Dr. Estefanía Jiménez-Iglesias
University of the Basque Country, Spain. estefania.jimenez@ehu.eus. https://orcid.org/0000-0002-8689-8485

Dra. Angeriñe Elorriaga-Illera
University of the Basque Country, Spain. angerine.elorriaga@ehu.eus. https://orcid.org/0000-0001-9274-8291

Dr. Sergio Monge-Benito
University of the Basque Country, Spain. sergio.monge@ehu.eus. https://orcid.org/0000-0001-8061-6865

Dra. Elena Olabarri-Fernández
University of the Basque Country, Spain. mariaelena.olabarri@ehu.eus. http://orcid.org/0000-0002-7433-0964

Children’s exposure on Instagram: instamoms, brand presence and legal loophole
Exposición de menores en Instagram: instamadres, presencia de marcas y vacío legal

Abstract
The influencer phenomenon has allowed previously unknown people to attract high levels of popularity through the display of images that recreate their activities, their interests, or their daily life. Instamoms are influencers who share content related to their family life on Instagram, frequently showing their young daughters and sons. In their publications, it is appreciated that commercial brands figure prominently, although the nature of the role they play in advertising strategies is not always clear. Through an ad hoc guide, 1,000 publications from ten popular Instagram accounts were analysed to quantify the frequency in which they show minors, and the presence of brands. Minors appear in 45.6% of the posts analysed and these publications receive 41% more likes than those in which there are no children. Trademarks appear in more than half of the publications analysed, with a pronounced increase in this respect between 2019 (43.3%) and 2020 (63.5%). Only one out of five there is a brand, and they explain that it is paid advertising. Minors feature frequently in the accounts of their mothers, and they contribute to generating large and attractive communities for the advertising industry. It is necessary to regulate the way in which advertising appears on these accounts, as well as the presence of their sons and daughters in them.

Keywords
advertising; children; influencers; Instagram; instamoms; sharenting

Resumen
El fenómeno influencer ha permitido a personas previamente desconocidas adquirir altos niveles de popularidad mediante la exhibición de imágenes que recrean sus actividades, sus intereses o su vida cotidiana. Las instamadres son influencers que comparten en la red social Instagram contenido relacionado con su vida familiar, mostrando con frecuencia a sus hijas e hijos pequeños. En sus publicaciones se aprecia alta presencia de marcas comerciales, pero la naturaleza de la relación que mantienen con la publicidad no siempre es clara. Mediante una ficha ad hoc, se han analizado 1,000 publicaciones de diez cuentas de instamadres populares para cuantificar la frecuencia con la que muestran en ellas a menores y la presencia de marca. En el 45.6% de los posts analizados aparecen menores y estas publicaciones reciben un 41% más de likes que aquellas en las que no los hay. En más de la mitad de las publicaciones analizadas aparecen marcas comerciales, y se percibe un incremento al respecto entre 2019 (43.3%) y 2020 (63.5%). Solo en una de cada cinco ocasiones en las que hay una marca se explicita que es publicidad, y por tanto, hay alguna remuneración. Nuestro trabajo demuestra que los niños y niñas son elementos frecuentes en las cuentas de sus instamadres, y contribuyen a generar comunidades grandes y atractivas para la industria publicitaria. Es necesario regular tanto la aparición en estas cuentas de menores como el modo en el que se hace presente la publicidad en ellas.

Keywords
influencers; Instagram; instamadres; menores; publicidad; sharenting

Palabras clave
influencers; Instagram; instamadres; menores; publicidad; sharenting
1. Introduction

Social media has caused a great revolution, not only in terms of communication but also because it has helped create new jargon, new marketing tools and new job profiles such as influencers. The influencer phenomenon allows people who were previously unknown to acquire high levels of popularity by creating audiovisual content that attracts a large audience on the internet. For some of them, this represents the chance to devote themselves professionally to creating content thanks to business contracts drawn up with brands interested in these niche audiences that have built up around them. Consumers trust “people like me” more, as mentioned by Cervera Solís (2017), than the actual brands. An international study by Influencer Marketing Hub stated that 90% of the brands in the survey that had contracted influencers at some point were satisfied with the results and so approximately 70% had increased their investment on the previous year (2019). Out of the 4,000 marketing agencies, brands and other industry professionals that were questioned in this study, almost 80% stated that they would invest part of their budget in influencer marketing and 87% said that they used Instagram when following these strategies. Data for advertising investment in 2020 in Spain ratify that influencer marketing is increasing (Indoadex, 2021). If we examine the age, both of the influencers and the audience following them, we see that the vast majority belong to the millennial generation: people born from 1980 onwards, who are transforming how advertising content is being broadcast and consumed on the internet.

The figure of the influencer on Instagram, in other words, the ‘instagrammer’, has undergone a professionalisation process as this social media and its potential as an advertising platform have evolved. It is part of a highly commercialised digital environment, where social media, that used to be blogs or YouTube channels, are used by specific persons who aspire to obtaining economic profit by maximising their visibility. To do so, they generate content, they attract users to construct communities - their followers - and they collaborate with brands that seek out these niche communities of potential customers. The communicative practice of introducing yourself as “current, authentic and intimate” to attract the attention of followers and treat them as though they were fans (Marwick, 2015) had been previously identified among youtubers and it is reproduced in the same way among instgrammers.

Given that the influencer marketing phenomenon is on the rise, the aim of this study is to focus on a very specific sector, bringing up children, analysing the accounts of ten instgrammers who are mothers, living in Spain, who regularly work with brands and receive compensation for this. We investigate the content that they share, the weight of advertising in their posts as a whole and how they declare it, the quantitative response received by their content from their audiences and the presence of minors, who are generally their young sons and daughters. To give the research some perspective, content published in these accounts will be compared between 2019 and 2020. The environment for broadcasting advertising content that is not always identified as such, where the image of minors is also frequently used, raises several ethical and legal challenges both for the advertising industry and for society as a whole, so it is important to study it in depth.

2. Literature review

2.1. Influencer marketing on Instagram: a rising trend

Some people define Instagram as the new social mediator within the media ecosystem (Martínez-Rolán, Tymoschuk, Piñero-Otero and Renó, 2019). According to data from IAB Spain (2021), 64% of the population uses Instagram in Spain, making it the second most frequently used network, only exceeded by WhatsApp. In fact, 83% of its users check in every day. Instagram is the network most used to search for information (40%) and where influencers are most followed (45%). 72% of people aged between 16 and 24, a particularly interesting demographic for sectors such as fashion or cosmetics, follow influencers through their Instagram account. In the 25 to 40 age range, where the millennial categorisation fits best, this figure is 48% and, in any case, it is constantly growing. It is a very visual form of social media that attracts users because it is user-friendly and highly interactive, and it is considered ideal for brands to promote their products through influential people (Segarra-Saavedra & Hidalgo-Marí, 2018).

The design of this network is continually innovating towards a more professional and commercial profile, making it easier for its users to create and share attractive content but, in parallel, making tools available to optimise their business as much as possible. Since 2019, it has included the chance to make payments. This means that purchases can be made without leaving the application or activating notifications for products that will be on sale soon. Influencer marketing is a non-invasive advertising technique that reaches a committed audience with great trust in the influencers that it has chosen, so it increases the reputation and the status of the company. The Mediakix agency revealed in its Influencer Marketing 2019 (2019) study that 89% of marketing experts considered Instagram necessary for their influence marketing strategy. The study added that 78% of those interviewed considered that the most effective format for this field was Instagram posts, putting them in first place among all the formats in different networks.
It is important to mention the reasons for influence marketing’s success, on the rise among companies to the point of being an indispensable tool for some. Influencers present themselves to Instagram users who have chosen to follow them, their advertising is not intrusive, and they humanise the brand, as they associate it directly with themselves. Frequently, the advertising is not only not intrusive but not identified (Monge-Benito, Elorriaga-Illera, Jiménez-Iglesias, Olabarri-Fernández, 2021). They often speak in the first person about their experience using the product or service that they are promoting. Furthermore, they are capable of telling a personal story associated with the product to contextualise their message and make the promotion seem native to attract their community of followers. The success of influencer marketing lies in that it is human to connect with other people, and not with logos. Influencers manage to communicate a brand’s message in a unique and personalised way, and they manage to get products and services recommended by people who their followers admire and respect (Díaz Iglesias, 2017).

This type of campaign generates engagement (commitment) among the audience: on Instagram specifically, followers can react to posts with likes and also by writing a comment. Both manifestations are visible to the rest of the community. The information that is obtained from user participation can be very useful, as consumers generate ideas that can be used as inspiration for new products, analyse what has gone wrong, their opinion of it, etc. Furthermore, this interaction is quantifiable, and it can be used to rate the acceptance achieved by the content.

2.2. Instagram and motherhood, a marriage of convenience

As described, the influencer, understood to be someone capable of multiplying the dissemination of online content by having an impact on a community’s consumption decisions, constitutes a significant element within the current communication industry and participates in a myth adapted to the limits and functional features of the platform that they are using: the meritocratic and neoliberal idea that through creativity, passion, tenacity and (performed) spontaneity, it is possible to achieve fame, recognition and monetisation from the exposure (Van Driel and Dumitraca, 2020).

Many influencers with the most followers nationally and internationally are young, aged between 20 and 30 years old (Truendy, 2012). Some studies describe a wider age range, from 15 to 35 years old (Abidln, 2016). In any case, both scenarios comprise women at the prime of their fertile age, often with small children. In that context, it should come as no surprise that influencers frequently define their digital identity based on their motherhood and they use their internet spaces to share content, interests and images related to these minors.

It is not unusual that women who become ‘instamoms’ had professions linked to the world of communication before they become mothers, and this role promises them a solution to the difficulties of conciliating childcare with their careers, an aspirational job (Jorge, Maropo, Coelho & Novello, 2021), “surrounded by glamour and self-realisation” (Littler, 2018: 201). Furthermore, these people find job-related achievement on social media and when creating content.

In the early stages of developing social media and the discourse on active participative cultures, users had the chance to share and celebrate the products that they were using, without expecting payment for their time and dedication. However, more current approximations to the phenomenon look at it from a critical point of view, highlighting its implications regarding work that is not clearly regulated, the weak position of consumers, or their hierarchical and subordinated alignment with the capitalist structure and market logic (Dufty, 2015; McQuarrie, Miller & Phillips, 2012). In turn, instamom accounts give the market access to very specific niches of potential consumers, undeniably attractive for brands and specific products related to parenting, diet, children’s fashion or family leisure. Instamoms capitalise their popularity on social media through commercial relationships with brands and hold a privileged position in the advertising industry where the audience is embracing alternative reference figures outside the mainstream.

2.3. Minors on the internet

The practice of putting parenting on show which diminishes the privacy and rights of infancy has become a research topic over the last decade (Belk, 2013; Davis, 2015; Blum-Ross & Livingstone, 2017; Verswijvel, Wairave, Hardies & Heirmanal, 2019). Many posts reflect concern around this phenomenon, that has been addressed from several perspectives. From the perspective of self-presentation, Aberg & Huvila (2019) wonder whether exposing their sons and daughters obeys the desire of mothers and fathers to express their expanded ego, seeing the minors as objects of representation, in other words components of their self-definition. This perspective opens up an explanation to the motivation driving them to share the creation of editorial content on child-raising.

Sharenting, a term coined to name the widespread trend of sharing content on young sons and daughters on social media, constitutes an absolute extended practice, although occasional. The apparently inoffensive custom of documenting and narrating the life of minors on social media to share
In Spain, a survey run among fathers and mothers of children aged 9 to 17 years old demonstrated that 89% of fathers and mothers said that they shared or sent digital content (photos or videos) of their children at least once a month. 8% state that they do this at least once a week and 3% do it every day. Almost all of them (95%) indicate that their objective is to keep in touch with family and friends (Garmendia, Martínez, Larrañaga, Jiménez, Carrera, Casado & Garitaonandia, 2020; Garitaonandia, Carrera-Xuarros, Jiménez-Iglesias & Larrañaga, 2020). The observation of activity on social media, not of conventional users but some influencers with their sons and daughters, provides a counterpoint to this evidence: minors are constantly present in their posts. In these cases, it could be said that the boys and girls are used as promotion or persuasion tools, in an act that could be qualified as commercial exploitation (Ofer, Coyle-Shapiro & Pearce, 2018).

The legal framework that regulates management of a minor’s image varies by country. In Spain, the decision to upload a photo of your children on social media falls within parental rights. This means that if both parents agree, they can do what they see fit. However, the law also acknowledges that children are persons and, as such, they have rights, such as their own image, established in article 18.1 of the Constitution. Fathers and mothers often mistakenly believe that they have absolute power over their children’s intimacy and image until they are 18 years old, but this is not true. If we add to these circumstances the fact that some of these parents, with wide communities of followers, receive economic payments from commercial brands to promote their products, we find ourselves in a scenario that should be studied in depth from a legal and ethical perspective or even from the point of view of communication. The brand’s own image could be damaged by associating with practices that are not necessarily backed by their audiences.

### 2.4. An incomplete legal framework

Influencer marketing is considered by the European Commission to be a potentially problematic practice given that consumers might find it hard to identify which content is advertising. According to a report published by this institution, one third of those asked were not aware of the commercial nature of native advertising (European Commission, 2018). Evidence in this respect, and the speedy development of these communicative practices, emphasise the need for legal frameworks and ad hoc codes to clearly and explicitly regulate the sector and to show which content posted on the internet is promoted by brands.

In this respect, it should be highlighted that in the English-speaking world, the Federal Trade Commission in the United States (FTC) imposed a very detailed Advertising Regulation Law in 2016, and the CMA, the advertising regulator in the United Kingdom, produced a guide to protect users from stealth advertising on social media. The Advertising Communications and Market Code says that advertising must be clearly distinguishable as such, and that native advertising must be labelled as an advertisement, so it is easy to recognise. If the influencer has received some type of compensation either monetary, gifts or advantages for the posted content, they must include the labels #sponsored or #ad. If they do not act as stated in the manual, they can face up to two years in prison. In France, in turn, the law states that influencers over the age of 16 must indicate promoted content clearly. The relevant organisation is the Autorité de Régulation Professionnelle de la Publicité (ARPP).

There have been some complaints in the sector in Spain, where it is accepted that there is a permanent lack of transparency, although there are laws that regulate advertising communication. The General Advertising Law of 1988 considers deceptive advertising to be unlawful (BOE, 1988) and the Law of Information Society and Electronic Trade Services (BOE, 2002) states that advertising must be presented as such, so that it cannot be confused with any other type of content, and the advertiser must be clearly identified. However, there is no law that regulates advertising practice through influencers specifically. And although the advertising standards do not explicitly include advertisers working with influencers, there is a general framework that might be applied to any type of advertising manifestation, independently of the platform where the commercial action takes place.
In parallel, since 1 January 2021, the Code of conduct on the use of influencers in advertising is under way, drawn up by the Spanish Advertisers Association and the self-regulation body Autocontrol (2020), under the premise that just as for radio or television, it is compulsory for any promotional action to be clearly marked as advertising. However, this code is still voluntary and has no legal validity.

In Spain, influencer marketing is a rising trend that, as indicated, attracts attention from advertising agencies and advertisers in equal measure. This has been confirmed by several academic studies (Castelló & Del Pino, 2015; Sanz-Marcos, Jiménez-Marín & Elías-Zambrano, 2019) and research carried out from the business field (Brandmanic, 2018; Socialpubli, 2019). However, no analysis has been run on the presence of children in this content that influencers create for brands. This study emphasises the case of influencers who are obtaining returns from commercial brands in exchange for creating and broadcasting content also featuring their children, and this perspective has yet to be addressed from the academic field.

3. Aims and methodology
This article analyses the content published on the Instagram accounts of a convenience sample composed of ten Spanish influencers who present themselves as mothers. They all have more than 100,000 followers, frequently show minors in their posts, normally their own sons and daughters, and usually work with brands. Estefanía Unzu (@verdeliss) stands out among them. With more than a million followers and a career as an influencer developed previously on other digital platforms (Monge-Benito, Elorriaga-Illera and Olabarri-Fernández, 2018), she is a communication phenomenon that reaches beyond Instagram.

The analysis focuses on two questions: firstly, the frequency with which the children appear on the accounts being analysed, and secondly, how commercial brands appear in their posts and whether the post explains that this is advertising. This seeks to determine if the children are attractive elements for the community of followers of these accounts and if this is related to the presence of advertising content that they post.

It works from the following two hypotheses:

1.- Posts featuring children generate more likes and comments that when their mothers do not show them.

2.- Posts featuring children include advertising content less frequently than when they do not appear.

1000 posts were analysed, 100 for each of the ten instamoms selected (Table 1), and the samples were compiled in two different periods: the last 50 posts from 2019 and the last 50 posts from 2020. Table 1 shows the profiles, their number of followers and their engagement rates, calculated according to the standardised formula used in the advertising industry to obtain this parameter: average likes + average number of comments from followers x 100. The calculation had to consider the exclusive performance of the 100 posts analysed for each profile.

<table>
<thead>
<tr>
<th>Instamoms</th>
<th>Number of followers</th>
<th>Rate of engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estefanía Unzu (@verdeliss)</td>
<td>1,300,000</td>
<td>5,37%</td>
</tr>
<tr>
<td>Grace Villareal (@gracyvillarreal)</td>
<td>622,000</td>
<td>5,56%</td>
</tr>
<tr>
<td>Verónica Sánchez (@oh.mamiblue)</td>
<td>428,000</td>
<td>2,91%</td>
</tr>
<tr>
<td>Gemma Marin (@gemma_marin)</td>
<td>279,000</td>
<td>3,15%</td>
</tr>
<tr>
<td>Carmen Esperanza (@Trmadredeprincesas)</td>
<td>283,000</td>
<td>2,74%</td>
</tr>
<tr>
<td>Lorena Tejeda (@lorenatejeda)</td>
<td>229,000</td>
<td>2,66%</td>
</tr>
<tr>
<td>Cristina Ramírez (@lalaylila)</td>
<td>185,000</td>
<td>1,65%</td>
</tr>
<tr>
<td>Judith Frontón (@Mummiella)</td>
<td>173,000</td>
<td>2,00%</td>
</tr>
<tr>
<td>Olga García Ojeda (@vivircongusto)</td>
<td>144,000</td>
<td>1,65%</td>
</tr>
<tr>
<td>María Pérez (@love.chloe.jon)</td>
<td>121,000</td>
<td>3,27%</td>
</tr>
</tbody>
</table>

Source: Compiled by authors. Number of followers by May 2021.
Each post is categorised using a record that guarantees the homogeneity of the analysis, considering various variables. Selection was inspired by the categories used in previous works focused on Instagram content analysis. This involved a meticulous bibliographic review (Segarra-Saavedra & Hidalgo-Marí, 2018; Ekman & Widholm, 2017; Lalancette & Raynauld, 2017; Selva-Ruiz & Caro-Castaño, 2017; Quevedo-Redondo & Portalés-Oliva, 2017). The selected posts were coded separately. In the subsequent checking process, high concordance was appreciated, therefore revealing the consistency of the instrument.

The analysis record featured the following variables:

1. Type of post: photo, video or multiple of photos/videos.
2. Presence or absence of commercial brands in the post.
3. When appropriate, explicit explanation of whether this is advertising or collaboration, using hashtags (#advertising, #ad, #collaboration), in the text or the picture/video, or using formulas such as “collaboration paid by....”).
4. Presence or absence of the image of minors in the post.
5. Number of likes and comments generated per post.

The statistical analysis used the SPSS software package. Chi-squared tests were used to analyse the differences between different categories. The statistical tests to compare the differences between means that are carried out on the normalised values of comments and likes were t-tests, with a significant threshold of p=0.05. To stop posts from influencers with higher means conditioning the results to the detriment of any with more modest means, the value of interactions was standardised for each influencer, to be able to compare the number of comments and likes from accounts with a different number of followers. This standardisation process was performed by dividing the value of comments or likes from each post among the mean of the posts from that account over that year.

4. Results

4.1. Presence of boys and girls on their instamoms’ accounts

Minors appear in 45.6% of the 1,000 posts analysed, with no significant differences (p=0.222) among their different types of posts: photo, multiple or video. Photos are the most frequent type of post (60.1%), followed by multiples (29.5%), that can contain several photos or videos. The least frequent type of post is videos (10.3%) but between 2019 and 2020, an increase was seen in its use as opposed to still photography. In 2019, videos represented only 5.8% of posts while in 2020 that value increased up to 14.6% (significant difference: p=0.000).

As mentioned in the methodology, to check whether the posts in which minors appear generate more responses from the community, the value of the number of likes and comments was normalised to be able to make comparisons between posts from different influencers. 1 thereby indicates a mean comment value for this influencer, >1 is a value over the mean and <1 is below the mean. The means for comments and likes on posts with and without minors have been compared using t-tests and the result can be seen in Table 2.
Table 2: Comparison of standardised value means for interactions related to the appearance of minors

<table>
<thead>
<tr>
<th></th>
<th>Posts without minors</th>
<th>Posts with minors</th>
<th>p-value t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>1.26±4.65</td>
<td>0.70±2.28</td>
<td>0.020 (significant)</td>
</tr>
<tr>
<td>Likes</td>
<td>0.78±0.55</td>
<td>1.10±0.58</td>
<td>0.000 (significant)</td>
</tr>
</tbody>
</table>

Source: Compiled by authors.

The result of the comparison tells us that the posts with minors receive 41% more likes (p=0.020) and, apparently, they also receive 45% fewer comments (p=0.000) than posts without minors. However, the issue of the comments must be examined carefully because a third factor conditions the result. In the sample of 1000 posts, there are 49 prize draws. Minors appear in 13 of them (27%) and in 36 of them (73%), they do not. The system for participating in prize draws usually requires followers to leave a comment, which would profoundly alter the value of the comments in these publications: posts with prize draws have comment values 10 times higher than the mean. Therefore, a small quantity of posts (49) with an abnormally high value of comments and unequal presence of minors constitutes a destabilising factor and it seems that the value of the comments is significantly lower when minors appear. However, if posts with prize draws are removed, there are no significant differences between the mean of the normalised value of comments received by posts with and without minors (0.42 vs. 0.45, p=0.699).

On the other hand, the number of likes in posts where minors appear is greater than received when minors are not included, and the difference in 2019 and 2020 is significant. So then, we can conclude that the presence of minors is related to a higher number of likes but not a greater quantity of comments.

4.2. Commercial brands and declared advertising in Instagram

Regarding the presence of commercial brands in the instamom content, this happens in 53.4% of the posts analysed. An increase can be seen in the appearance of commercial brands over time: from 43.3% in 2019 to 63.5% in 2020 (significant difference: p=0.000).

The percentage of posts explaining that there is a paid collaboration with a commercial brand is 21.2% of the total. Also in this regard, a rising trend can be seen from 18.4% of posts in 2019 to 23.8% in 2020, 29% more posts with declared advertising (significant difference: p=0.035).

As can be deduced from these figures, only 39.5% of posts where commercial brands appear explain what type of commercial relationship exists between the instagrams and the brand, which raises the question of what happens with the remaining 60.5%. It is impossible to know whether this relationship exists or whether, on the contrary, this is stealth advertising.

The study also checked whether the posts where brands appear generate more interactions between the community of followers and the results are compiled in table 3.

Table 3: Comparison of standardised value means for interactions related to the appearance of brands

<table>
<thead>
<tr>
<th></th>
<th>Brands do not appear</th>
<th>Brands do appear</th>
<th>p-value t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>0.68±2.24</td>
<td>1.29±4.69</td>
<td>0.010 (significant)</td>
</tr>
<tr>
<td>Likes</td>
<td>1.03±0.65</td>
<td>0.84±0.50</td>
<td>0.000 (significant)</td>
</tr>
</tbody>
</table>

Source: Compiled by authors.

Posts where commercial brands appear receive 90% more comments than the mean, but 18% fewer likes and, as shown in the table, this is a significant difference. However, if we eliminate all the prize draws from the analysis, the difference between the normalised comment value means with or without brands is not significant (0.37 against 0.51). Therefore, with the data that we have, we could not say that the appearance of brands implies an increase in the number of comments, if there were no prize draws. All the prize draws are in posts where brands appear and, as we have seen, this type of post has a much higher number of comments. There are no significant variations in these data over the years.

On the other hand, the study has also analysed whether this trend of receiving fewer likes when there are brands is maintained when we are talking about advertising declared in one of the ways we have controlled (hashtag, declaration in the text, declaration in the content, or declaration in the location). The results are shown in table 4.
Table 4: Comparison of standardised value means for interactions related to the explicit declaration of advertising

<table>
<thead>
<tr>
<th></th>
<th>Advertising is not declared</th>
<th>Advertising is explicitly declared</th>
<th>p-value t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>0.98±3.48</td>
<td>1.08±4.69</td>
<td>0.757 (not significant)</td>
</tr>
<tr>
<td>Likes</td>
<td>0.96±0.62</td>
<td>0.80±0.40</td>
<td>0.000 (significant)</td>
</tr>
</tbody>
</table>

Source: Compiled by authors.

The posts with declared advertising have 18% fewer likes than posts where no commercial relationship is clarified. The results do not vary significantly over the years.

4.3. Relationship between the exposure of minors and the absence or presence of brands

Finally, in reference to the relationship between the appearance of minors and the commercial brands, the presence of the latter is more frequent when there are no minors (58.9%) than when there are children in the content (46.8%). Although this difference is significant (p=0.000), certainly the percentage of minors that appear linked to commercial brands, as in images 1 and 2, is still very high.

Image 1: Post with advertising content with presence of minors

Image 2: Post with advertising content with presence of minors

Source: @trimadredeprincesas.

Source: @verdeliss.

As already presented, the percentage of posts where the collaboration with commercial brands is explained is 21.2% but, in this case, there are no significant differences relating to the appearance of minors (p=0.132). Following on from the analysis in the previous point, it has been compared whether the posts that contain commercial brands receive more or less interaction depending on whether minors appear in them or not. The results are shown in table 5.
Table 5: Comparison of standardised value means for interactions related to the explicit declaration of advertising

<table>
<thead>
<tr>
<th></th>
<th>Minors do not appear</th>
<th>Minors do appear</th>
<th>p-value t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>1.67±5.65</td>
<td>0.72±2.61</td>
<td>0.022 (significant)</td>
</tr>
<tr>
<td>Likes</td>
<td>0.73±0.43</td>
<td>1.00±0.55</td>
<td>0.000 (significant)</td>
</tr>
</tbody>
</table>

Source: Compiled by authors.

Depending on this data, we can conclude that the posts with commercial brands where minors appear have 36% more likes than posts that do not have them, which is more striking if we remember that the posts with commercial brands attract 18% fewer likes than those which do not include them. If we had not observed the distorting element of the comments, we might also have been tempted to conclude that posts with minors receive 57% fewer comments than those without minors. However, if we remove the prize draws from the count, as in previous occasions, the effect of the comments disappears; 0.38 without minors compared to 0.35 with minors (non-significant difference: p=0.754). However, the greater quantity of likes for posts with minors and brands is maintained.

5. Discussion and conclusions

As described, the initial starting hypothesis we raised is only partially met: the instamom posts where they include their sons and daughters receive more likes than when they are included. However, it cannot be concluded that the presence of minors is related to a higher number of comments. Consequently, the pictures of boys and girls on Instagram are used to generate more likes, which, for their follower communities, are the simplest response that requires the least effort.

Regarding the second hypothesis, analysis of the results shows us that it is not met: the presence of minors does not imply that advertising disappears from the posts, quite the opposite. It is true that there are more brands in the posts where minors do not appear than when they do, but there are many children that appear linked to commercial brands. In fact, they counter the detected trend that more advertising leads to fewer likes: the posts that include brands where minors appear perform better in terms of likes than the average.

Children have become a substantial element to generate follower communities and they generate more engagement, irrespective of whether brands are present, and if these brands are explicit or stealth advertising. This leads us to think that they work as decoys to generate and feed large audiences that might then be attractive for the advertising industry.

Compared to the strict regulations for employing children in other advertising supports such as television, it is striking that there is a legal vacuum regarding the appearance of children on this support. As seen (Influencer Marketing Hub, 2020; Infoadex, 2021; IAB Spain, 2021) influencer marketing is on the rise, just as Instagram consumption is also increasing and the attraction of this support both for the brands and for the instamoms who have precisely based their career around frequently exposing their children. They use their children to increase their follower community because they are photogenic and because they generate likes, irrespective of whether brands are present.

The presence of brands is constant among instamoms: one in every five posts analysed is presented as explicit advertising. This was even more obvious in 2020 than in 2019 -almost 50% more from one year to the next, and it must be understood in a context in which the circumstances derived from the COVID pandemic meant that investment in advertising was forced to be redistributed. The weight of influencer marketing, growing 22.3% on the total, was one of the few upward trends in advertising methods in 2020 (Infoadex, 2021).

As limitations to this research, it must be highlighted that the analysis was run on posts from the history of the selected instamoms, not including their stories, a complementary format that is more volatile and difficult to recover, and also more given to videos. It would be opportune to find out how advertising is inserted in this case, and the role of children in it. In the same way, our study has detected, and considered, the distorting factor implied by prize draws: to take part in a prize draw, it is compulsory to like the post and write a comment, which conditions the mean engagement results. Greater knowledge of the strategies and tools used to disseminate advertising content in Instagram would be an intriguing area for research.

Although current legislation in Spain states that all agents in the advertising sector must identify paid content, the speed that influencer marketing has developed on social media, and particularly on
Instagram, means that, as opposed to the television or the press, this advertising forum seems to be on the edge of this obligation. Greater regulation of how the advertising content is handled, by influencers in general and instamoms in particular, might restrict their messages, but in the medium term, it would result in the loyalty that they arouse among their communities. Consequently, before the Millennial audience niches begin to turn their back, out of mistrust, saturation or due to questioning the use of child images, as they have done to other platforms, it is important for the advertising sector to develop and enforce more precise rules.

6. Specific contributions of each author

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research design</td>
<td>1, 2, 3 and 4</td>
</tr>
<tr>
<td>Documentary search</td>
<td>1, 2, 3 and 4</td>
</tr>
<tr>
<td>Data collection</td>
<td>1, 2, 3 and 4</td>
</tr>
<tr>
<td>Critical data analysis and interpretation</td>
<td>1, 2 and 3</td>
</tr>
<tr>
<td>Writing, review and approval of versions</td>
<td>1, 2 and 3</td>
</tr>
</tbody>
</table>

7. Acknowledgement
Translator: Kit Cree.

8. References


**Note**
The authors would like to thank María Alzaga, Irati Cillero, Andrea Domezain, Argiñe Lizarraga, Noa Oronoz, Naroa Salgado, Judit Segura and Beatriz Temprano for their assistance with technical tasks.