such as those related to likeability (1 and 2) and to pleasure emotions (15, 16 and, 17). So, this horizontal

exe opposes attractiveness and dominance (ATTRACTIVE avatar) versus likeability and pleasure (COMMON avatar).

Second, the vertical dimension opposes the EXPERT avatar (on the top) versus the COMMON one (on the bottom). The EXPERT avatar is associated with most of the desired proprieties, especially those concerning experience (6, 7, 8) and credibility (10), and also with most of the desired effects, such as arousal (12, 13 and 14), buying intention (20 and 21), Ewom (22). The COMMON avatar on the bottom is associated with likeability (3) and pleasure emotions (15, 16 and, 17). So, the vertical exe oppose credibility/experience and behavioural effects (EXPERT/CREDIBLE avatar) versus likability and pleasure emotions (COMMON avatar).

This perceptual map leads us to conclude, as previous lines have shown, that the best avatar to incentive emotions, sales and Ewom would be the EXPERT/CREDIBLE avatar. To transmit dominance and attraction, an ATTRACTIVE/LIKEABLE avatar will be the best option.

Our findings added value to previous literature as graphic representation tools are used to visualize the best properties and results associated with each avatar. Using other statistical tools, Messinger, Ge, Smirnov, Stroulia and Lyons, (2019) also concluded that a virtual first impression matters (Cummings and Dennis, 2018). As these authors summarize, people remember essential traits from their interlocutors. More specifically, to make a right decision the credibility of an interlocutor is evaluated better than its visual appeal. Furthermore, a common interlocutor is evaluated worse than an expert one. People do no relay on attractive idealized avatars, they prefer well prepared ones for commercial purposes. In sum, our results support what Moreno, Lafuente, Carreón & Moreno (2017) highlight when labelling millennials as intelligent young people, as they assign more relevance to internal attributes (credibility) than to external ones (attractiveness).

Key designing properties and consumers' segments

The results of table 5 show how men and women do not differ significantly in their perceptions related to the ATTRACTIVE / LIKEABLE avatar, since in the four perceived properties (attractiveness, expertise, credibility and likeability) the means do not differ respectively: F = 1.498; F = 1,241; F =, 406; F = 2,525. That is, regarding the properties perceived in avatar 1, men and women give equivalent average valuations, since in no case are significant differences between both. In sum, both groups, on average, value avatar 1 equally. The picture does not vary much when evaluating the COMMON avatar, since the preferences between men and women still does not have a very significant difference.

On the contrary, men and women do really differ significantly when the EXPERT/CREDIBLE avatar is evaluated. As table 5 shows, For this avatar, woman assign higher punctuations than men in a significant way in terms of attractiveness, expertise, credibility and likeability.

(Table 4 and Table 5)

The evaluation was also carried out for the avatar effectiveness as shown in table 6. Regarding ATTRACTIVE/LIKEABLE avatar, it does not differ significantly between men and women. The same results are obtained for the COMMON AVATAR. In the case of the EXPERT/CREDIBLE avatar, we can appreciate the difference between men and women do really exist. For this avatar, woman perceived higher effectiveness (in terms of pleasure, arousal, dominance, buying intention and ewom) than men.

Our results support Bailey, Blackmore, Sutton, Licumba, Zhong, Wang... & Stocks (2017) findings, as long as gender differences in the perception of avatars have been confirmed. So, support Weiser (2000) Socialization Theory extended to the digital world, stating that gender differences in Internet use patterns do really exist.

(Table 6)

Conclusion

As our results have demonstrated, not always the expected results are those that are finally obtained after the respective evaluation. The Peruvian millennials have shown to have preferences for a certain type of avatar that was not exactly what was expected for certain criteria. Our results have demonstrated, on one side, that the design properties of avatar (attractiveness, likeability, expertise and credibility) and effectiveness (emotions, buying intention and Ewom) are related terms, contravening our null hypotheses. On another side, it seems that an EXPERT/CREDIBLE avatar will work better than an ATTRACTIVE/LIKEABLE one, and, also than a COMMON avatar; specially among the feminine target.

More specifically, our results lead us to the conclusion that working on the four designing properties will lead to better results in terms of emotions, buying intention and eWOM. A comparative analysis was carried out among three avatars to discover which of them has better performance in the evaluation of the various design properties and effectiveness.

First, with respect to the design properties, the results are strong and clear in favor of the EXPERT/CREDIBLE avatar, since it must be chosen if it is desired to obtain better likeability, attractiveness, experience and credibility. It is understandable that this avatar obtains better results in experience and credibility, but it is striking that it also obtains the highest scores in attractiveness

and likeability. We could conclude that, despite having the option of attractive and likeable avatars, Peruvian millennials prefer images that evoke knowledge of the kitchen and experience for the adequate preparation of the food to be offered. This finding supports that, in e-commerce, hedonic images are less valuable by millennials because they look for utilitarian benefits (Bilgihan. 2016). As this author remarks, utilitarian features have a higher impact on millennials' positive experiences compared to hedonic features. As the Congruence Theory supports, (Waltemate, Gall, Roth, Botsch and Latoschik, (2018), a person will prefer to interact with an avatar congruent with him/her than with an unrealistic avatar (ATTRACTIVE) that he/she perceives as more distant. For this reason, the link with an EXPERT/CREDIBLE avatar has demonstrated to be higher, as well as the level of immersion, causing more and better responses. Young Chileans identify better with experience/credibility than with attractiveness.

Second, with respect to effectiveness, again the EXPERT/CREDIBLE avatar must be chosen if it is desired to obtain better buying intention, increase emotions and generate more ewom. The second point can be sustained as a consequence of the first, since if the EXPERT/CREDIBLE avatar proved to have the best design attributes, then it should not be surprising that it is also the most effective one. Finally, the conclusion that the recommended avatar is an EXPERT/CREDIBLE one. So, in line with Martin (2015), it can be concluded that credibility and experience are commonly the basis of millennials' purchasing decisions. This result supports the Subjective Source Effect Theory, which posits that "in the communications literature it is widely recognized that the perceived expertise or competence of a source is a major determinant of the effect of any communication" (Selnes, 1998, p. 309).

Finally, we wanted to determine if there is any difference between the preferences of men and women. The evaluation indicates that the obtained means have very similar results which does not allow to identify a solid difference between both., except when the EXPERT/CREDIBLE avatar was considered. In this case, women assign higher values than men. So, we can conclude that credible/expert avatars are more effective for women that for men, because, as Lehdonvirta, Nagashima, Lehdonvirta, and Baba (2012) observe, men are traditionally reluctant to ask for help, due to social stereotypes. So, credible sources will be more accepted for women than for men. That is, consistent with literature, and as Bailey, Blackmore, Sutton, Licumba, Zhong, Wang... & Stocks (2017) have demonstrated, statistically significant difference exists between men and women regarding avatars' perceptions. Therefore, and as Weiser (2000) Socialization Theory extended to the digital world postulates, gender bias exists regarding social interactions with virtual avatars.

Based on these results, we will recommend managers three main line of actions. First, our results recommend to use avatars to promote business, given that they seem to provide interesting and useful information to incentive sales. An adequate virtual first impression sells (Cummings & Dennis, 2018). Moreover, these avatars should be designed carefully considering some interesting proprieties that affect success: attractiveness, likeability, credibility and experience. All these proprieties are useful to improve results. Therefore, managers should not neglect the use of this tool in their digital platforms as they provide a different experience and increase the level of persuasion to obtain the expected results. a

Second, the best avatar to promote a restaurant among millennials is a CREDIBLE/EXPERT one. So, we would recommend managers to emphasize credibility when designing an avatar. This results are coherent with Holzwarth, Janiszewski & Neumann (2006).

To this end, they could use some extrinsic elements that are associated with extensive knowledge on the subject. For example, a chef hat in the case of the restaurant industry. We have understood that credibility continues to be the attribute most valued by people and that this must be taken advantage of by managers to provide an image of experience to their clients. So, as Messinger, Ge, Smirnov, Stroulia and Lyons (2019) recommend, avatars should be designed using a merger of realistic and enhanced features to sell experience. When credibility is low, problems occur. If expert avatars work for commercial webs, attractive avatars have proven to be suitable for recreational websites (Li, Van Nguyen, Cheng and Teng, 2018), which are not intended to sell, but to entertain.

Third, and given that women assign more importance to credibility than men, the feminine segment should be target using credible and expert figures. To this end, we recommend managers, in the first place, to clearly identify if they will seek to approach a female or male audience with greater emphasis. Once identified that women are the target, the emphasis on experience and credibility should be even greater. As previous literature has demonstrated (Lehdonvirta, Nagashima, Lehdonvirta, and Baba, 2012) women are more likely than men to use credible sources of information to complete their knowledge. This can be achieved with images of characters that show knowledge of the subject they speak, in addition to having a clear script of clear and forceful words that demonstrate solidity in knowledge.

Finally, our work has some limitations that could represent potential lines of research. First, only one country has been analyzed, future research could new markets to compare if what work in one environment, works in another. Second, the millennial target was evaluated. Future studies could compare their opinions with a more adult segment. Third, just three kind of avatars were

simulated to identify which of them will work better in a Latin American country. However, additional simulations differentiating between male and female avatars; or between young and older avatars could be created to complete the study. Finally, a future research line could be the study of potential differences between those who have reviewed their experiences in restaurants/bars once and those have reviewed more than twice.

References

Ahearne, Michael; Gruen, Thomas W; Jarvis, Cheryl Burke (1999), "If looks could sell: Moderation and mediation of the attractiveness effect on salesperson performance", *International Journal of Research in Marketing*, 16 (4), 269-284

Alves, António and Soares, Ana Maria (2013), "Evaluating the use of Avatars as Sociability Factor in e-commerce", International Cconference on Marketing and Consumer Behaviour- *Back to Basics: consumer-centric marketing or target-centric marketing*, 194.

Bailey, J., Blackmore, K., Sutton, K., Licumba, E. A., Zhong, Y., Wang, J., ... & Stocks, N. (2017), "Gender differences in spatial ability and affective processing in avatar perception", Australasian Simulation Congress, Australia (Sydney) 28 – 31, 1-9.

Barlow, Alexis K.J., Noreen Q. Siddiqui, and Mike Mannion (2004), "Development in Information and Communication Technologies for Retail Marketing Channels", *International Journal of Retail and Distribution Management*, 32 (March), 157–63.

Bedard, Jean (1991), "Expertise and Its Relation to Audit Decision Quality," *Contemporary Accounting Research*, 8 (1), 198–222.

Bilgihan, A. (2016), "Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding", *Computers in Human Behavior*, *61*, 103-113.

Bonner, Bryan L., Michael R. Baumann, and Reeshad S. Dalal (2002), "The Effects of Member Expertise on Group Decision-Making and Performance," *Organizational Behavior and Human Decision Processes,* 88 (2), 719–736.

Colley, A. and Todd, Z. (2002), "Gender-Linked Differences In the Style and Content of Emails to Friends", *Journal of Language and Social Psychology*, 21 (4), 380392.

Cugelman, B., Thelwall, M., & Dawes, P. (2009), "The Dimensios of Website Credibility and their Relation to Active Trust and Behavioural Impact". *Comunications of the Association for Information System*s, 24 (26), 455-472.

Cummings, J., & Dennis, A. R. (2018), "Virtual first impressions matter: the effect of enterprise social networking sites on impression formation in virtual teams", *MIS Quarterly*, *42*(3), 697-718.

DeShields, O.W., Kara, A., Kaynak, E. (1996), "Source effects in purchase decisions: The impact of physical attractiveness and accent of salesperson". *International Journal of Research in Marketing*, 13, 89–101.

Dholakia, Ruby Roy and Brian Sternthal (1977), „Highly Credible Source: Persuasive Facilitator or Persuasive Liabilities?", *Journal of Consumer Research*, 3 (March), 223-232.

Dipboye, R.L., Arvey, R.D., Terpstra, D.E. (1977), "Sex and physical attractiveness of raters and applicants as determinants of resume evaluations", *Journal of Applied Psychology,* 62, 288–294.

Doney PM, Cannon JP (1997), "An examination of the nature of trust in buyer–seller relationships", *Journal of Marketing,* 61, 35–51.

Eagly, A.H., Ashmore, R.D., Makhijani, M.G., Longo, L.C., (1991), "What is beautiful is good, but.: A meta-analytic review of research on the physical attractiveness stereotype". *Psychological Bulletin*, 110 (1), 109–128.

Eisend, M. (2006), "Source credibility dimensions in marketing communication–A generalized solution", *Journal of Empirical Generalisations in Marketing Science*, 10(2)

Fallows, D. (2005), "How Women and Men Use the Internet", Pew Internet. Available at: http://www.pewinternet.org/pdfs/PIP_Women_and_Men_online.pdf [Accessed December 15, 2005].

Floyd, Myron F. (1997) "Pleasure, arousal, and dominance: Exploring affective determinants of recreation satisfaction", *Leisure Sciences*, 19 (2), 83-96.

Fu, Jen-Ruei; Ju, Pei-Hung; Hsu, Chiung-Wen (2015), "Understanding why consumers engage in electronic word-of-mouth communication: Perspectives from theory of planned behavior and justice theory", *Electronic Commerce Research and Applications*, 14 (6), 616-630.

G&J Electronic Media Services (2001), 7th Wave of the GfKOnline-Monitor. Hamburg: GfK Press.

Gefen, D. and Straub, D.W. (2004), "Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-service", *Omega*, 32 (6), 407-424.

Gotlieb, Jerry B. and Dan Sarel (1991), "Comparative Advertising Effectiveness: The Role of Involvement and Source Credibility," *Journal of Advertising*, 20 (1), 38-46.

Grewal, Dhruv and Jerry Gotlieb (1994), "The Moderating Effects of Message Framing and Souroo Credibility on the Price-Perceived Risk Relationship", *Journal of Consumer Research*, 21 (June), 145-154.

Holzwarth, Martin; Janiszewski, Chris and Neumann, Marcus M. (2006), "The influence of avatars on online consumer shopping behaviour". *Journal of Marketing*, 70(4), 19-36

Hu, Haiyan and Jasper, Cythia R., (2004), "Men and women: a comparison of shopping mall behavior", *Journal of Shopping Center Research*, webmail.jrdelisle.com

Internet World Stats. (2010). Retrieved June 30, 2010, from www.internetworldstats.com/htm

Kaynar, O., & Amichai-Hamburger, Y. (2008), "The effects of cognition on Internet use revisited", *Computers in Human Behaviour*, 24, 361–371.

Keeling, Kathleen A.; McGoldrick, Peter J. & Beatty, Susan F. (2010), "Avatars as salespeople: Communication style, trust, and intentions", *Journal of Business Research*, 63 (8), 793-800

Ko, Dong-Gil & Dennis, Alan R. (2004), "Sales Force Automation and Sales Performance: Do Experience and Expertise Matter?", *Journal of Personal Selling & Sales Management*, 24 (4), 311-322

Lehdonvirta, M., Nagashima, Y., Lehdonvirta, V., & Baba, A. (2012), "The stoic male: How avatar gender affects help-seeking behavior in an online game", *Games and Culture*, 7(1), 29-47.

Li, K., Van Nguyen, H., Cheng, T. C. E., & Teng, C. I. (2018), "How do avatar characteristics affect avatar friendliness and online gamer loyalty? Perspective of the theory of embodied cognition". *Internet Research*.

Malshe, Avinash (2010), "How is marketers' credibility construed within the sales-marketing interface?", *Journal of Business Research*, 63 (1), 13-19

Marchant, Garry (1989), "Analogical Reasoning and Hypothesis Generation in Auditing," *Accounting Review*, 64 (3), 500–513.

Marshall, Dan and Weatherson, Brian (2018), "Intrinsic vs. Extrinsic Properties", The Stanford Encyclopedia of Philosophy, Edward N. Zalta (ed.)

Martin, E. J. (2015), "How to use authenticity, brands, and visuals to engage millennials", *EConten*t, 38(8), 6-9.

McGoldrick, Peter J.; Keeling, Kathleen A. & Beatty, Susan F. (2008), "A typology of roles for avatars in online retailing", *Journal of Marketing Management*, 24 (3) 433-461.

Messinger, P. R., Ge, X., Smirnov, K., Stroulia, E., & Lyons, K. (2019), "Reflections of the extended self: Visual self-representation in avatar-mediated environments", *Journal of Business Research*, *100*, 531-546.

Moorman C, Deshpande R, Zaltman G. (1993), "Factors affecting trust in market research relationships", *Journal of Marketing,* 57, 81-101.

Moreno, F. M., Lafuente, J. G., Carreón, F. Á., & Moreno, S. M. (2017), "The characterization of the millennials and their buying behavior", *International Journal of Marketing Studies*, *9*(5), 135-144.

Mull, Ian; Wyss, Jamie; Moon, Eunjung; Lee, Seung-Eun (2015) "An exploratory study of using 3D avatars as online salespeople: The effect of avatar type on credibility, homophily, attractiveness and intention to interact", Jo*urnal of Fashion Marketing and Management*, 19 (2), 154-168

Nowak, K. L., & Rauh, C. (2005), "The Influence of The Avatar on Online Perceptions of Antropomorphism, Androgyny, Credibility, Homophily, and Attraction". *Journal of Computer-Mediated Communication*, 11(1), 153-178

Nowak, K. L., Hamilton, M. A., & Hammond, C. C. (2008), "The Effect of Viewer Perceptions of Avatar Anthropomorphism and Realism on Judgments of Credibility and Homophily, and Avatar Choice". Proceedings of the 11th Annual International Workshop on Presence. Pádua.

Palmatier RW, Dant RP, Grewal D, Evans KR (2006), "Factors influencing the effectiveness of relationship marketing". *Journal of Marketing,* 70, 136–53.

Peña, J., Hancock, J. T., & Merola, N. A. (2009), "The priming effects of avatars in virtual settings", *Communication Research*, *36*(6), 838-856.

Ramírez-Correa, P. E., Grandón, E. E., & Arenas-Gaitán, J. (2019), "Assessing differences in customers' personal disposition to e-commerce", *Industrial Management & Data Systems*, 119, 4, 792-820.

Selnes, F. (1998), "Antecedents and consequences of trust and satisfaction in buyer-seller relationships", *European Journal of marketing*, 32 (3/4), 305-322.

Waltemate, T., Gall, D., Roth, D., Botsch, M., & Latoschik, M. E. (2018), "The impact of avatar personalization and immersion on virtual body ownership, presence, and emotional response". *IEEE transactions on visualization and computer graphics*, *24*(4), 1643-1652.

Reingen, P.H., Kernan, J.B. (1993), "Social perception and interpersonal influence: Some consequences of the physical attractiveness stereotype in a personal selling setting", *Journal of Consumer Psychology*, 2 (1), 25–28.

Rieh, S. Y., & Danielson, D. R. (2007), "Credibility: A Multidisciplinary Framework", *Annual Review of Information Science and Technology*, 41, 307-364.

Shanteau, James (1992), "Competence in Experts: The Role of Task Characteristics," *Organizational Behavior and Human Decision Processes*, 53 (2), 252–266.

Shanteau, James and Thomas R. Stewart (1992), "Why Study Expert Decision Making? Some Historical Perspectives and Comments," *Organizational Behavior and Human Decision Processes*, 53 (2), 95–106.

Shepherd, C. David, and Joseph O. Rentz (1990), "A Method for Investigating the Cognitive Processes and Knowledge Structures of Expert Salespeople", *Journal of Personal Selling & Sales Management*, 10, 4 (Fall), 55–70.

Sirdeshmukh D, Singh J, Sabol B. (2002), "Consumer trust, value, and loyalty in relational exchanges". *Journal of Marketing,* 66, 15–37.

Smith, Christie (2015) "The Radical Transformation of Diversity and Inclusion: The Millennial Influence", Deloitte, *University website: https://www2. deloitte. com/us/en/pages/about-deloitte/articles/radical-transformation-of-diversity-and-inclusion. html*.

Snyder, M., Rothbart, M. (1971), "Communicator attractiveness and opinion change", *Canadian Journal of the Behavioral Sciences* 3, 377–387.

Taken Smith, Katherine (2011), "Digital marketing strategies that Millennials find appealing, motivating, or just annoying", *Journal of Strategic Marketing*, 19 (6) 489-499.

Wang, L.C. and Fodness, D. (2010), "Can avatars enhance consumer trust and emotion in online retail sales?", *International Journal of Electronic Marketing and Retailing*, 3 (4), 341-362

Wang, Liz C.; Baker, Julie; Wagner, Judy A. and Wakefield, Kirk (2007), "Can a Retail Web Site Be Social?", *Journal of Marketing*, 71 (3), 143-57.

Weiser, E. B. (2000), "Gender differences in Internet use patterns and Internet application preferences: A two-sample comparison". *Cyberpsychology and Behavior*, *3*(2), 167-178.

Webster, Frederick E. (1968), "Interpersonal Communication and Salesman Effectiveness", *Journal of Marketing*, 32 (July), 7–13.

Zimmerman, Michael J. (2015), "Intrinsic vs. Extrinsic Value", The Stanford Encyclopedia of Philosophy, Edward N. Zalta (ed.)
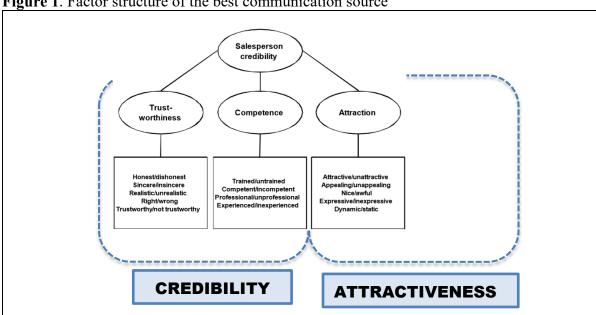
Figure 1. Factor structure of the best communication source

Source: own elaboration based on Eisend (2006)

Figure 2: Avatar Types

ATRACTIVE / LIKEABLE	EXPERT / CREDIBLE	COMMON

Source: own elaboration

Table 1. Scales used to measure variables

CONCEPT	ITEMS	AUTHORS
ATTRACTIVENESS	• I think this avatar is ATTRACTIVE • It would be NICE to use this avatar	Ian Mull, Jamie Wyss, Eunjung Moon and Seung-Eun Lee
LIKEABILITY	• In my opinion, the virtual consultant is LIKEABLE • In my opinion, the virtual consultant is FRIENDLY • In my opinion, the virtual consultant is AGREEABLE	Martin Holzwarth, Chris Janiszewski, & Marcus M. Neumann
EXPERIENCE	• In my opinion, the virtual consultant is TRAINED • In my opinion, the virtual consultant is EXPERIENCED • In my opinion, the virtual consultant is KNOWLEDGEABLE	Martin Holzwarth, Chris Janiszewski, & Marcus M. Neumann
CREDIBILITY	• In my opinion, the virtual consultant is SINCERE • In my opinion, the virtual consultant is COMPETENT • In my opinion, the virtual consultant is CREDIBLE	Martin Holzwarth, Chris Janiszewski, & Marcus M. Neumann
PLEASURE EMOTIONS	• Pleasant-Unpleasant • Enjoyable-Unenjoyable • Fulfilling-Disappointing	Myron F. Floyd
AROUSAL EMOTIONS	• Relaxing-Tense • Dull-Exciting • Anxious—At ease	Myron F. Floyd
DOMINANCE EMOTIONS	• Successful-Unsuccessful • Skillful-Lucky	Myron F. Floyd
BUYING INTENTION	• Likely to buy • Likely to recommend	Kathleen Keeling, Peter McGoldrick, Susan Beatty
eWOM	• I intend to post this positive (negative) buying experience online	Jen-Ruei Fu, Pei-Hung Ju, Chiung-Wen Hsu

Table 2. Difference between avatars in terms desired attributes

	ATTRACTIVE / LIKEABLE	EXPERT / CREDIBLE	COMMON	ANOVA (significant differences) F
Likeability	2,91 (1,03)	**4,23 (,71)**	3,58 (,88)	57,06**
Attractiveness	2,85 (1,14)	**3,75 (,79)**	3,16 (,88)	24,47**
Experience	3,12 (1,17)	**4,23 (,80)**	2,81 (,93)	59,64**
Credibility	2,86 (1,19)	**4,12 (,78)**	3,22 (,79)	49,19**

(*) p<0,05; (**) p<0,01. The cells collect the average rating. The standard deviation is found in parentheses.

Table 3. Difference between avatars in terms of results obtained

	ATTRACTIVE / LIKEABLE	EXPERT / CREDIBLE	COMMON	ANOVA (significant differences) F
Pleasure (average)	2,65 (,98)	**4,08 (,78)**	3,31 (,84)	70,11**
Arousal (average)	2,66 (,95)	**3,90 (,77)**	3,34 (,81)	54,89**
Dominance (average)	3,37 (,93)	**3,91 (,76)**	3,10 (,75)	26,31**
Buying intention (average)	2,63 (1,19)	**3,97 (,96)**	3,21 (,89)	44,49**

| EWom (average) | 2,62 (1,26) | **3,75 (1,11)** | 3,00 (,97) | 27,04** |

(*) p<0,05; (**) p<0,01. The cells collect the average rating. The standard deviation is found in parentheses.

Table 4. Contribution of dimensions to the inertia of each avatar and each attribute

	Marginal Profile	Dim 1	Dim 2	Total
AVATARS				
1 ATTRACTI	,283	**,984**	,016	1,000
2 EXPERT	**,399**	,257	**,743**	1,000
3 COMMON	**,318**	,716	,284	1,000
PROPIETIES				
1	,048	**,918**	,082	1,000
2	,048	,644	,356	1,000
3	,048	,326	,674	1,000
4	,045	**,694**	,306	1,000
5	,043	**,937**	,063	1,000
6	,046	,603	**,397**	1,000
7	,045	,692	**,308**	1,000
8	,046	,486	**,514**	1,000
9	,045	,993	,007	1,000
10	,046	,774	**,226**	1,000
11	,046	,967	,033	1,000
DERIDE EFFECTS				
12	,049	,178	**,822**	1,000
13	,044	,967	,033	1,000
14	,043	,927	,073	1,000
15	,043	,739	**,261**	1,000
16	,045	,960	,040	1,000
17	,046	,005	**,995**	1,000
18	,047	**,913**	,087	1,000
19	,046	**1,000**	,000	1,000
20	,045	,998	,002	1,000
21	,044	,970	,030	1,000
22	,042	,996	,004	1,000

Table 5. Differences between men and women regarding desired proprieties perceptions'.

	Men	**Women**	**ANOVA (significance differences)**
ATTRACTIVE/LIKEABLE	Attractiveness 2,95 (1,18) Expertise 3,22 (1,14) Credibility 2,91 (1,18) Likeability 3,03 (1,04)	Attractiveness 2,67 (1,04) Expertise 2,95 (1,22) Average credibility 2,76 (1,23) Likeability 2,70 (1,00)	1,498 1,241 ,406 2,525
EXPERT/CREDIBLE	Attractiveness 3,59 (0,877) Expertise 4,08 (0,859) Credibility 3,94 (0,86) Likeability 4,11 (0,765)	Attractiveness **4,05** (0,504) Expertise **4,49** (0,614) Credibility **4,45** (0,504) Likeability **4,46** (0,572)	**8,836**[**] **6,688**[*] **10,816**[**] **6,014**[*]
COMMON	Attractiveness 3,05 (0,987) Expertise 2,69 (1,034) Credibility 3,14 (0,873) Likeability 3,43 (0,909)	Attractiveness 3,38 (0,631) Expertise 3,04 (0,676) Credibility 3,39 (0,623) Likeability 3,87 (0,789)	3,559 3,626 2,399 **6,181**[*]

(*) $p<0,05$; (**) $p<0,01$. The cells collect the average rating. The standard deviation is found in parentheses.

Table 6. Differences between men and women regarding desired effects perceptions.
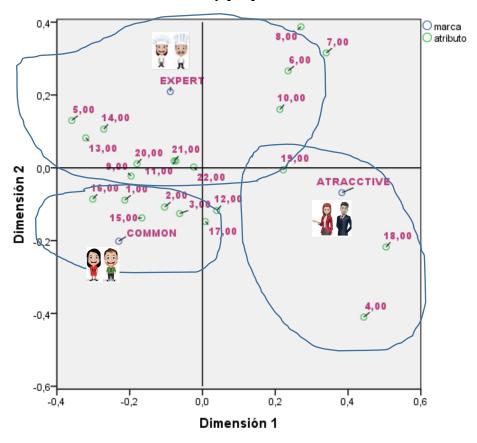
	Men	Women	ANOVA (significance differences)
ATTRACTIVE/LIKEABLE	Pleasure 2,65 (1,05) Arousal 2,65 (1,02) Dominance 3,40 (,84) Buying intention 2,75 (1,17) Average ewom 2,67 (1,28)	Pleasure 2,64 (,86) Arousal 2,68 (,81) Dominance 3,32 (1,07) Buying intention 2,44 (1,21) Average ewom 2,55 (1,24)	,006 ,028 ,176 1,559 ,195
EXPERT/CREDIBLE	Pleasure 3,94 (0,865) Arousal 3,74 (0,873) Dominance 3,81 (0,836) Buying intention 3,78 (1,071) eWOM 3,56 (1,139)	Pleasure **4,35** (0,548) Arousal **4,18** (0,482) Dominance **4,11** (0,595) Buying intention **4,32** (0,609) eWOM **4,08** (0,997)	6,971* 7,936** 3,653 7,990** 5,461*
COMMON	Pleasure 3,22 (0,868) Arousal 3,28 (0,792) Dominance 3,05 (0,846) Buying intention 3,17 (0,951) eWOM 2,98 (1060)	Pleasure 3,48 (0,797) Arousal 3,45 (0,864) Dominance 3,2 (0,552) Buying intention 3,28 (0,803) eWOM 3,03 (0,822)	2,299 1,034 0,886 0,31 0,043

(*) p<0,05; (**) p<0,01. The cells collect the average rating. The standard deviation is found in parentheses.

Map 1: Avatars associations with key proprieties and desired results

Simétrica Normalización

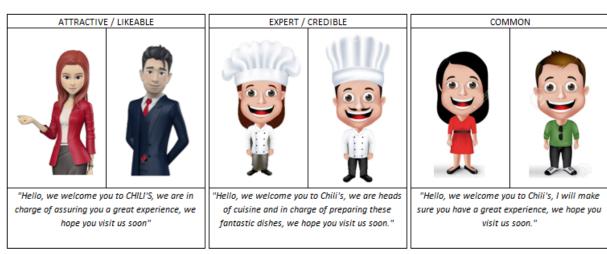| LIKEABILITY	AROUSAL EMOTIONS
1. Likeable	12. Pleasant
2. Friendly	13. Enjoyable
3. Agreeable	14. Fulfilling
ATTRACTIVENESS	PLEASURE EMOTIONS
4. I think this avatar is attractive	15. Stimulating
5. It would be nice to use this avatar	16. Relaxing
EXPIRIENCE	17. Dull
6. Trained	DOMINANCE EMOTIONS
7. Experience	18. Successful
8. Knowledgeable	19. Skilful
CREDIBILITY	BUYING INTENTION
9. Sincere	20. I would visit the restaurant recommended by this avatar
10. Competent	21. I would like to visit this restaurant
11. Credible	EWOM
	22. I would share positive messages about the restaurant on social networks

Appendix. Survey

Good morning, thank you very much for your support in solving this questionnaire =)

The restaurant CHILI'S wants to improve its WEB PAGE and will use a "AVATAR COMERCIAL" to talk about its products.
A "commercial avatar" is a virtual character that allows a web page to interact with its visitors. It has voice and movement.
This questionnaire seeks to identify your preferences with respect to THREE TYPES of "commercial avatars".

ATTRACTIVE / LIKEABLE	EXPERT / CREDIBLE	COMMON
"Hello, we welcome you to CHILI'S, we are in charge of assuring you a great experience, we hope you visit us soon"	"Hello, we welcome you to Chili's, we are heads of cuisine and in charge of preparing these fantastic dishes, we hope you visit us soon."	"Hello, we welcome you to Chili's, I will make sure you have a great experience, we hope you visit us soon."

1. Please, assess how you perceive each one of the avatars. Choose between the range of 1 to 5 where 1 means "Nothing" and 5 means "Totally".

Likeability (Friendly)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Likeability (Likeable)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Likeability (Agreeable)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Attraction (Attractive)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Attraction (It would be nice to use this avatar)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Expertise (Trained)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Expertise (Experienced)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Expertise (Knowledgeable)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Credibility (Sincere)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Credibility (Competent)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Credibility (Credible)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente

2. Please rate how you perceive / what you feel with each image. Choose between the range of 1 to 5.

Pleasure (Unpleasant-Pleasant)	Desagradable 1 2 3 4 5 Agradable	Desagradable 1 2 3 4 5 Agradable	Desagradable 1 2 3 4 5 Agradable
Pleasure (Unenjoyable-Enjoyable)	No divertido 1 2 3 4 5 Divertido	No divertido 1 2 3 4 5 Divertido	No divertido 1 2 3 4 5 Divertido
Pleasure (Boring-Stimulating)	Aburrido 1 2 3 4 5 Estimulante	Aburrido 1 2 3 4 5 Estimulante	Aburrido 1 2 3 4 5 Estimulante
Arousal (Tense-Relaxing)	Tenso 1 2 3 4 5 Relajante	Tenso 1 2 3 4 5 Relajante	Tenso 1 2 3 4 5 Relajante
Arousal (Dull-Exciting)	Apagado 1 2 3 4 5 Emocionante	Apagado 1 2 3 4 5 Emocionante	Apagado 1 2 3 4 5 Emocionante
Arousal (Anxious—At ease)	Ansioso 1 2 3 4 5 A gusto	Ansioso 1 2 3 4 5 A gusto	Ansioso 1 2 3 4 5 A gusto
Dominance (Unsuccessful-Successful)	Fracasado 1 2 3 4 5 Exitoso	Fracasado 1 2 3 4 5 Exitoso	Fracasado 1 2 3 4 5 Exitoso
Dominance (Lucky-Skillful)	Afortunado 1 2 3 4 5 Hábil	Afortunado 1 2 3 4 5 Hábil	Afortunado 1 2 3 4 5 Hábil

3. Please, assess to what extent each of these six avatars would influence you. Choose between the range of 1 to 5 where 1 means "nothing" and 5 means "totally".

Patronage intentions (Likely to buy *(Would you visit the restaurant recommended by this avatar?)*)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
Patronage intentions (Likely to recommend *(Would you recommend to visit the restaurant?)*)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente
eWOM intention (positive/negative) (I intend to post this positive (negative) buying experience online)	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente	Nada 1 2 3 4 5 Totalmente

4. Age _____

5. Gender

Male ⦿
Female ◯

6. Do you post comments about your experiences with restaurants / bars?

Never ⦿
Very little (1 time) ◯
Little (2-3 times) ◯
Frequently (4-5 times) ◯
Often (more than times) ◯

8. When you go to a new restaurant / bar, do you usually visit their website?

Yes ⦿
No ◯