

## **Emotional experiences of films: Are they universal or culturally mediated?**

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### **Abstract:**

Dominant stands consider that films elicit universal experiences. However, data from audio-visual design suggests that the cultural background of the audience might influence film perception. In this paper, we explored whether emotional experiences of films change depending on the cultural openness of the audience. Thus, we presented three culturally different films (produced in Spain, Finland and US) matched in genre and topic to a Spanish audience varying in cultural orientation. Our aim was to investigate if cultural cosmopolitanism, people's interest for other cultures, influences their experience of culturally loaded films. We captured viewers' experiences by means of an on-line voting system where viewers indicated the more interesting scenes, and by means of an off-line questionnaire that qualified participants' voting responses. Results showed very few differences between films and groups, suggesting that, some emotions might be universally experienced by some aspects of the films.

**Keywords:** Emotional experiences, Film audiences, Interest, Universal emotions, Cultural diversity, Cosmopolitan orientation.

## Introduction

For a number of years some researchers have tried to understand the elements and features of a film that makes it interesting for the audience (Silvia & Berg, 2011; Tan, 1996; Tarvainen et al., 2014). Thus, some aspects of the narrative, the acting, the visual composition and musical elements may interact to produce emotional experiences in the viewers. An essential property of films is their power to produce emotional reactions despite the fact that viewers know that the scenes they are presented with are not reality but fiction. Our experiences of films seem to depend on our emotions, and it is therefore, critical to ask how do the general properties of human emotions affect our film experiences, and how can we explain properties of film experience on the ground of the general properties of human emotions. Of course, understanding film experiences and emotional reactions to films is a lifelong project that goes far beyond a single study. Hence, in this paper we address a more specific problem as we aim to analyse on-line emotional experiences of full scripted films to explore the extent to which these experiences contain universal properties or are culturally mediated. From this view, we indirectly address the classic problem of the universality versus diversity of emotional processing (Darwin, 1872; Ekman, 1973).

Arguments in favour of the universal view of emotions come mainly from studies showing that many different cultures have similar ways of naming and recognising emotions; the words happy, surprise, fear, disgust, anger, or sad are present in all languages; they are expressed using the same facial movements, and they are similarly recognised across cultures (Ekman, 1973; Ekman, Friesen, & Ellsworth, 1972; Izard, 1977, but see a recent review by Gendron, Crivelli, & Barrett, 2018 for a non-universalist position of emotional recognition of facial expressions). This point is important for the film industry as it suggests that our emotional experience of films could be, in part, culturally universal, and that it might be possible to find cultural universals for the emotional language of film. In fact, cinematographic resources for conveying meaning and emotions are usually described by film experts as universal norms. Thus, it is easy to read about specific ways of using the camera to convey emotions, the angle you use, the frame composition, the distance, etc., are explained as ways to induce emotional specific experiences (Brown, 2003; Nielsen, 2005). For example, the following is a description of ways that perceptual film phenomena produce emotions (Tan, 1996, pp. 12 ):

... film has a distinct advantage when spatiotemporal aspects of the stimulus are major causes of emotion. The sight of a giant spider in a film evokes more fear than do the words 'giant spider' in a written narrative. Furthermore, proximity

of a negative event, a cause for fear, has a one-to-one correspondence to the spatiotemporal aspects of the film stimulus.

This reflects the idea that perceptual phenomena universally evoke specific emotions. From this view, video producers and filmmakers have expert knowledge of the effect that different angles, distances, movements, etc. have on the emotional experiences of the viewers. This relates to recent approaches that have borrowed the users' experience approach to investigate audio-visual products (e.g. Tarvainen et al. 2014). The idea is to identify features of the audio-visual product that have the desired impact on the audience. The aim is to "design" films and audio-visual products that enhance the overall experience of the viewers including their thoughts, perceptions, or feelings by including perceptual and technical features that elicit them.

However, although this approach may prove useful to identify common elements that raise interest and evoke emotions in the general audience, it is possible that the cultural background and experience of the viewers may influence the way film contents and perceptual features impact the audience. In fact, basic research and theories have questioned the universality of emotional recognition, since even the studies showing similarities across cultures have also shown some cultural variations in the way facial expression and basic emotions are recognised (Gendron et al., 2018; Mesquita & Frijda, 1992). Recent models emphasize that emotions occur in social interactions and they serve specific functions within a context. From this, emotions can be culturally diverse since some will be more frequently experienced than others within a given culture, and they might also show some variations depending on personal experiences and context (Boiger & Mesquita, 2012). Although some researchers have taken extreme positions, the general view is that theories need to accommodate some degree of universality and contextual variations and that they should try to specify which components of emotions are similar or diverse across cultures and contexts (Mesquita & Frijda, 1992; Russell, 1994; Scherer & Wallbott, 1994).

This basic view can also be applied to films and audio-visual products. Thus, it is possible that a film product developed in a country and a cultural context does not have the same impact on the users of another country or culture. In the field of design this seems to be an important concern. Although, it is possible to find some features that users may generally consider usable and, many factors seem to be strongly influenced by cultural values (Ito & Nakakoji, 1996). Studies looking at cultural factors across nationalities and within national cultures have identified dimensions in which people differ. For example, Hofstede (2010) has identified six cultural dimensions in which people from different countries differ: Power distance, Individualism vs. Collectivism, Uncertainty avoidance, Masculinity vs. femininity, Long-term orientation vs. short-term orientation, Indulgence versus restraint. These dimensions may also have an effect on how people experience and react to films and other audio-visual products. Similarly, films produced in different countries may reflect different values along these dimensions and may be perceived differently by people from other national background (Hofstede, 2010).

Similarly, recent research also suggests that within a country, people with apparently similar cultural background, may differ in their cultural habits, and in their openness to experience and the frequency of consuming foreign product and habits (Cleveland et al., 2009; Hannerz, 1990; Skrbis and Woodward, 2007; Szerszynski and Urry, 2002; Woodward et al., 2008). This openness to foreign culture has been termed ‘cosmopolitan orientation’, and it is usually accompanied by a tendency to experience cultural products and services and to travel and visit foreign countries. Rössel and Schroedter (2015) characterized cosmopolitan cultural consumption by *its openness for and engagement with cultural products and services from foreign cultures* (pg. 81). This orientation might, therefore have an influence in the type of elements that people find interesting or moving within a film, or they might influence whether they find interesting cultural-foreign elements within a film. For example, a recent study by Savage and Meuleman (2013) analysed the geographic range of cultural and aesthetic tastes for films, books and music in Dutch participants and found different dimensions that determined people preferences. One dimension went from people with high interest in all cultures (national and transnational) and with very culturally engaged habits, to people with local tastes and very disengaged of cultural habits. Another dimension went from preferences for American popular culture to preferences for European culture. Finally, the third dimension went from people who preferred exclusively Dutch cultural products to people who preferred any other combination of cultures. Some of these dimensions are related to education and age (e.g. like for American products), but they also seem to reflect forms of relating to culture that vary in terms of engagement and openness. From, this perspective, it makes also sense to study individual differences in film preferences as they relate to people cultural orientation.

Our aim in this paper is to address the question of whether individual differences on cultural orientation (cosmopolitan orientation) influence the emotional experiences of the films. An obvious assumption is to think that people with more opened forms of life (cosmopolitan orientation) would be more tolerant and positive to films coming from different countries and with cultural elements different from their own. Therefore, we expected that individual differences would be more evident for culturally different films.

The methodological approach of the study is to combine quantitative and qualitative data to assess individual differences in reaction to the films depending on cultural orientation. Our aim in this paper was to use our recently developed ‘quantitative voting method’ (see Cañas-Bajo et al., in press) and combine it with qualitative data (questionnaires and interviews) to assess differences in film preferences for people with different cultural orientations. As we are interested in understanding factors, which increase the success of films, the users’ experience approach was used to analyse aspect of culturally different films. In the study, we assessed *interest* as a complex critical emotion that may determine the success of a film. Interest was captured on-line by asking participants to press a key whenever they thought their interest was raised by a particular scene while they were watching a film. They were also asked to provide the emotional valence of their experienced interest (the system uses two different buttons to signal positive and negative emotions).

The number of presses to the buttons provided online indexes of interest and emotional valence. In addition, viewers' experiences were qualified by asking participants off-line to rate their experience of some movie components (narrative, visual, music, characters, etc.) and by providing rating reflecting the extent to which they felt specific emotions (happy, sad, anger, surprise, etc.).

## **Methodology**

The study consisted of a single session with three phases. In the first and third phases of the study, participants were asked to fill out questionnaires regarding the movie they would see (first phase) or they have just seen (third phase) and different aspects of their cultural orientation. In the second phase, participants watched three movies and were asked to indicate through a voting system (see below) the sequences that they thought interesting and critical for understanding the film. All participants were involved in a single session where they filled out the questionnaires and watch the films. However they were distributed in six groups with different schedules (according to the participants' availability) and with different order of presentation of the movies.

**Participants:** A group of 59 Spanish participants (mean age = 22.7, SD = 3.01, 36 women and 23 men) took part in the study. Participants were recruited by posting a Facebook announcement in which the purpose and the procedure for the study was explained. In addition, they were offered the possibility of choosing among different dates and schedules since they would be presented with three full-scripted films along a full day. They were informed that they would have to watch the three films but after presentation of each film there would be a break where they would be offered food and beverages. Participants were distributed in six groups of 5 to 18 participants. We excluded participants who worked in film industries as well as students of films, audiovisuals, communication studies, etc.

**Materials:** We selected three films that differ in the country where they were produced and in the language they were presented, however they shared the genre (drama) and main theme (children of war). The selected films were *The Empire of the Sun* (US), *Ispansi* (Spain) and *Mother of Mine* (Finland). We selected these films since they have survived the test of time in their respective countries. In addition, they all convey positive and negatively balanced emotional experiences, and therefore they were suitable to assess their emotional profile. The Finish and US films were played in Finnish and English respectively with Spanish subtitles so that participants would be able to understand the dialogues. An additional reason to select these films is that they came from countries that differ according to many of Hofstede's cultural dimensions. Thus Spain seems to differ from Finland and United States in a number of dimensions such as individualism, uncertainty avoidance and indulgence (Hofstede, 2010; Morden, 1999; Van Everdingen & Waarts, 2003). These differences in cultural dimension are probably reflected in national films and may be perceived differently by people from different cultures.

## Procedure

As mentioned, participants took part in a single session (from 11 am to 7pm) where they watched three different films and fill out questionnaires.

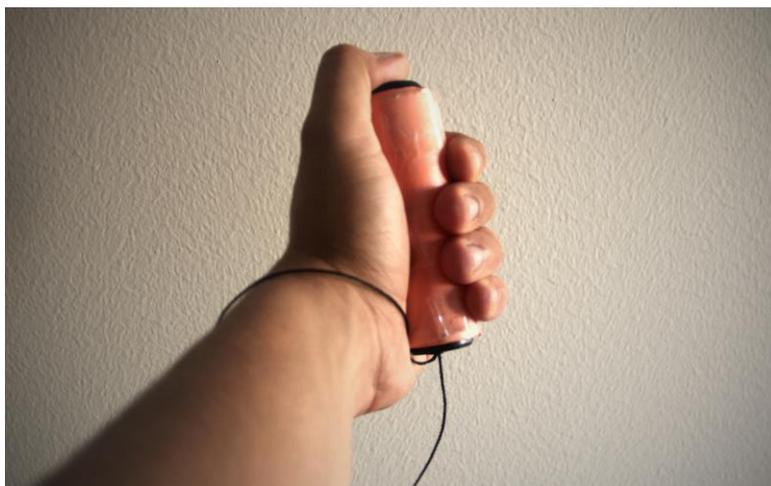
**Questionnaires:** Before and after watching the movies, participants were asked to fill out three questionnaires with questions regarding the participants' background, their expectations before watching the movies and their experiences and emotions while they were watching the movie.

Two of the questionnaires were offered before watching the films and we gathered information about the demographic features of the participants, their interest about other cultures and their knowledge and interest in cinema. The purpose was to be able to evaluate if cultural or demographic aspects of the participants would underlie the obtained results. First, we adapted the questionnaire by Silvia and Berg (2011) to assess participants' knowledge and interest in films in a scale ranging from 1 (low interest) to 5 (high interest). Second, we added the following questions regarding cultural aspects to the questionnaire and asked the participants: *How interested are you in learning about cultures different from yours? What is your level of spoken English comprehension? How many times have you travelled abroad in the last five years? How many different countries have you visited?* We introduced questions regarding travelling and language since Rössel and Schroedter (2015) provided data suggesting that the number of continents visited, long stays in other countries, and the linguistic capital predicted many indicators of cosmopolitan consumption.

The second questionnaire aimed to capture the participants' expectation about the movie before watching it, and after reading a brief synopsis and other technical aspects of the movie. Hence, before each film was presented, they were asked to read a summary of the film and to answer some questions regarding their expectancies about the film (10 minutes). Then, they watched the film, and they were asked to fill out a questionnaire regarding the experiences and emotions elicited by the film. In this questionnaire, we wanted to assess the participants' actual conscious experiences of the films, after watching each of them. Thus, some questions were directed to their overall experience of the films (they were asked to rate in a scale from 1 (low) to 5 (high) to what extent they found the film interesting and entertaining), and some others were directed to rate specific emotions (positive feeling, sadness, boredom, etc.).

The third questionnaire aimed to evaluate the participants' final experience of the whole movie as well as the specific aspects related to it (plot, acting, visual composition, music...), and therefore was offered after watching each movie. This questionnaire contained three open questions in which participants were asked to explain what aspects of the movie they have liked the most and the least, and which elements they considered could be improved in the movie. The purpose of this last questionnaire was to use Content Analysis of the participants' responses to identify features of the movies that might differ in importance for the audiences of different cultural background and to see how these features are present in the scenes extracted by the voting system.

**Watching the film and voting:** In the second phase of the study, people were asked to signal the sequences in the film that raised their interest and they thought were central for understanding the film. For this we used a voting system consisting of two sticks with a bottom at the end that participants could press to signal the sequences they thought critical (see **Figure 1**). Participants were asked to hold the sticks in their hands and to press the button if they thought the sequence was critical and interesting. In addition, they were instructed to press the right or left button to indicate a positive or negative valence-reaction (the hands for positive and negative responses were counter-balanced across participants). This voting system was synchronized with the movie and the participants were asked to press either of the two bottoms every time they considered the sequence critical for the final experience of the movie. The system recorded the participants' responses so that it was possible to identify the critical sequences by looking at the frequency of responses (critical sequences were those with more bottom press) and whether the overall valence for these critical sequences was negative or positive. The advantage of this voting system is that allows capturing participants' emotional responses with minimum disruption of attention to the movie. Reliability and validity of the data from this voting system has been discussed elsewhere (see Cañas-Bajo, et al., in press).



**Figure 1:** Picture of the stick for the voting system.

## Data Analyses

To assess the cosmopolitan orientation of our participants, we analysed the demographic questionnaire which included not only questions regarding demographics features of our sample, (e.g. age, level of education, nationality, etc.), but also a series of cultural items regarding interest in other cultures (from 1 to 5), knowledge of English (from 1 to 5), amount of travels abroad and number of countries visited. In order to understand whether the four cultural questions in this questionnaire were reliably measures of the same latent variable (interest in other cultures), a Cronbach's alpha was run on the sample of 59 participants in the study. The results showed a high level of internal consistency (.678). A

Principal Axis Factor (PAF) with a Promax rotation of the 4 Likert scale questions from this attitude survey questionnaire was conducted on data gathered from 59 participants.

An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable (KMO=.690). The results of the analysis yielded two factors after three convergent iterations. We termed Factor 1 *Intended Cultural Interest* since the only variable with high load in this factor was *Interest in other cultures* (.99). *English knowledge* had a weight of .31, while *Number of countries visited* and *Frequency of travelling* loaded -.20 and 0.05, respectively. Hence, this factor reflects cultural interest regardless participants' objective knowledge of other countries. We termed Factor 2 *Objective Cultural Interest (Travel and English)* since the variables with high load in this factor were *Number of countries visited* (.98), *Frequency of travelling* (.87) and *Knowledge of English* (.69). Hence, this component seems to include variables that indicate objective knowledge of other countries and cultural elements. The dissociation between these two factors is interesting since they reflect different aspects of cultural openness (see Goldberg et al., 2016 for other dissociations): the first more theoretical and subjective based on the participants own perception of their interest in other cultures; the second, more objective, since it includes actual behaviours such as travelling and language knowledge that clearly reflect exposure to other cultures.

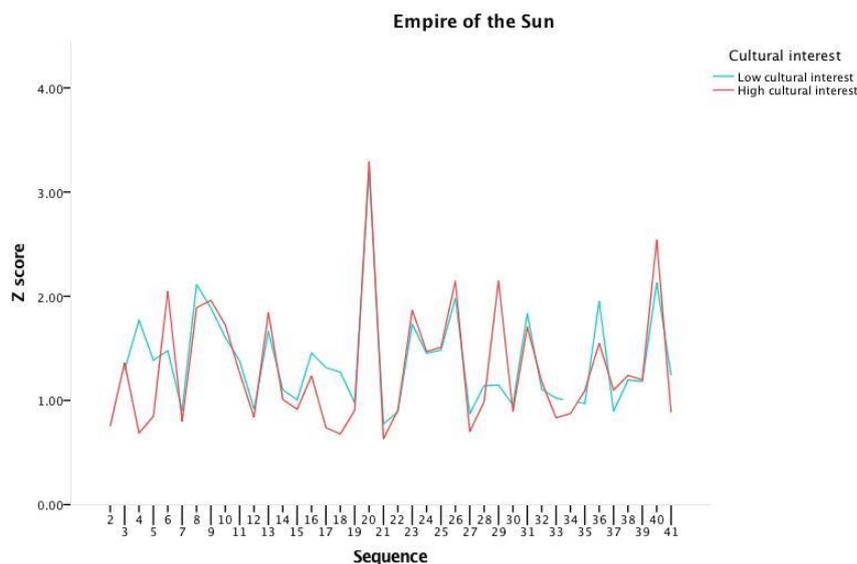
Very importantly, our second factor (*Objective Cultural interest*) included the variables (language and travel) that Rössel and Schroedter (2015) showed as important predictors of cosmopolitan consumption. For this reason and because cosmopolitan orientation was more objectively captured by exposure to other countries and languages, we are reporting here the data regarding individual differences in this factor<sup>1</sup>, and we use this factor to define our groups. Since we wanted to explore whether cosmopolitan orientation influenced the expectations, experiences and emotions elicited by the films, we classified participants in two groups according to their scores in the factor and include groups as factors both when analysing Z-Scores from the voting system, and the results of the questionnaires. The first group corresponded to those whose scores lied below the 25<sup>th</sup> percentile (16 participants), the second those who lied above the 75<sup>th</sup> percentile (14).

### **Overall interest: on-line voting**

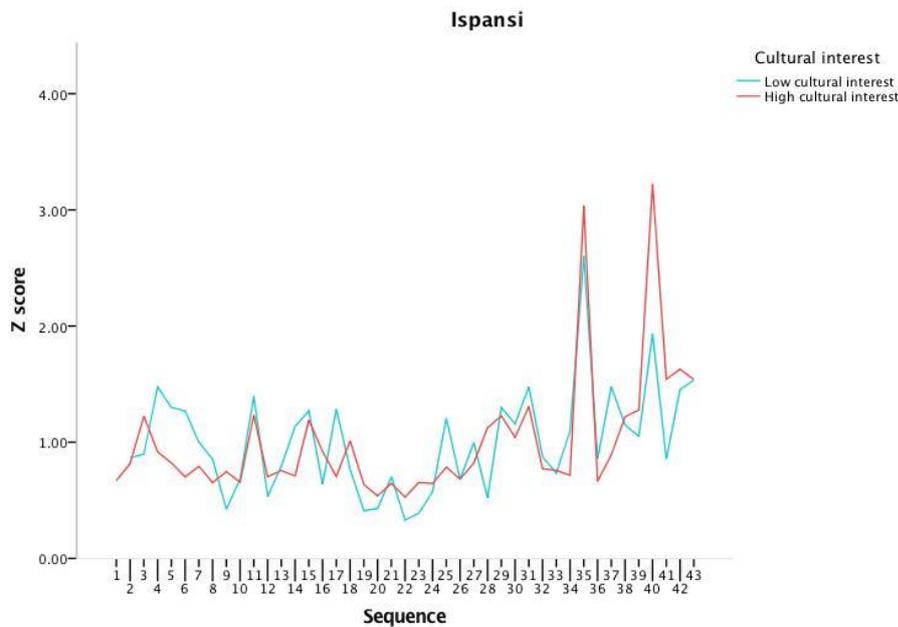
In order to operationalize and measure the interest raised by the films as they unfold on time, we performed analyses on the number of button presses per sequence (see Cañas-Bajo et al., in press, for a similar approach). For the analyses, we divided the movies into sequences and coded the number of registered presses by participant and sequence. We then normalized the data by calculating absolute Z-scores (larger scores represent more presses) for each participant and calculated the mean average score for each scene. In order to measure the overall interest raised in each group for each film, we performed analyses in the transformed Z-Scores for number of button presses per sequence (proxy of overall interest) with Film and Group as independent variables (see first row **Table 1**). The results of the ANOVAs yielded no significant difference among the overall interest of the films, with

Film  $F(2, 56) = 2.9$ ,  $MSe = 3.63$ ,  $p = .06$ ,  $\eta^2 = .09$ ; Group,  $F(1, 28) = 1.8$ ,  $MSe = 12.38$ ,  $p = .19$ ,  $\eta^2 = .06$  or their interaction  $F(2, 56) = 1.8$ ,  $MSe = 3.63$ ,  $p = .17$ ,  $\eta^2 = .06$ . Figure 2a, 2b and 2c reflects the interest distribution across the sequences of the films for each (low and high group) for each film and cultural dimension. Inspection of these figures shows that there is a large overlap on the sequences that produced interest in the different groups. Hence, these analyses suggest that participants' experiences of the films are independent of the participants' cultural orientation and of the culture in which the film were produced.

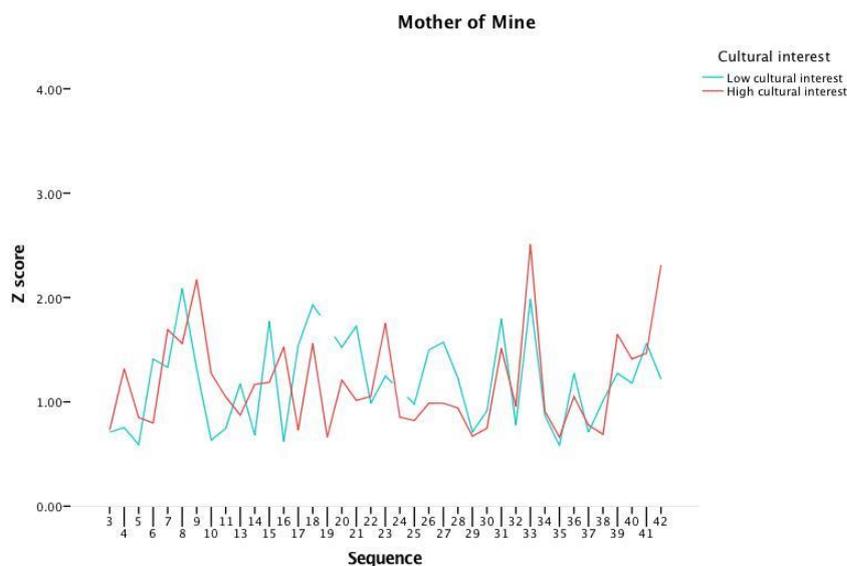
Because we found small differences between films and some interesting tendencies in the analyses reported above, and our sample was relatively small, we decided to perform further analyses directly comparing the three films for the complete sample. Thus, we averaged the z scores of each participant for each film and used them in a regression analysis in which cultural orientation was considered as a continuous variable and the complete sample was introduced in the analyses to calculate regression coefficients for each film with z-scores (interest) as dependent variable and cultural orientation as predictor. For the three films the regression analyses yielded no significant coefficients,  $R^2 = .001$ ;  $\beta = .031$ ,  $p = .81$  for the *Empire of the Sun*,  $R^2 = .001$ ;  $\beta = .13$ ,  $p = .34$  for *Ispansi*, and  $R^2 = .001$ ;  $\beta = .04$ ,  $p = .79$ , for *Mother of Mine*, suggesting that cultural orientation did not predict the degree of interest independently of whether the film was from the same cultural background or from a different culture. This provide additional support to the idea that cultural orientation did not influence the way in which participants reacted to films independently of whether the film was from the same or different nationality of the participants.



**Figure 2a:** Mean Z-scores for each sequence and culturally oriented group for the *The Empire of the Sun*.



**Figure 2b:** Mean Z-scores for each sequence and culturally oriented group for the *Ispansi*.



**Figure 2c:** Mean Z-scores for each sequence and culturally oriented group for *Mother of Mine*.

### ***Subjective overall experience of the film***

As mentioned, to assess the participants’ actual experiences of the films, after watching each film, participants were asked about their overall experience of it. Thus, they were asked to rate in a scale from 1 (low) to 5 (high) to what extent they found the film interesting, and if they thought it entertaining. Mean scores and standard deviations on these scales for each movie and group are summarized in **Table 1**. We performed mixed ANOVAS with Film and Group as factors for each of these dimensions. The results of these analyses revealed a main effect of Film on the dimensions *Interesting*,  $F(2, 56) = 4.01$ ,  $MSe =$

1.3,  $p = .02$ ,  $\eta p2 = .12$ ; and *Entertaining*,  $F(2, 56) = 4.11$ ,  $MSe = 5.09$ ,  $p = .02$ . Post hoc comparisons indicated that there were significant differences in the *Interesting* dimension between *Ispansi* and *Mother of Mine* ( $p < .05$ ), with lower scores for the latter. As for *Entertaining*, the only significant difference was between *Empire of the Sun* and *Ispansi* ( $p < .05$ ), with lower scores for the first. The main effect of group was not significant in the *Entertaining* dimension,  $F < 1$ , and did not reach significance in the *Interesting* dimension Group,  $F(1, 28) = 3.1$ ,  $MSe = 1.9$ ,  $p < .08$ ,  $\eta p2 = .10$  although there was a small tendency by the high group to find the three movies less interesting than the low group, but more importantly, the interaction between group and film did not reach significance in the *Entertaining*  $F < 1$ , or the *interesting* dimension,  $F(2,56) = 2.6$ ,  $MSe = 3.4$ ,  $p > .08$ ,  $\eta p2 = .08$ . An additional interesting point here that can be seen in **Table 1** is that the participants' experience of the films was moderate, in the sense that in most dimensions they rated the movies around the middle point of the scale or somewhat below it. Importantly, this pattern uniformly applies to the three movies that showed similar scores for rated experienced.

	LOW CULTURAL INTEREST			HIGH CULTURAL INTEREST		
	EOS	ISPANSI	MOM	EOS	ISPANSI	MOM
V. z-scores	3.95 (5.5)	2.8(2.8)	1.8 (0.73)	1.99(0.77)	1.9 (0.83)	1.70(.72)
Interesting	2.60(1.29)	3.20(1.26)	2.40(1.55)	1.73(.88)	2.47(1.3)	1.73(.96)
Entertaining	2.60(1.12)	3.20(1.32)	2.60(1.59)	2.07(.88)	2.93(.79)	2.47(1.12)
Positive Feelings	3.20(.80)	2.38(.97)	3.02(.92)	3.45(.62)	2.68(.69)	3.02(.57)
Surprise/curiosity	2.97(.95)	2.26(.88)	3.20(1.12)	3.33(1.13)	2.60(1.07)	2.97(.64)
Sadness	3.33(1.11)	2.70(1.25)	3.77(1.24)	3.57(.90)	3.23(.86)	3.93(.92)
Boredom	2.13(1.12)	2.93(1.28)	2.13(1.30)	2.00(.75)	2.80(1.08)	2.00(.84)
Disgust	2.13(1.12)	1.93(1.28)	1.87(1.12)	1.87(1.06)	1.80(1.01)	2.13(1.18)
Anger	2.13(1.15)	1.73(1.10)	1.87(1.30)	1.93(1.22)	2.00(1.06)	2.33(1.17)
Fear	2.13(1.13)	1.70(.96)	1.60(.81)	1.90(.89)	1.70(.88)	1.80(.73)

**Table 1:** Means and standard deviation for each film in z-scores button presses (voting system), interesting dimension and entertaining dimension of the experience questionnaire and for each of the dimensions of the emotional experience questionnaire as a function of Travel & language. Scores reflect responses in a scale from 1 (low) to 5 (high).

### **Rating of the emotions elicited by the films**

As before, we performed mixed model ANOVAs with Film and Group as factors for each of the emotional dimensions in the questionnaire (see **Table 1** for descriptive statistics). The results of these analyses showed main effects of Film in *Positive Feelings*,  $F(2, 56) = 12.0$ ,  $MSe = .50$ ,  $p < .001$ ,  $\eta p2 = .30$ , and *Surprise*,  $F(2, 56) = 3.7$ ,  $MSe = .70$ ,  $p < .03$ ,  $\eta p2 = .11$  with lower scores for *Ispansi* than for *EoS* ( $p < .001$ ) and *Moher of Mine* ( $p < .05$ ). There was also a main effect of *Sadness*,  $F(2, 56) = 13.01$ ,  $MSe = .72$ ,  $p < .001$ ,  $\eta p2 = .32$  with post hoc comparisons revealing that *Mother of Mine* had significantly higher scores than *Ispansi*.

None of the other dimension showed significant effect. Similarly, the main effect of Group and its interaction with film was not significant for any of the dimensions with all the  $F_s$  between 1 and 1.5, and with all  $p > .20$ . Interestingly, mean scores on each dimension in **Table 1** reflect that participants seemed to experience positive feelings, curiosity, sadness and boredom to a larger extent than other more extreme feelings such as disgust, anger or fear. These larger scores for moderate emotions might correspond with the participants' moderate ratings regarding their experience of the movie as moderately interesting and likable. Importantly, these scores also show that the pattern of emotions was similar for the three films.

### Content Analyses of open questions

Finally to assess more qualitative aspects of the viewers' experiences that might not have been captured by the more specific expectancy, experience, and emotion questionnaires, we analysed the open verbalizations to the questions where participants were asked to explain what aspects of the movie they liked the most and the least. We performed content analyses of the participants' verbalizations as described by Weber in his book *Basic Content Analysis* (Weber 1990). The approach for the content analysis was data-driven because the focus was to identify the elements and properties of the films that raised the interest on the audience. We identified semantic units and categorized them into broader categories. **Table 2** shows the recorded number of elements within each broad category (Narrative, Acting, Visual Composition, Music, Time and Rhythm).

CATEGORY	POSITIVE RESPONSES			NEGATIVE RESPONSES		
	EOS	ISPANSI	MOM	EOS	ISPANSI	MOM
Narrative	26	22	22	17	20	21
Acting	3	1	5	3	13	1
Visual composition	5	8	7	4	0	5
Music	2	2	0	2	1	1
Time & Rhythm	0	0	0	10	0	3

**Table 2:** Number of written verbalizations from the questionnaire responses for each film in identified broad category.

'Narrative' referred to verbalizations regarding elements of the plot, characters, dialogues, historical moment, or evaluating the quality of narrative features; 'Acting' referred verbalizations regarding aspects of the actors' interpretation, 'Visual composition' represented verbalizations regarding characterization, makeup and settings, and 'Audio composition' referred to verbalizations regarding the music and voice-over. Inspection of **Table 2** indicated that Narrative was the most frequent category in the viewers' answers.

Most importantly, again with few exceptions, the distribution of the participants' verbalizations was very similar for the three films.

In summary, the data analyses performed on the participants' expectancies and experiences of the movies both on-line (through the voting system), or off-line (through questionnaires and open questions), seem to suggest that our participants with a similar Spanish-culture background, perceived and experience the three culturally different movies in similar manners.

## **Discussion**

Our aim with this study was to explore the extent to which emotional experiences when viewing full scripted films contained universal properties or, on the contrary, they were culturally mediated. In line with Universalists positions regarding emotional processes (Ekman, 1973), film experts implicitly discuss many of the cinematographic resources and techniques (frame composition, distance, angles, etc.) as universal ways of conveying specific emotions (Brown, 2003; Nielsen, 2005). However, more recent theoretical approaches to emotional processing (Boiger & Mesquita, 2012), and data on social media and audio-visual design suggests that many perceptual and emotional experiences might be strongly influenced by cultural values (Ito & Nakakoji, 1996). On the one hand, studies looking at cultural factors across nationalities have identified dimensions in which people from different countries and nationalities differ (Hofstede, 2010), with some demonstrations that aesthetic appreciation may vary with geographical location and culture (O'Connell, 2014). On the other hand, another set of studies have shown that, within a given culture, people 'cosmopolitan orientation' influence cultural habits, and openness to experience foreign product (Cleveland et al., 2009; Skrbis & Woodward, 2007).

Hence, in our study we aimed to assess emotional experiences of viewers and to look at the effects of culture. We compared Spanish viewers' expectancies and experiences of films produced in countries that differed in important cultural dimensions such as Spain, Finland or US (Hofstede, 2010). In this case, all the viewers came from identical national backgrounds (Spain), and the films were selected so that the genre and topic were similar, although the country of production and the underlying script reflected historical and cultural elements of their corresponding countries. We also compared participants with different cultural orientations and compared their expectations and emotional experiences of the films. For this, we divided participants according to their cultural orientation and compared their responses to the three films. Common to these two types of comparisons is the idea that, in order to enhance the success of a product, it is important to assess the viewers' experiences and to identify the features of the product that have the desired impact on the users. When applied to films, this means finding the elements of the films that raise interest in the audience, elicit the intended emotion and provoke a general experience of liking the movie (Silvia & Berg, 2011; Tarvainen et al., 2014). Although these features can be universal because they draw into universal emotions, recent theories

(Boiger and Mesquita 2012, see also Gerdon, et al., 2018) suggest that many of these features could be culturally mediated.

Contrary to our expectation, results of our study suggest that some of the emotional experiences to culturally diverse movies can be, at least in part, universal. Comparison of the emotional profiles of the three movies was very similar. The pattern of button presses of our participant to the movies yielded similar emotional profiles with the three movies considered being moderately interesting and the more voted sequences having similar emotional features. Similarly, the overall expected interest and the distribution of expected interest and enjoyment of different aspects of the movie (acting, visual composition etc.) for the three movies was similar. These similar distributions were also present in the reported overall experiences of the participants and the distribution of their emotions. The fact that participants considered the three films only moderately interesting might in part explain that cultural orientation was not reflected in the emotional ratings that people offered as reaction to the films. Recent case studies and theoretical approaches (Axelson, 2017; Marzouki, 2011; Zillmann, 2005) suggest that there is an interplay between emotion and cognition when people react to films (*feelings of deep meaning*, in Grodal's, 2009, terms). In this way, cognitive, and ethical positions are enhanced when the viewers are deeply involved in the filmic experience. From this view, it is possible that cosmopolitan orientation, a cognitive factor, would only show in contexts where people are deeply engaged. Obviously this was not the case for our films since participants rated them as only moderately interesting.

Evidence from universal emotions in films also comes from comparison regarding group experiences. The results of our analyses on participants' responses to our demographic and cultural questionnaire yielded two factors (*intended cultural interest* and *objective cultural interest*) with the second factor including variables (travel and language) that have been previously shown to predict cosmopolitan consumption (Rössel & Schroedter, 2015). Thus, we defined cosmopolitan orientation by dividing our participants between those who scored high and low on *objective cultural interest* as a proxy of cosmopolitan orientation. Results of these analyses showed no interactions between film and groups, suggesting that cultural orientation and openness to other cultures were not affected by the expectancies, experiences and emotions to films varying in cultural background. Interestingly the Spanish movie was not liked better or worse for people coming from the same culture. Similarly, the more culturally different Finnish movie was not perceived as better or worse by the Spanish participants with lower cultural interest or with lower experience in travelling and foreign languages. Although there were some overall variations in the films, they were small and unreliable since they did not appear when considering the complete group, and there were no relevant interactions between film and group.

Together, these results support the idea that universal emotions are elicited by different aspects of the films. But why are these data at odd with other studies showing culturally mediated experiences toward visual products or the role of cosmopolitan

orientation in culturally loaded products (Cañas-Bajo & Silvennoinen, 2017; Cleveland et al., 2009; Savage et al., 2013)? Recently, some research from appraisal theories of emotion suggests that some mental symbols mediating emotional experiences might be universal (Chang et al., 2013; Ivonin et al., 2015). From this view, mental symbols mediate the connection between the physical world that produces emotional reactions and the psychological state that make people aware of them. It is the appraisal of symbolic contents that makes emotional become real and the challenge is to find universal symbols that sustain universal emotions (Chang et al., 2013; Ivonin et al., 2015). Borrowing from Jung archetype notions, they suggest that some symbolic contents seem to be identical across time and space. The child, the mother, the good ancient man represent archetypal events and archetypal figures that may sustain universal unconscious emotions. When applied to aesthetics experiences, this can help to design emotional products that provoke universal reactions, to explain why emotional reactions to some aesthetic products such as films seem to provoke universal emotions. Elements like the hero's travel, the child, the figure of the mother etc., might be symbolic elements that when included in the narrative and strengthening them by audiovisual features might produce universal reactions (Chang et al., 2014). Although, in our view, this proposal is in need of support from empirical data, the fact that the selected movies contained many of these universal figures and events may explain the lack of culturally mediated effects on our viewers' emotional responses. Additionally, as we mentioned above, the fact that the films were considered only moderately interesting may be also at the base of the lack of differences regarding cultural orientations. Despite the difference in national origin, the films were similar in the moderate level of interest that they raised in the participants. Although this pattern might be used as supporting the idea of universal reactions to films, it might also be that complex cognitive orientations do not play a role unless the participants are highly engaged in the films (Axelson, 2017). We are aware that the idea of Universalism in emotions is at the moment very much contested by both theoretical and empirical arguments (Barrett, 2017; Barrett, Lindquist, & Gendron, 2007; Medin, Ojalehto, Marin, & Bang, 2017), and we are sympathetic with this position since results of many aesthetics-emotional dimensions also show cultural and contextual variations. Hence, in our view, stronger conclusion need to wait until further studies: a) comparing films with different archetypal structure, and/or b) producing high engagement in the individuals, help to disentangle the roles of universal and culturally mediated emotional experiences.

Several aspects of our data (button presses and questionnaires) merit some further considerations. First, the consistency between different types of responses. Thus, the button processes, the responses to questionnaires and the verbalizations to open questions were very consistent in showing that three films were considered of moderate interest to the participants with all the responses moving in the middle point of the scales. This middle point did not seem to be produced by participants tending to always respond in the middle portion of the scales since there were also emotions that were low in the scales and there were sequences with small or larger numbers of button presses. Hence, participants'

consistency did not mean lack of discrimination, but reliable and consistent responding across tasks and measures. Second, analyses of the more voted sequences support the idea that interest in films are produced by complex cognitive and emotional sequences in agreement with previous theoretical ideas and research on 'interest' as an important emotional experience (Silvia & Berg, 2011).

In summary, the results of the present study lead us to conclude that, at least in part, films are able to produce universal emotional experiences. However, as the previous paragraphs suggest some limitations of our study preclude generalization of these conclusions. First, our participants were all coming from the same cultural/national background (Spain) and they were very similar in education and age. Very possibly comparisons of viewers from different nationalities and ages might yield different results. Same data suggest that older people with less access and experience with technology and audio-visual contents are more susceptible to cultural effects. Cultural globalization is a relatively new phenomenon that may produce age differences in the way cultural products are perceived. Second, the films were all coming from western cultures, it is possible that comparison between more extreme cultural differences might show differences in the emotional experiences to culturally different films. Finally, and most importantly, in order to control for genre and topic of the films, the three selected films displayed common archetypical events and figures and it is possible that other genres (e.g. comedies) and topics provoke different culturally loaded emotional experiences. Future studies should also address this point by comparing films varying in genre and topic.

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## Notes:

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<sup>1</sup> We also performed analyses on the cultural interest factor that yielded similar effects.

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