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Adolescents' advertising literacy and body self-perception in the face of influencer marketing

Alfabetización publicitaria y autopercepción corporal de los adolescentes ante el marketing de influenciadores

Literacia publicitária e auto-perceção corporal dos adolescentes face ao marketing de influencia

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ABSTRACT | In today's society, people are increasingly conscious of their bodies, and marketers are well aware of this fact. As a result, influencers have started to include body-related content in their posts, especially when promoting fashion, food, cosmetics, beauty or fitness brands. This, and the influence that influencers' lifestyles have on users' body image, calls for a closer look at measures that can protect the public, especially young people, from the effects of these posts, which often blur the lines between organic and sponsored content. This study raises the possibility that one of these filters to protect this age group from sponsored content from influencers exploiting the image argument is their level of advertising literacy. Based on a survey applied to 1,055 adolescents aged 11 to 17 between April and June, 2022, living in Spain, a significant relationship was found between adolescents' concern about their body image and their level of advertising literacy in the face of these contents, especially in setting goals to achieve the perfect body and the importance of physical appearance in their self-perception. The gender, age and socioeconomic status of the respondents lead to nuances in the results. The discussion here is relevant for companies that include influencers in their marketing strategies, families, educators and public administrations.

KEYWORDS: advertising literacy; body image concerns; appearance; adolescents; influencer marketing; sponsored content.

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RESUMEN | *En la sociedad actual, la gente está cada vez más preocupada por su cuerpo y los profesionales del marketing son muy conscientes de ello. Como resultado, los influenciadores han empezado a incorporar contenido con un protagonismo especial del cuerpo y de la apariencia, especialmente cuando al promocionar marcas de moda, alimentación, cosmética, belleza o fitness. Esto, junto con la incidencia que el estilo de vida de los influenciadores tiene en la imagen corporal de los usuarios, hace necesario un análisis más detallado de las medidas que pueden proteger al público, principalmente a los jóvenes, del impacto de estas publicaciones que, a menudo, desdibujan los límites entre el contenido orgánico y el patrocinado. Este estudio plantea la posibilidad de que uno de estos filtros para proteger a este grupo de edad de los contenidos patrocinados de influenciadores que explotan el argumento de la imagen sea su nivel de alfabetización publicitaria. Mediante una encuesta aplicada a 1055 adolescentes de 11 a 17 años residentes en España entre abril y junio de 2022 se pudo comprobar la relación significativa entre la preocupación de los adolescentes por su imagen corporal y su nivel de alfabetización publicitaria ante estos contenidos, especialmente en el establecimiento de metas para conseguir el cuerpo perfecto y la importancia del aspecto físico en su autopercepción. El género, la edad y el nivel socioeconómico de los encuestados introducen matices en los resultados. La discusión es relevante para empresas que incluyen influenciadores en sus estrategias de marketing, familias, educadores y administraciones públicas.*

PALABRAS CLAVE: *alfabetización publicitaria; preocupación por la imagen corporal; apariencia; adolescentes; marketing de influenciadores; contenidos patrocinados, España*

RESUMO | Na sociedade atual, as pessoas estão cada vez mais conscientes do seu corpo, e os profissionais de marketing estão bem cientes deste facto. Consequentemente, os influenciadores começaram a incorporar conteúdos relacionados com o corpo nas suas publicações, sobretudo quando promovem marcas de moda, alimentação, cosmética, beleza ou fitness. Isto, juntamente com a incidência que os estilos de vida dos influenciadores têm na imagem corporal dos utilizadores, exige um olhar mais atento às medidas que podem proteger o público, especialmente os jovens, do impacto destas publicações, que muitas vezes, confundem as linhas entre o conteúdo orgânico e o patrocinado. Este estudo levanta a possibilidade de que um desses filtros para proteger essa faixa etária do conteúdo patrocinado de influenciadores que exploram o argumento da imagem seja o seu nível de alfabetização publicitária. Através de um inquérito aplicado a 1055 adolescentes dos 11 aos 17 anos, residentes em Espanha entre abril e junho de 2022, foi possível verificar a relação significativa entre a preocupação dos adolescentes com a sua imagem corporal e o seu nível de alfabetização publicitária quanto a esses conteúdos, especialmente no estabelecimento de metas para alcançar o corpo perfeito e a importância da aparência física na sua autopercepção. O gênero, a idade e o estatuto socioeconômico dos inquiridos introduzem nuances nos resultados. A discussão aqui apresentada é relevante para empresas que incluem influenciadores nas suas estratégias de marketing, famílias, educadores e administrações públicas.

PALAVRAS-CHAVE: Literacia publicitária; preocupações com a imagem corporal; aparência; adolescentes; marketing de influência; conteúdo patrocinado.

INTRODUCTION

The importance of physical appearance in consumer society cannot be denied (Marzano-Parisoli, 2001). For many years, people have been striving for the perfect figure, which has led to the consumption of various products in different areas such as fashion, cosmetics, aesthetics, and food. Advertising has capitalized on this pursuit by using it as a selling point (Borland & Akram, 2007; De Lenne et al., 2021; Yu et al., 2011).

Physical appearance is often associated with acceptance, projection and social success. This also applies to social media, where an attractive physique can lead to more followers, interaction and engagement. The use of filters to enhance physical appearance is a common practice, but it is not without controversy. Such modifications can affect self-concept and acceptance of one's own body (Burnette et al., 2017; Holland & Tiggemann, 2016). Since 2021, an amendment to the Norwegian Marketing Act requires influencers to disclose the use of filters that alter their images in their posts.

Influencer marketing is one of the most frequently used advertising strategies in social media. This strategy has become increasingly popular since 2019 and has led to significant growth. The influencer marketing industry has more than tripled in size worldwide since 2019 and will reach a record value of 24 billion US dollars by the end of 2024 ("Global influencer...", 2024). While advertising spend in Spain declined by almost 23% in 2022, influencer marketing was one of the fastest growing categories (Infoadex, 2023). In this strategy, all content revolves around one person (the influencer), which means that their physical appearance has enormous importance (Vanwesenbeeck et al., 2024; Silva et al., 2021).

Influencers' content can significantly influence the body perception of their followers (Feijoo & Vizcaíno-Verdú, 2024; Silva et al., 2021; Burnette et al., 2017), especially when they have commercial intentions. This is based on social-cognitive theory (Bandura, 2001) and Festinger's (1954) social-comparative theory, which have previously been used to measure the relationship between media exposure and body image (Hendrickse et al., 2017).

While previous research (Ameen et al., 2022; Durau et al., 2022; Lowe-Calverley & Greeve, 2020; Tiggeman & Anderberg, 2020; Su et al., 2021) has shown that influencer content can have a negative impact on a user's body satisfaction, it can also have positive effects. In fact, the review by Engel and colleagues (2024) shows that at least 8 articles demonstrate benefits of social media use for adolescents.

If the target audience affected by this content is underage, their resources for dealing with publications that have blurred boundaries between organic and

advertising content and are not always correctly labelled are rather limited. This makes it difficult to recognize persuasive intentions (Rozendaal & Buijzen, 2023).

This research proposal aims to enrich the debate on how exposure to content published by influencers influences adolescents' body self-perception. The main contribution of this study lies in the use of advertising literacy as a factor that can serve as a filter for body image concerns in adolescents. In this paper, advertising literacy is introduced as a skill that not only allows one to recognize the persuasive intent behind content, but also encourages critical reflection on messages related to physical appearance. By linking the ability to interpret advertising to emotional and cognitive variables related to body image, this study opens a new line of research that proposes pedagogical strategies to mitigate the negative effects of this type of marketing on vulnerable audiences.

Body image concerns and sponsored influencer content

The influence of sociocultural factors - parents, peers or the media - is very important for the projection of children's body image (Ricciardelli & McCabe, 2001). According to social comparison theory (Festinger, 1954), individuals tend to make comparisons of physical attributes with their environment, which influence their own evaluation of body image. As Hendrikse and colleagues (2017) show, this environment is now extended to social networks.

Identifying the causes that impact on an individual's body image is very complex and it would be unrealistic to expect exposure to social media to exert a simple and direct influence on body dysmorphic disorder (Perloff, 2014). In fact, according to a study by Vall-Roqué and colleagues (2023) with Spanish women during the COVID-19 lockdown, "no significant differences were found in body dissatisfaction and physical appearance comparisons depending on whether participants' Instagram frequency of use had increased, remained the same or decreased" (p. 127).

While Hendrikse and colleagues (2017) analyzed a university and female audience, this research focuses on adolescents, an age group associated with low confidence and low self-esteem (Ameen et al., 2022). Self-confidence and self-esteem are concepts that are directly linked to body image (Cameron et al., 2019) and are often considered when measuring it. According to Perloff (2014), some of the consequences resulting from the importance attributed to body image and body perception could be frustration, anxiety, single-mindedness or self-deprecation in relation to one's appearance.

Based on social cognitive theory (Bandura, 2001), it is assumed that influencers model the behavior of their followers through observation, becoming symbolic models that they imitate in order to achieve the same results. This process could be

intensified because influencers are seen as close friends (Meyers, 2017), a widespread feeling among children and adolescents. The stronger the parasocial interaction with influencers, the more trustworthy and attractive their messages are - values that could be transferred to the products and brands they sponsor (Lim et al., 2017).

Likewise, the bodies of influencers in food and fitness marketing become brand assets to convey an ideal body image (Powers & Greenwell, 2016). The more the influencer is present, the more engagement the content generates (Vizcaíno-Verdú et al., 2024; Pilgrim & Bohnet-Joschko, 2022). There is also evidence of the impact of influencers' lifestyles on body satisfaction among social network users (Lowe-Calverley & Greeve, 2020; Su et al., 2021; Tiggeman & Anderberg, 2020), which is more pronounced among younger audiences (Engel et al., 2024; Cambronero Saiz et al., 2024).

In a context where physical appearance is increasingly important and influencers reinforce ideal physical characteristics that make them archetypes of beauty and physical health care (Rosara & Luthfia, 2020), minors must have mechanisms that allow them to critically process the content generated by these figures, especially those that have a persuasive intent behind them (Vanwesenbeeck et al., 2024). Advertising literacy is therefore proposed as one of these filters in this study.

Advertising literacy in the face of hybrid content

Advertising literacy develops a person's knowledge, skills, and abilities to understand, process and respond to commercial content with persuasive intent. This ability is particularly important in a consumer society.

Advertising literacy is traditionally divided into a cognitive and an attitudinal dimension (Rozendaal et al., 2011). Regarding the first dimension, there is consensus that consumers need to be able to recognize some aspects of advertising, such as the selling intent, the source, the persuasive intent, the tactics used, and the bias of the advertisement (Friestad & Wright, 1994; Livingstone & Helsper, 2006; Rozendaal et al., 2011). The attitudinal dimension relies on acquired knowledge to elicit the consumer's response to the liking/disliking that the commercial content may evoke in them and a healthy skepticism that leads them to think about what they have heard or seen (Hudders et al., 2017). Ideally, the final response to advertising would be more conscious as a result of this critical analysis. Recently, a third dimension has been added to advertising literacy, ethics (Sádaba & Feijoo, 2024; Hudders et al., 2017; Sweeney et al., 2022).

There are several studies (Rozendaal et al., 2011; An et al., 2014; Vanwesenbeeck et al., 2017; Van Reijmersdal et al., 2017) that have shown that the conceptual dimension of advertising literacy is necessary but not sufficient to deal with digital

formats, especially among younger users. This is exacerbated in hybrid formats, which are characteristic of influencers, where the distinction between organic and commercial is blurred (De Jans & Hudders, 2020; Van Reijmersdal & Rozendaal, 2020; Van Dam & Van Reijmersdal, 2019; Feijoo et al., 2023).

Influencer marketing is increasingly blurring the line between entertainment and commercial content. It is necessary to focus on what distinguishes children when they receive this type of content, which does not have a standardized format and in many cases depends on the context in which it is inserted.

Gender often plays an important role in body image concerns. Existing research suggests that, on average, men have less self-doubt about their body image (Möri et al., 2022). Age is also generally a relevant variable: although the influence of the media in constructing the perfect body norm occurs throughout adolescence (Tiggemann & Slater, 2013), age is indeed a crucial variable for levels of advertising literacy (Hudders et al., 2017). Likewise, it is considered relevant to establish the socioeconomic level of households as a criterion that may introduce nuance into the results, in line with previous research on advertising literacy, minors and influencers (Feijoo et al., 2023).

Objectives and research questions

In a digital environment where influencer marketing plays a predominant role, advertising literacy proves to be an important tool to protect adolescents from persuasive messages related to body image. This study has two main objectives:

1. To explore whether advertising literacy is related to body image concerns in adolescents exposed to influencer marketing.
2. To determine how variables such as gender, age, and socioeconomic level influence this relationship.

Based on these premises, the following research questions are posed:

RQ1. Is there an association between adolescents' level of advertising literacy and their level of concern about their body image when exposed to influencer-sponsored content about products related to physical appearance?

RQ2. How does this association relate to the gender, age and socioeconomic level of the adolescents?

To answer these research questions, an exploratory study was conducted among adolescents living in different parts of Spain. Using a questionnaire distributed online, they were asked to what extent they were concerned about their body or their own image when confronted with publications by influencers collaborating

with brands linked to physical appearance. Their level of advertising literacy was measured when they were confronted with three specific examples of this type of content. Following the recommendations of Hudders and colleagues (2017), we chose to analyze advertising competence at the situational level rather than the dispositional level. This approach allows us to assess how consumers' advertising knowledge and skills are activated in a real-life context where they are exposed to specific content, rather than just measuring the abstract possession of these skills. Looking at advertising literacy from a situational perspective is particularly relevant in the context of influencer marketing, where hybrid messages often blur the lines between organic and sponsored content.

METHOD

Design and sample

In order to collect information, an ad hoc questionnaire was created and sent to minors aged between 11 and 17 residing in Spain. A total of 1055 people participated in this study, with a confidence level of 95 and a margin of error of +/-3%. The sampling procedure was multistage and stratified, with proportional distribution. Four geographical areas were considered as the first stratum (NUT areas EU), and a second level was based on the socioeconomic status of the families (low, medium and high). The final selection of people to be interviewed was based on cross-quotas for gender and age, and the fieldwork was conducted between April and June 2022. The distribution of the sample by age includes 28.3% of children aged 11 to 12 years, 44% aged 13 to 15 years and 27.7% aged 16 to 17 years (average age 14 years). In terms of gender, 53.6% of respondents are male, 46.3% are female and 0.1% identify as other. Regarding socioeconomic level, 30.2% are low level, 50.4% are medium level and 19.3% are high level.

In order to protect the integrity of the study participants and the researchers, permission to collect data was obtained from the minors' legal guardians by signing an informed consent form, which was previously validated by the ethics committee of the university where this study is being conducted (Universidad Internacional de la Rioja), which also reviewed and approved the methodological design of the project.

Measures and procedure

The data for this study is part of a larger project investigating the prevalence of dietary and appearance influences on minors in Spain.

The participating adolescents provided demographic information about their age and gender. They then completed the measurements for the variables of interest in

this study. Body image concern (BI) was measured with five items (α=.87) based on the factors identified by Perloff (2014). To measure advertising literacy (ADLIT), we used the ALS-C (Advertising Literacy Scale for Children) survey model developed by Rozendaal and colleagues (2016) as a starting point, which takes into account the analysis of competence at both cognitive, attitudinal and moral levels and was also designed with five items (α=.86). Both constructs were assessed using a 5-point Likert scale. For the interpretation of the BI scale, the higher the score, the greater the concern for image, while for ADLIT, the higher the score on the scale, the greater the ability to deal with advertising messages. A comprehensive overview of the measures can be found in table 1.

Construct		Items	Question	Scale	Reference
Body image concerns (BI)		BI1	When you see posts from influencers collaborating on food or fitness products, how often do you feel the following? 1. That you are not up to standard and that your physical presence does not sufficiently meet the standard.	1 = Never, 5 = Very frequently	Perloff (2014)
		BI2	2. You feel frustrated or anxious because you cannot achieve the image they convey.		
		BI3	3. A beautiful body is a slim and toned body.		
		BI4	4. Physical appearance determines a lot about how you value yourself.		
		BI5	5. You need to set goals to achieve that perfect body		
Ad literacy (ADLIT)			Rate the extent to which you agree with the following statements about the content you have just seen in the video:	1 = Totally agree and 5 = Strongly disagree	Rozendaal et al., (2016).
	Cognitive dimension	ADLIT1	1.It made me want the product [persuasive intentionality].		
		ADLIT2	2. Show what the product is really like [advertising bias].		
	Attitudinal dimension	ADLIT3	3. It is reliable [skepticism].		
		ADLIT4	4. I liked [like/dislike].		
	Moral dimension	ADLIT5	5. Is acceptable to me.		

Table 1 Description of the variables

Source: Own elaboration.

Ex.	Social network	Type of influencer	Format	Collaboration signaling	Product advertised	Protagonism of the body
1	TikTok	Female with 1,9 million followers. No description in profile, except for a contact email. Posts about everyday situations in a humorous way.	1':21'' standard video	Use the hashtag #publi in the video description and mention the brand. Allusion to a discount code in the report.	Laser hair removal service.	No allusion to the influencer's body.
2	Instagram	Female with 3 million followers. Profile «Never ever compare your happiness, your body, your relationships or your goals in life to ANYONE».	Publication of 2 images with a brief text mentioning the brand*.	Mention of the brand in the text of the post.	Women's fitness clothing.	Close-up.
3	TikTok	Male with 1,9 million followers. Profile: «Fitness lifestyle. Lose weight and fat by eating delicious».	1':14'' standard video	Use of the hashtags #publi and #ad in the video description and mention of the brand. Allusion to a discount code in the video.	Sports nutrition (protein).	Secondary plane.

* Case 2 was also presented in audiovisual format to show the example in a context of navigation on a mobile device. The screen application was used for this purpose.

Table 2. Description of the examples for measuring advertising literacy

Source: Own elaboration.

In this study, we analyzed advertising literacy from a situational perspective, i.e., through the processing of specific examples by minors (Hudders et al., 2017). Three examples were selected (see table 2) from the current routine on the social networks most frequently used by the minors studied: TikTok and Instagram (IAB Spain, 2023). All examples show publications by influencers in which they collaborate with products related to appearance and body worship.

The statistical analysis was carried out using the SPSS software package version 25.0. To answer the questions posed, bivariate analyzes were performed using Spearman's nonparametric test to analyze the relationship between adolescents' body image concern and advertising literacy, as the distribution of the variables was not normal (Kolmogorov-Smirnov, $p<.005$, was used for the normality test).

RESULTS

Descriptive data

Figure 1 shows that between 12% and 28% of minors frequently or very frequently experience negative feelings about their body or self-image. While these figures are considerable, it should be noted that the majority of minors surveyed are less frequently confronted with such situations.

When the individual items of the BI scale are broken down, it can be seen that children are most affected by the items relating to their physical appearance and perceived image. Around 26% and 27% of children rate themselves based on their physical appearance (BI4). They also believe that a healthy body is a slim and toned body (IB3). However, the consequences of the scale, such as belittling their own physique (BI1), frustration and anxiety (BI2) or goal setting (BI5), have less influence. Only 12% to 14% of children say that they often or very often feel this way.

As far as the children's level of knowledge about advertising is concerned, the most common answer in view of the examples presented is a neutral neither agree nor disagree. The majority of children stated that advertising had no persuasive effect on them, with the scale item of persuasive intentionality (ADLIT1) being mentioned most frequently. Around 50% of young people confirmed that they were not interested in buying the product shown in the advertisement.

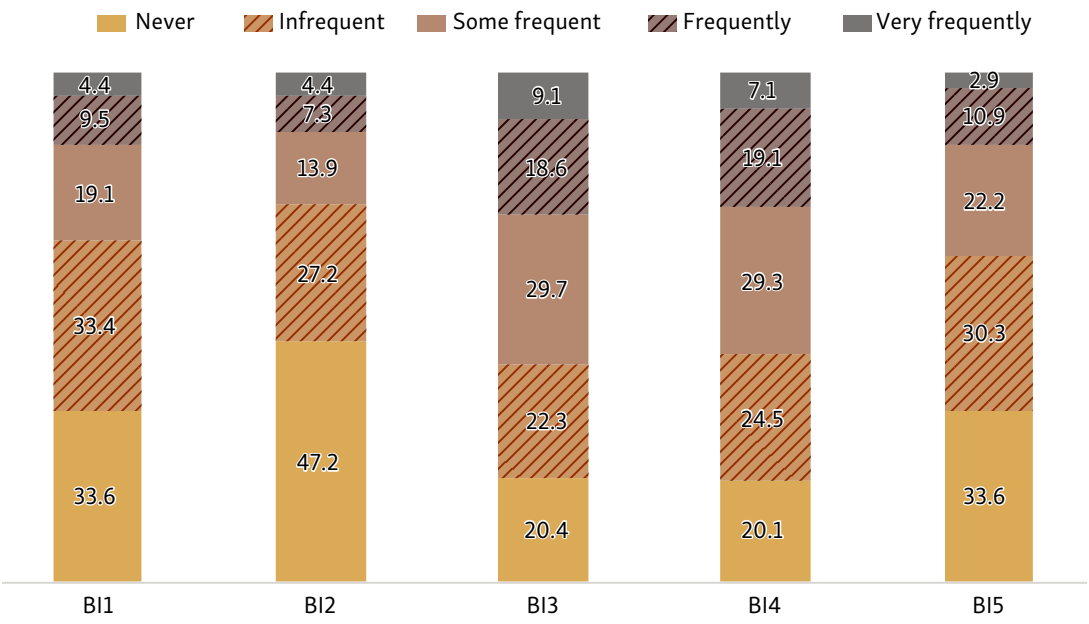

Figure 1. Descriptive data of the variable body image concerns

Source: Own elaboration.

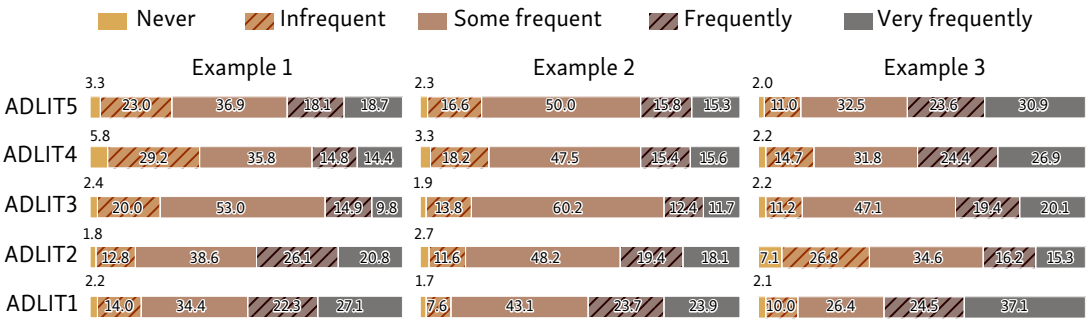

Figure 2. Descriptive data of the variable advertising literacy by example

Source: Own elaboration.

Based on the results shown in figure 2, the survey participants show a higher level of advertising competence at the cognitive level (ADLIT1 and ADLIT2), followed by the moral level (ADLIT5). However, adolescents have the least confidence in the attitudinal dimension (ADLIT3 and ADLIT4), particularly with regard to skepticism when confronted with the advertising examples presented to them.

In the three examples analyzed, there is a significant correlation ($p<0.01$) between the items of the body image concerns (BI) scale and those defined for the advertising literacy scale (ADLIT) scale, except for certain overlaps. This correlation is observed across different gender, age and socioeconomic groups, suggesting that advertising literacy has an impact on how body image concerns are dealt with.

Example 1

In this sample study on advertising, the variable ADLIT1 (which measures persuasive intentionality) shows the strongest correlation with all items of the BI scale, as shown in table 3. In addition, respondents reported feeling less frustrated and anxious (BI2) and less motivated to achieve their ideal body (BI5) when exposed to less persuasive examples.

We would also like to emphasize the strength of the correlations between ADLIT4 (liking/disliking) and ADLIT5 (moral competence).

After analyzing the data by gender (table 1 in the appendix), it was found that the correlations were stronger for female viewers than for male viewers. This could be due to the fact that Example 1 is promoted by a female influencer and is aimed at girls. The differences are more pronounced for ADLIT1 and the attitudinal dimension of literacy (ADLIT 3 and ADLIT4). In addition, differences can also be observed in the moral dimension (ADLIT5), although item BI2 has a higher correlation with the male target group (rs=-.242).

		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	rs	-.293(**)	-.164(**)	-.225(**)	-.258(**)	-.256(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI2	rs	-.329(**)	-.161(**)	-.208(**)	-.224(**)	-.255(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI3	rs	-.269(**)	-.121(**)	-.180(**)	-.244(**)	-.227(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI4	rs	-.284(**)	-.088(**)	-.187(**)	-.245(**)	-.272(**)
	Sig. (2-tailed)	0.000	0.004	0.000	0.000	0.000
BI5	rs	-.312(**)	-.209(**)	-.221(**)	-.225(**)	-.254(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 3. Association between body image concerns and advertising literacy (example 1)

Source: Own elaboration

As far as the correlations segmented according to age intervals are concerned (table 2 in the appendix), the strength of the correlations decreases with increasing age. The two constructs correlate more strongly in the age interval from 11 to 12 years. The strongest correlation (rs=-.369) is found in this age group, namely between ADLIT1 and BI2. Among 16- to 17-year-olds, the relationship between ADLIT and BI is weaker, especially for BI3 (beautiful and firm body as standard) and BI4 (importance of physical appearance in self-assessment).

The segmentation according to the socio-economic level of the children's households (table 3 in the appendix) does not show any major differences in this example. Nevertheless, it is interesting to note that BI2 (feelings of frustration and anxiety) shows a stronger correlation in the medium and low levels; however, BI2 and ADLIT5 show the most significant correlation coefficient in the high SES level (rs=-.325). Likewise, BI1 (feeling undervalued) correlates more strongly with ADLIT in the high SES sample.

Example 2

As in the previous example, the strongest correlations occur between BI and ADLIT1 (persuasive intentionality), especially at BI5, where the highest correlation of example 2 is presented (rs = -.283), as shown in table 4 below. The barrier between liking and disliking (ADLIT4) as well as the occurrence of the moral dimension (ADLIT5) in the variable BI4 (rs=-.207) should also be emphasized.

		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT5
BI1	rs	-.200(**)	-.133(**)	-.133(**)	-.152(**)	-.174(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI2	rs	-.249(**)	-.150(**)	-.144(**)	-.196(**)	-.192(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI3	rs	-.178(**)	-.093(**)	-.133(**)	-.183(**)	-.160(**)
	Sig. (2-tailed)	0.000	0.003	0.000	0.000	0.000
BI4	rs	-.182(**)	-.112(**)	-.175(**)	-.178(**)	-.207(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
BI5	rs	-.283(**)	-.161(**)	-.177(**)	-.215(**)	-.197(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 4. Association between body image concerns and advertising literacy (example 2)

Source: Own elaboration

In this example, among female participants, advertising literacy correlates more strongly with the established standard that a beautiful body is a slim and toned body (BI3) and with the setting of goals to achieve this standard of beauty (BI5). Likewise, men recorded higher significance coefficients for ADLIT4, perhaps because female fitness clothing was advertised in example 2 (table 4 in the appendix).

There were notable differences depending on the age of the participants (table 5 in the appendix). As in example 1, the strongest correlations between BI and ADLIT occur in the 11-12 age group, with a particular weight of ADLIT1 and ADLIT4. In the older sample (16-17 years), the highest correlation is again found in the moral dimension (ADLIT5) - as in example 1 before BI5 (rs=-.184).

Regarding the differences by socioeconomic group in example 2 (table 6 in the appendix), the correlations between BI and ADLIT are generally lower in the high SES group, with data where there is no correlation (p>.05), mainly in BI2 and BI3. The highest correlations in this group tend to occur between BI and ADLIT5 (moral dimension). The presence of ADLIT3 (skepticism) on the BI scale at medium and low levels is also highlighted.

Example 3

In example 3, which follows the trend of the previous examples, it is the variable ADLIT1 that correlates most strongly with all BI items. The most significant correlation is with BI5 (rs=-.298), which is shown below in table 5. Secondly, the advertising literacy variables with the highest correlation coefficient are ADLIT5 (moral dimension) and ADLIT4 (like/dislike).

		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT5
BI1	rs	-.225(**)	-.099(**)	-.137(**)	-.166(**)	-.184(**)	
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	
BI2	rs	-.222(**)	-.068(*)	-.112(**)	-.166(**)	-.168(**)	
	Sig. (2-tailed)	0.000	0.027	0.000	0.000	0.000	
BI3	rs	-.245(**)	-.132(**)	-.171(**)	-.178(**)	-.185(**)	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
BI4	rs	-.210(**)	-.133(**)	-.132(**)	-.154(**)	-.150(**)	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
BI5	rs	-.298(**)	-.105(**)	-.161(**)	-.222(**)	-.206(**)	
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 5. Association between body image concerns and advertising literacy (example 3)

Source: Own elaboration

As for the gender differences in example 3 (table 7 in the appendix), the ADLIT variables correlate significantly more strongly with BI5 in the male listeners than in the female listeners. The moral dimension (ADLIT5) is also more pronounced among men for all BI items. In addition, the taste dimension (ADLIT4) showed higher correlation coefficients for boys than for girls. However, ADLIT3, the other variable that measures the attitudinal dimension (skepticism), has a slightly higher correlation index among female audiences, as does ADLIT2 (identification of advertising bias), with weaker correlations among boys. It is important to clarify that these nuances may be present, as example 3 shows the promotion of a well-known protein brand by a male influencer.

In line with the previous examples, when breaking down the correlations by age in example 3 (table 8 in the appendix), we again observe the trend that the highest correlation coefficients are generally found in the younger age group, with the exception of the moral dimension (ADLIT5), where the opposite is true, with higher indices among 13- to 15- and 16–to 17-year-olds. Especially in the older age group, the items defined for the attitudinal dimension of advertising literacy (ADLIT3 and ADLIT4) hardly correlate with the BI items, except for BI5 (rs=-.220).

The differences in socioeconomic level in example 3 (Table 9 in the appendix) affect the attitudinal dimension of advertising literacy (ADLIT3 and ADLIT4) with higher correlation coefficients with the BI scale variables between medium SES and

low SES; ADLIT2 (recognizing advertising distortions) shows higher correlations in high SES minors.

In answer to RQ1, the results confirm a significant relationship between ADLIT and BI. In particular, adolescents with higher levels of advertising literacy show lower body image concerns when exposed to influencer-sponsored content. This relationship is more pronounced for the cognitive and moral dimensions of literacy, suggesting that recognizing persuasive intentions and critically reflecting on advertising content play a key role in regulating the negative effects related to physical appearance. Regarding RQ2, women show a stronger correlation between ADLIT and BI, especially in the moral and affective dimensions. Regarding age, the correlation between ADLIT and BI is more pronounced in younger groups (11-12 years old); in older adolescents (16-17 years old), the moral dimension has a greater weight. Finally, adolescents from middle and lower socioeconomic strata show greater confidence in the affective and cognitive dimensions of advertising literacy, while adolescents from higher socioeconomic strata rely predominantly on the moral dimension.

Discussion

This study demonstrates a link between adolescent body image concerns and advertising literacy. Advertising literacy can regulate minors' concerns when confronted with sponsored content related to appearance and body image products and services.

Certain items of advertising literacy showed a higher correlation index: the lack of effect of persuasive intentionality (ADLIT1) and, secondly, liking (ADLIT4) and considering whether the publication is suitable for them (ADLIT5). These items relate to both the cognitive (ADLIT1), attitudinal (ADLIT4) and moral (ADLIT5) dimensions of the model of advertising literacy used as a reference in this study (Rozendaal et al., 2016; Hudders et al., 2017), emphasizing that all dimensions of advertising literacy are relevant when adolescents are confronted with content related to the appearance of their bodies.

The study finds it noteworthy that the variable skepticism (ADLIT3), which is considered important in research on advertising literacy in the digital context and in influencer marketing, is not as significant in this particular example. This could be due to the focus being on a specific sector and a body topic that has strong social patterns and stereotypes, so the attitude of taste (ADLIT4) is more influential than critical reflection (ADLIT3).

The BI scale variables that correlated most strongly with the advertising literacy items were the goal of achieving the perfect body (BI5) and the importance of

physical appearance for self-assessment (BI4). In contrast, the variable with the weakest correlations was BI3, the feeling that a beautiful body is a slim and well-toned body. This could be related to the fact that this is a widespread standard of beauty among young respondents (Tiggemann & Anderberg, 2020).

It was interesting to note that the gender of the influencer introduces nuances, especially when differentiating the correlations by gender. For example, in example 1 (female influencer), the correlation coefficients between ADLIT and BI are stronger among female listeners, especially the attitudinal variable of liking (ADLIT4) and the moral dimension (ADLIT5). The same pattern is repeated in example 3 (male influencers) for men, although the correlations in example 1 are stronger. So it seems obvious that the variable of liking or disliking has an influence, especially when the content is more audience related.

It is also important to emphasize that the bivariate analyzes revealed higher rates among girls than boys, suggesting that the frequency of advertising literacy related to physical appearance is higher among girls. This is significant as girls are traditionally the target audience for many products and services focused on aesthetics and appearance enhancement and are more receptive to the body argument (Brown & Tiggemann, 2016; Chae, 2018; Möri et al., 2022; Perloff, 2014; Silva et al., 2021).

This study also showed that advertising literacy plays a greater role in overcoming image problems at a younger age. In the three examples, stronger correlations were found in the 11 to 12 age group. One exception is the moral dimension of the ADLIT scale, which had more significant correlation coefficients in the older age groups, leading to the suggestion that it may be more strongly related to personal maturity (Adams et al., 2017). It is also important to note that in example 3, the attitudinal dimension (ADLIT3 and ADLIT4) barely correlated in the 16-17 year old group. This could be due to the emergence of other elements at this age that have a greater influence on adolescents' concern about their appearance, such as friends, the media or their own trends or fashions (Ashikali et al., 2014; Hay & Ashman, 2003; Tiggemann & Slater, 2013).

Regarding the observed differences by socioeconomic level, the attitudinal dimension of advertising literacy has more weight in the medium and low SES population. However, in the high SES population, the moral dimension of advertising literacy showed the highest correlations, especially in example 1. It is interesting to note that the family was able to create an environment in which these issues are addressed more regularly and with arguments that can have an impact on adolescents (Berríos-Valenzuela et al., 2015; Daneels &

Vanwynsberghe, 2017). These findings confirm the need for further research into the impact of socioeconomic level on the acquisition of digital skills.

This study has some limitations: The results presented here are based on the self-reported intentions of a sample of Spanish adolescents. Further research is needed to determine whether these correspond to their actual perceptions and concerns about appearance and body image. A more qualitative study design would be beneficial to address these limitations. On the other hand, it should not be forgotten that this article deals with adolescents' body image as a dependent variable, a very complex construct that is influenced by numerous other factors besides advertising. It would not be correct to interpret the level of advertising literacy as a simple and direct solution to dissatisfaction with appearance and physique, but rather as a resource that can mediate the construction of minors' body image in the face of influencer marketing. This study is also limited to three specific examples of influencers selected to represent common variations in content and reach. Future studies should consider a wider variety of formats and social media platforms to validate these findings in a broader context.

CONCLUSIONS AND PRACTICAL IMPLICATIONS

In recent years, efforts to improve the digital literacy and media skills of citizens, especially adolescents, have gained considerable momentum. This upswing can be attributed to factors such as the rapid development of the information society, the spread of disinformation and the transformative impact of the COVID-19 pandemic on digital interaction. However, an often overlooked but crucial aspect of these initiatives is the inclusion of advertising literacy.

The need to integrate advertising literacy into media education is underscored by two key developments. First, the proliferation of hybrid online advertising content, particularly that targeted at minors, is blurring the lines between organic and sponsored content. This complexity makes it increasingly difficult for adolescents to recognize advertising and makes them more susceptible to persuasion techniques and commercial influences. Secondly, the content analyzed and consumed by teenagers can significantly shape their self-perception, particularly in relation to their physical appearance. The reinforcement of unattainable beauty standards through online advertising and influencer culture poses risks to their wellbeing and mental health, highlighting the need for targeted interventions.

Addressing these challenges requires a holistic approach that not only encourages critical engagement with digital content, but also empowers adolescents to deal with the subtle yet pervasive effects of advertising. In this way, educational

initiatives can help protect mental health while promoting a better informed and more resilient digital citizenry.

Research also needs to provide evidence to highlight the role of education in developing critical thinking. Studies such as this one propose media literacy as a concrete strategy that requires collaboration between academia, the education system, families and even brands.

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APPENDIX

Table 1.
Association between body image concerns and advertising literacy (Example 1), differentiated by gender

		MALE					FEMALE				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.230(**)	-.133(**)	-.194(**)	-.241(**)	-.228(**)	-.323(**)	-.178(**)	-.238(**)	-.237(**)	-.253(**)
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI2	r_s	-.282(**)	-.137(**)	-.183(**)	-.223(**)	-.242(**)	-.337(**)	-.169(**)	-.212(**)	-.177(**)	-.228(**)
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI3	r_s	-.226(**)	-.099(*)	-.168(**)	-.213(**)	-.194(**)	-.308(**)	-.136(**)	-.181(**)	-.273(**)	-.258(**)
	Sig. (2-tailed)	0.000	0.019	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI4	r_s	-.200(**)	-0.058	-.170(**)	-.222(**)	-.249(**)	-.362(**)	-.111(*)	-.190(**)	-.252(**)	-.275(**)
	Sig. (2-tailed)	0.000	0.170	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI5	r_s	-.272(**)	-.174(**)	-.214(**)	-.224(**)	-.241(**)	-.340(**)	-.238(**)	-.212(**)	-.200(**)	-.248(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
****. Correlation is significant at the 0.01 level (2-tailed)**											
***. Correlation is significant at the 0.05 level (2-tailed)**											

Table 2.
Association between body image concerns and advertising literacy (Example 1), differentiated by age

		11-12 YEARS					13-15 YEARS					16-17 YEARS				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.336(**)	-.206(**)	-.267(**)	-.275(**)	-.287(**)	-.306(**)	-.137(**)	-.240(**)	-.250(**)	-.286(**)	-.222(**)	-.161(**)	-.149(*)	-.248(**)	-.155(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.006	0.011	0.000	0.008
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI2	r_s	-.369(**)	-.157(**)	-.265(**)	-.304(**)	-.331(**)	-.336(**)	-.147(**)	-.203(**)	-.198(**)	-.273(**)	-.272(**)	-.187(**)	-.145(*)	-.182(**)	-.132(*)
	Sig. (2-tailed)	0.000	0.007	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.013	0.002	0.024
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI3	r_s	-.286(**)	-.159(**)	-.179(**)	-.250(**)	-.227(**)	-.334(**)	-.134(**)	-.233(**)	-.294(**)	-.304(**)	-.127(*)	-0.058	-0.093	-.149(*)	-0.074
	Sig. (2-tailed)	0.000	0.006	0.002	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.029	0.319	0.111	0.011	0.209
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI4	r_s	-.321(**)	-.119(*)	-.229(**)	-.291(**)	-.273(**)	-.288(**)	-0.077	-.180(**)	-.225(**)	-.305(**)	-.209(**)	-0.064	-.147(*)	-.214(**)	-.177(**)
	Sig. (2-tailed)	0.000	0.040	0.000	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.000	0.278	0.012	0.000	0.002
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI5	r_s	-.326(**)	-.254(**)	-.218(**)	-.252(**)	-.249(**)	-.333(**)	-.197(**)	-.231(**)	-.186(**)	-.285(**)	-.247(**)	-.179(**)	-.197(**)	-.255(**)	-.179(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.002
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
****. Correlation is significant at the 0.01 level (2-tailed)**																
***. Correlation is significant at the 0.05 level (2-tailed)**																

Table 3.
Association between body image concerns and advertising literacy (Example 1) differentiated by SES

		HIGH SES					MEDIUM SES					LOW SES				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.329(**)	-.158(*)	-.291(**)	-.244(**)	-.296(**)	-.275(**)	-.151(**)	-.219(**)	-.302(**)	-.253(**)	-.294(**)	-.201(**)	-.201(**)	-.172(**)	-.226(**)
	Sig. (2-tailed)	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI2	r_s	-.321(**)	-0.017	-.264(**)	-.191(**)	-.325(**)	-.320(**)	-.178(**)	-.187(**)	-.253(**)	-.243(**)	-.344(**)	-.244(**)	-.221(**)	-.173(**)	-.214(**)
	Sig. (2-tailed)	0.000	0.806	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI3	r_s	-.305(**)	0.073	-0.071	-.190(**)	-.235(**)	-.220(**)	-.191(**)	-.220(**)	-.268(**)	-.251(**)	-.326(**)	-.137(*)	-.198(**)	-.219(**)	-.174(**)
	Sig. (2-tailed)	0.000	0.301	0.311	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.002
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI4	r_s	-.336(**)	0.037	-.173(*)	-.255(**)	-.292(**)	-.253(**)	-.110(*)	-.207(**)	-.238(**)	-.277(**)	-.293(**)	-.139(*)	-.178(**)	-.237(**)	-.250(**)
	Sig. (2-tailed)	0.000	0.601	0.013	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.013	0.001	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI5	r_s	-.352(**)	-.161(*)	-.322(**)	-.214(**)	-.322(**)	-.303(**)	-.228(**)	-.196(**)	-.228(**)	-.246(**)	-.301(**)	-.219(**)	-.204(**)	-.219(**)	-.225(**)
	Sig. (2-tailed)	0.000	0.022	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
****. Correlation is significant at the 0.01 level (2-tailed)**																
***. Correlation is significant at the 0.05 level (2-tailed)**																

Table 4.
Association between body image concerns and advertising literacy (Example 2), differentiated by gender

		MALE					FEMALE				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.183(**)	-.114(**)	-.109(**)	-.169(**)	-.167(**)	-.189(**)	-.141(**)	-.144(**)	-.098(*)	-.143(**)
	Sig. (2-tailed)	0.000	0.007	0.010	0.000	0.000	0.000	0.002	0.001	0.030	0.001
	N	566	566	566	566	566	488	488	488	488	488
BI2	r_s	-.254(**)	-.140(**)	-.115(**)	-.210(**)	-.205(**)	-.219(**)	-.148(**)	-.156(**)	-.147(**)	-.137(**)
	Sig. (2-tailed)	0.000	0.001	0.006	0.000	0.000	0.000	0.001	0.001	0.001	0.002
	N	566	566	566	566	566	488	488	488	488	488
BI3	r_s	-.173(**)	-0.060	-.088(*)	-.173(**)	-.142(**)	-.172(**)	-.121(**)	-.172(**)	-.183(**)	-.167(**)
	Sig. (2-tailed)	0.000	0.154	0.035	0.000	0.001	0.000	0.007	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI4	r_s	-.149(**)	-0.070	-.154(**)	-.202(**)	-.211(**)	-.202(**)	-.152(**)	-.188(**)	-.129(**)	-.181(**)
	Sig. (2-tailed)	0.000	0.096	0.000	0.000	0.000	0.000	0.001	0.000	0.004	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI5	r_s	-.237(**)	-.097(*)	-.118(**)	-.200(**)	-.178(**)	-.321(**)	-.224(**)	-.232(**)	-.208(**)	-.193(**)
	Sig. (2-tailed)	0.000	0.021	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
****. Correlation is significant at the 0.01 level (2-tailed)**											
***. Correlation is significant at the 0.05 level (2-tailed)**											

Table 5.
Association between body image concerns and advertising literacy (Example 2), differentiated by age

		11-12 YEARS					13-15 YEARS					16-17 YEARS				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.309(**)	-.164(**)	-.129(*)	-.224(**)	-.219(**)	-.177(**)	-.145(**)	-.171(**)	-.148(**)	-.205(**)	-0.107	-0.076	-0.078	-0.072	-0.056
	Sig. (2-tailed)	0.000	0.004	0.026	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.067	0.194	0.184	0.217	0.336
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI2	r_s	-.328(**)	-.223(**)	-.182(**)	-.290(**)	-.257(**)	-.242(**)	-.142(**)	-.118(*)	-.189(**)	-.211(**)	-.167(**)	-0.086	-.141(*)	-0.103	-0.087
	Sig. (2-tailed)	0.000	0.000	0.002	0.000	0.000	0.000	0.002	0.011	0.000	0.000	0.004	0.143	0.016	0.080	0.140
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI3	r_s	-.244(**)	-.151(**)	-.114(*)	-.230(**)	-.149(**)	-.178(**)	-0.076	-.173(**)	-.214(**)	-.245(**)	-0.091	-0.059	-0.087	-0.076	-0.018
	Sig. (2-tailed)	0.000	0.009	0.048	0.000	0.010	0.000	0.104	0.000	0.000	0.000	0.120	0.317	0.138	0.196	0.755
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI4	r_s	-.271(**)	-.171(**)	-.177(**)	-.249(**)	-.205(**)	-.143(**)	-0.072	-.173(**)	-.152(**)	-.216(**)	-0.105	-0.104	-.162(**)	-.134(*)	-.161(**)
	Sig. (2-tailed)	0.000	0.003	0.002	0.000	0.000	0.002	0.121	0.000	0.001	0.000	0.074	0.075	0.006	0.022	0.006
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI5	r_s	-.347(**)	-.206(**)	-.187(**)	-.231(**)	-.190(**)	-.309(**)	-.179(**)	-.189(**)	-.224(**)	-.191(**)	-.147(*)	-0.084	-.139(*)	-.171(**)	-.184(**)
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.012	0.154	0.017	0.003	0.002
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
****. Correlation is significant at the 0.01 level (2-tailed)**																
***. Correlation is significant at the 0.05 level (2-tailed)**																

Table 6.
Association between body image concerns and advertising literacy (Example 2) differentiated by SES

		HIGH SES					MEDIUM SES					LOW SES				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.205(**)	-.145(*)	-0.131	-.153(*)	-.190(**)	-.200(**)	-.117(**)	-.120(**)	-.143(**)	-.150(**)	-.210(**)	-.169(**)	-.169(**)	-.175(**)	-.208(**)
	Sig. (2-tailed)	0.003	0.039	0.061	0.029	0.007	0.000	0.007	0.006	0.001	0.000	0.000	0.003	0.002	0.002	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI2	r_s	-.246(**)	-0.135	-0.050	-.168(*)	-.197(**)	-.233(**)	-.139(**)	-.135(**)	-.194(**)	-.171(**)	-.296(**)	-.196(**)	-.242(**)	-.229(**)	-.235(**)
	Sig. (2-tailed)	0.000	0.053	0.477	0.016	0.005	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI3	r_s	-.173(*)	-0.052	-0.084	-.175(*)	-0.099	-.178(**)	-.129(**)	-.143(**)	-.172(**)	-.192(**)	-.195(**)	-0.068	-.162(**)	-.208(**)	-.149(**)
	Sig. (2-tailed)	0.013	0.462	0.235	0.012	0.159	0.000	0.003	0.001	0.000	0.000	0.000	0.229	0.004	0.000	0.008
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI4	r_s	-0.133	-0.115	-.166(*)	-.168(*)	-.192(**)	-.187(**)	-.113(**)	-.180(**)	-.161(**)	-.228(**)	-.218(**)	-.123(*)	-.191(**)	-.218(**)	-.188(**)
	Sig. (2-tailed)	0.058	0.103	0.018	0.017	0.006	0.000	0.009	0.000	0.000	0.000	0.000	0.028	0.001	0.000	0.001
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI5	r_s	-.281(**)	-.155(*)	-0.117	-.140(*)	-.224(**)	-.284(**)	-.178(**)	-.213(**)	-.229(**)	-.198(**)	-.296(**)	-.146(**)	-.160(**)	-.245(**)	-.185(**)
	Sig. (2-tailed)	0.000	0.027	0.095	0.045	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.004	0.000	0.001
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
****. Correlation is significant at the 0.01 level (2-tailed)**																
***. Correlation is significant at the 0.05 level (2-tailed)**																

Table 7.
Association between body image concerns and advertising literacy (Example 3), differentiated by gender

		MALE					FEMALE				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.218(**)	-0.057	-.110(**)	-.175(**)	-.190(**)	-.242(**)	-.138(**)	-.165(**)	-.161(**)	-.190(**)
	Sig. (2-tailed)	0.000	0.174	0.009	0.000	0.000	0.000	0.002	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI2	r_s	-.224(**)	-0.059	-.104(*)	-.175(**)	-.190(**)	-.229(**)	-0.074	-.120(**)	-.161(**)	-.159(**)
	Sig. (2-tailed)	0.000	0.164	0.013	0.000	0.000	0.000	0.102	0.008	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI3	r_s	-.281(**)	-.100(*)	-.170(**)	-.197(**)	-.206(**)	-.211(**)	-.165(**)	-.171(**)	-.163(**)	-.168(**)
	Sig. (2-tailed)	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
BI4	r_s	-.239(**)	-.137(**)	-.133(**)	-.192(**)	-.186(**)	-.185(**)	-.129(**)	-.135(**)	-.114(*)	-.120(**)
	Sig. (2-tailed)	0.000	0.001	0.002	0.000	0.000	0.000	0.004	0.003	0.011	0.008
	N	566	566	566	566	566	488	488	488	488	488
BI5	r_s	-.351(**)	-.116(**)	-.159(**)	-.283(**)	-.253(**)	-.245(**)	-0.088	-.161(**)	-.160(**)	-.161(**)
	Sig. (2-tailed)	0.000	0.006	0.000	0.000	0.000	0.000	0.053	0.000	0.000	0.000
	N	566	566	566	566	566	488	488	488	488	488
****. Correlation is significant at the 0.01 level (2-tailed)**											
***. Correlation is significant at the 0.05 level (2-tailed)**											

Table 8.
Association between body image concerns and advertising literacy (Example 3), differentiated by age

		11-12 YEARS					13-15 YEARS					16-17 YEARS				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.262(**)	-.114(*)	-.221(**)	-.244(**)	-.201(**)	-.259(**)	-.144(**)	-.163(**)	-.215(**)	-.223(**)	-.125(*)	-0.006	-0.001	-0.015	-0.094
	Sig. (2-tailed)	0.000	0.049	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.033	0.915	0.985	0.801	0.111
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI2	r_s	-.240(**)	-0.077	-.143(*)	-.235(**)	-.169(**)	-.254(**)	-.100(*)	-.147(**)	-.187(**)	-.197(**)	-.142(*)	-0.004	-0.022	-0.064	-.116(*)
	Sig. (2-tailed)	0.000	0.187	0.014	0.000	0.003	0.000	0.031	0.002	0.000	0.000	0.015	0.940	0.711	0.273	0.048
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI3	r_s	-.215(**)	-.138(*)	-.207(**)	-.228(**)	-.150(**)	-.284(**)	-.190(**)	-.196(**)	-.186(**)	-.213(**)	-.201(**)	-0.033	-0.085	-0.114	-.166(**)
	Sig. (2-tailed)	0.000	0.017	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.001	0.575	0.149	0.051	0.004
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI4	r_s	-.146(*)	-0.081	-.137(*)	-0.108	-0.059	-.236(**)	-.201(**)	-.163(**)	-.214(**)	-.202(**)	-.218(**)	-0.085	-0.078	-0.111	-.146(*)
	Sig. (2-tailed)	0.011	0.165	0.018	0.062	0.313	0.000	0.000	0.000	0.000	0.000	0.000	0.146	0.186	0.057	0.012
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
BI5	r_s	-.229(**)	-0.039	-.174(**)	-.174(**)	-.137(*)	-.346(**)	-.179(**)	-.183(**)	-.259(**)	-.236(**)	-.286(**)	-0.060	-0.115	-.220(**)	-.207(**)
	Sig. (2-tailed)	0.000	0.502	0.003	0.003	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.307	0.050	0.000	0.000
	N	299	299	299	299	299	464	464	464	464	464	292	292	292	292	292
****. Correlation is significant at the 0.01 level (2-tailed)**																
***. Correlation is significant at the 0.05 level (2-tailed)**																

Table 9.
Association between body image concerns and advertising literacy (Example 3) differentiated by SES

		HIGH SES					MEDIUM SES					LOW SES				
		ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5	ADLIT1	ADLIT2	ADLIT3	ADLIT4	ADLIT5
BI1	r_s	-.194(**)	-.260(**)	-0.101	-.146(*)	-.221(**)	-.220(**)	-0.085	-.160(**)	-.142(**)	-.150(**)	-.259(**)	-0.014	-.133(*)	-.235(**)	-.230(**)
	Sig. (2-tailed)	0.005	0.000	0.151	0.038	0.001	0.000	0.051	0.000	0.001	0.000	0.000	0.810	0.018	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI2	r_s	-.172(*)	-.178(*)	-0.059	-0.107	-.197(**)	-.218(**)	-0.028	-.111(*)	-.139(**)	-.141(**)	-.266(**)	-0.070	-.175(**)	-.266(**)	-.212(**)
	Sig. (2-tailed)	0.014	0.011	0.405	0.129	0.005	0.000	0.515	0.010	0.001	0.001	0.000	0.213	0.002	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI3	r_s	-.244(**)	-.159(*)	-.138(*)	-.157(*)	-.139(*)	-.224(**)	-.136(**)	-.172(**)	-.165(**)	-.188(**)	-.291(**)	-.125(*)	-.207(**)	-.238(**)	-.223(**)
	Sig. (2-tailed)	0.000	0.023	0.050	0.025	0.047	0.000	0.002	0.000	0.000	0.000	0.000	0.025	0.000	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI4	r_s	-.196(**)	-.153(*)	-0.093	-0.110	-.171(*)	-.163(**)	-.119(**)	-.140(**)	-.114(**)	-.140(**)	-.306(**)	-.161(**)	-.159(**)	-.264(**)	-.168(**)
	Sig. (2-tailed)	0.005	0.029	0.186	0.117	0.014	0.000	0.006	0.001	0.008	0.001	0.000	0.004	0.004	0.000	0.003
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319
BI5	r_s	-.326(**)	-.207(**)	-.187(**)	-.240(**)	-.277(**)	-.271(**)	-0.051	-.162(**)	-.181(**)	-.184(**)	-.327(**)	-.135(*)	-.145(**)	-.294(**)	-.206(**)
	Sig. (2-tailed)	0.000	0.003	0.007	0.001	0.000	0.000	0.244	0.000	0.000	0.000	0.000	0.016	0.009	0.000	0.000
	N	204	204	204	204	204	532	532	532	532	532	319	319	319	319	319

****. Correlation is significant at the 0.01 level (2-tailed)**
***. Correlation is significant at the 0.05 level (2-tailed)**