



# The Impact of Nostalgia and Social Setting on Consumer Motivation to Watch a Movie at the Cinema vs. through Streaming

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## **Abstract**

Movie theatres have long been considered a social space, where people come together and share the experience of watching a new movie on the big screen. Consumers often hold a sense of familiarity with cinema. The ritualistic nature of the dark room, and the popcorn machine, contributes to the creation of an emotional experience and a sense of Nostalgia.

Over the years, technology posed several threats to theatres. Streaming has become widely popular, even on-par with cinema not only through fostering its own ritualistic nature – associated with the culture of binge watching and escapism – but also when it comes to carrying exclusive releases. Thus, understanding how consumers choose in this industry has become increasingly relevant.

This thesis explores the role of Nostalgia and Social Setting in driving consumer motivation to watch a movie at the theatre and through streaming. Through two experimental studies, we find that Nostalgia is particularly relevant for streaming, increasing Inspiration to watch a movie and Intention to watch a series. For cinema, we find no effect of Nostalgia on motivation, likely due to a naturally high Nostalgic Value making our Nostalgia manipulation redundant. Inversely, Social Setting is particularly relevant for cinema and non-significant for streaming. In the cinema context, we find that watching a movie in groups increases Inspiration, Intention, and Willingness to pay.

Our study is theoretically and practically relevant, contributing to literature on the role of Nostalgia in fostering Inspiration, and providing managers of streaming platforms and cinemas with relevant ways to increase consumption.

**Keywords:** Cinema; Streaming; Media; Nostalgia; Social Connectedness; Inspiration; Willingness to Pay; Perceived Risk; Escapism; Movies; Series.

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## Resumo

Há muito que o cinema é visto como um espaço social, onde se partilha a experiência de ver um filme no grande ecrã. Os consumidores atribuem ao cinema um sentimento de familiaridade. A natureza ritualista da sala escura, e da máquina de pipocas, permite a criação de uma experiência emocional e de um sentimento de nostalgia.

Ao longo dos anos, a inovação tecnológica tem constituído uma ameaça para os cinemas. A popularidade do *streaming* tem atingido novos patamares, aproximando-o do cinema, não só por fomentar uma natureza ritualística própria – associada, por exemplo, à cultura do *binge watching* e do escapismo -, mas também por oferecer estreias exclusivas. Assim, compreender as escolhas dos consumidores nesta indústria tem-se tornado cada vez mais relevante.

Esta tese explora o papel da Nostalgia e do Contexto Social no aumento da motivação do consumidor para ver um filme no cinema e nas plataformas *streaming*. Através de dois estudos experimentais, verificamos que a Nostalgia é particularmente relevante para o *streaming*, aumentando a Inspiração e Intenção de ver um filme ou série. Este efeito não se revelou significativo para o cinema, provavelmente devido a um Valor Nostálgico naturalmente elevado, tornando a nossa manipulação redundante. O contexto social é particularmente relevante para o cinema, onde ver um filme em grupo aumenta a inspiração, a intenção e a disposição para pagar.

Este estudo contribui para a literatura existente sobre o papel da Nostalgia na Inspiração, e proporciona aos gestores de plataformas *streaming* e cinemas formas relevantes para aumentar o consumo.

**Palavras-chave:** Cinema; *Streaming*; Média; Nostalgia; Conexão Social; Inspiração; Disposição para Pagar; Risco; Escapismo; Filmes; Séries

**Título:** O Impacto da Nostalgia e do Contexto Social na Motivação do Consumidor para ver um Filme no Cinema vs. através de Streaming

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## Introduction

Cinema has long been considered a social space, where people can come together and enjoy a shared experience. Over the years, technology posed several threats to theatres. Widescreen television, for example, forced exhibitors to adapt and invest in improved facilities such as multiple screens, comfortable seating, and sound quality (Eliashberg et al. 2006). Nevertheless, exclusivity was never questioned: movie theatres have always typically been the first to distribute a movie.

Though studios were considering a change in channel order for some time (Hennig-Thurau et al. 2007), it was not until the pandemic that this idea became a serious threat to theatrical distribution. Movie studios such as Disney and Warner Bros recently experimented with such changes, making their movies simultaneously available through theatres and their own streaming platforms.

The advent of technology has altered the way consumers approach, buy, and consume entertainment products (Papies & van Heerde, 2017). In the case of multiformat goods such as movies, demand for new digital channels negatively impacts demand for incumbents (Papies & van Heerde, 2017), thus posing concerning threat to existing formats. If multiple releases have high profit potential for studios (Hennig-Thurau et al. 2007), they can be proven disastrous for traditional channels. In fact, movie theatres are set to lose as much as 40% of their revenues should simultaneous release become the norm (Hennig-Thurau et al. 2007).

Given the current setting, it has become increasingly relevant to understand consumer choices in this industry. Though research on the topic is not extensive, previous studies identify the needs fulfilled by media, and suggest differences across formats. Escapism, relaxation, connection, and imagery are the main motivators of media consumers, and relative importance varies according to the type of media. While watching a movie at home mainly fulfils needs of escapism and relaxation (Camilleri & Falzon 2020), going to the cinema is seen as ritualistic (Walmsley, BA 2011), and mainly fulfils social and affective needs (Tefertiller 2017).

Additionally, both platforms are associated with ritualism, though in different ways. Cinema carries the excitement of seeing a film on the big screen, often leading to heightened emotion

and increased enjoyment (Tefertiller 2017). People often cherish fond memories associated with cinema, even keeping movie tickets and other physical remembrances of their attended screenings (Walmsley, BA 2011). Thus, the ritualism associated to cinema – purchasing tickets, buying popcorn, finding seats, and even the dark room – contributes, during the screening, to a sense of familiarity and shared experience, and to feelings of Nostalgia after the event. Streaming, on the other hand, is not so much associated with old memories but with the potential for new ones, while still being linked to ritualistic behaviours. The habit of tuning in to a streaming platform after a full day of work can be a ritual in itself, allowing viewers a form of mental escape from stress. The culture of binge watching is another example of ritualism associated to streaming.

As the affective and nostalgic nature of movie theatres seems to be the main differential between the two experiences, the purpose of this study is to assess the role of nostalgia and social setting on consumer inspiration to watch a movie. We will explore the extent to which social setting – watching the movie alone or with a group of friends –, and nostalgia influence the motivation to watch a film in two different media: movie theatres and streaming platforms.

Thus, the research questions for this study are the following:

- a) What is the effect of nostalgia on consumer motivation to watch a movie at the theatre and through streaming?
- b) What is the moderating effect of social setting (consuming alone vs in group)?
- c) Through which process does Nostalgia impact consumers' motivation to watch a movie?

## **Literature Review**

### **Literature on consumer motivation for media consumption**

The uses and gratifications framework suggests that consumers use media to satisfy specific needs. In particular: cognitive needs, affective needs, integrative needs, and the need for escapism and relaxation (Tefertiller 2017; Camilleri & Falzon 2020).

Cognitive needs refer to intellectual stimulation, learning, and understanding. They are related to gathering information and attaining knowledge, experiencing new things, and learning about the self. Affective needs are the emotional and social requirements essential to human well-being and fulfilment. They refer to, for example, emotional experiences and pleasant aesthetics. Integrative needs allow the strengthening of self-esteem and status. They are related to several aspects of personality, relationships, and experiences, when these are seen as cohesive and meaningful. Both affective and integrative needs are related to emotion and social contact (Tefertiller 2017). Lastly, escapism and relaxation refer to the need to seek distraction as a relief from several aspects of one's life by engaging in activities that get the self into a better mood (Camilleri & Falzon 2020).

Previous studies find that all forms of media, in general, satisfy these needs, though the degree to which each need is met depends on the type of media (Tefertiller 2017). Tefertiller (2017) argues that, since escapism needs are related to integrative needs in its capability of relieving social tension, three categories of needs can be derived. His study evaluated the degree to which these categories influence Intention to watch a movie at the theatre. Tefertiller (2017) measured the degree to which respondents valued each need when attending a screening, as well as the respondents' perception of the degree to which each need would be met when watching a movie in theatres. The authors found that movie theatres mainly satisfied affective needs. Integrative needs were found to have no effect on Intention, and Cognitive needs, though having some relevance, were much less important than affective needs.

Camilleri & Falzon (2020) analysed several possible determinants of Intention to use streaming services. These included some of the categories of needs identified by Tefertiller (2017) – cognitive needs, and escapism needs – and some characteristics of streaming services, such as

easiness of use and usefulness. This study concluded that escapism needs have a positive influence on Intention. Furthermore, cognitive needs and entertainment could also be relevant, as they were indicated by respondents as motives for using streaming platforms.

Thus, according to previous research, there are three main categories of needs fulfilled by media: cognitive needs, escapism needs, and affective needs. Though all these are, to some degree, fulfilled by most forms of media, depending on the type of media, some needs have a more determinant role than others in driving Intention. Following previous studies, while movie theatres mainly satisfy affective needs (Tefertiller 2017), streaming services satisfy cognitive needs and the need for escapism and relaxation (Camilleri & Falzon 2020), being especially used to pass time (Sung et al. 2018).

### **Defining Inspiration**

Nostalgia has been defined as a primarily positive emotion and psychological resource that influences consumer behaviour (Hinsch et al. 2020). Previous research has shown a promising role of Nostalgia in increasing purchase intentions (Weingarten & Wei 2023) and willingness to pay (Lasaleta & Vohs 2014), and Inspiration has been cited as one of the processes through which Nostalgia influences consumers (Hinsch et al. 2020).

The concept of inspiration is defined as a temporary motivational state that induces consumers to pursue a consumption related goal after being exposed to a marketing-induced idea. (Böttger et al. 2017). Inspiration encompasses two distinct processes – inspired-by and inspired-to – which can occur each on its own or together. They can also both occur in response to the same stimuli (Hinsch et al. 2020).

*Inspired-by* is related to the intrinsic value of the stimuli as it is perceived by the consumer and *inspired-to* is related to the motivation to act as a response to this stimulus (Hinsch et al. 2020). While the first process is related to psychological response, *inspired-to* is related to behaviour. A person can typically be inspired by another person, an experience, or an idea. This stimulus triggers a psychological process in consumers' minds, which previous research characterizes as fundamentally grounded in sentiment and creativity (Hinsch et al. 2020). For example, hedonic

benefits perceived from the stimulus have been shown to drive inspiration (*inspired-by*) (Hinsch et al. 2020). A consumer will then be *inspired-to* have a behavioural response when capable of evoking meaningful associations with the stimulus. Marketers can aid the consumer to evoke these associations, for example, by triggering the feeling of Nostalgia (Hinsch et al. 2020).

### **Inspiration and nostalgia**

Nostalgia generates psychological inspiration, resulting in behavioural change, such as increased purchase intention, because it allows the consumer to invoke meaningful associations related with the stimulus, offsetting risk (Hinsch et al. 2020). Previous research argues that meaningful associations – significant or valuable relationships, experiences, ideas, or concepts stored in consumers’ minds – increase inspiration when recalled in relation to the stimulus, and that Nostalgia is a type of meaningful association (Hinsch et al. 2020). Furthermore, Nostalgia can be derived from personal experience, but also from consumers’ cultural context (Hinsch et al. 2020). Therefore, Nostalgia allows consumers to experience something new in the light of a familiar construct (Hinsch et al. 2020), influencing consumers even when they are yet to have any experience with the object or stimuli. In their study, Hinsch et al. (2020) found that Nostalgia increased inspiration in a context where the stimulus was a relatively new technology – Augmented Reality – but was associated with a familiar brand – LEGO. Thus, in our study, Nostalgia is likely to influence consumers’ Inspiration to watch a movie in both contexts. Even if streaming platforms are a newer concept compared to movie theatres, Nostalgia would still increase Inspiration since movies are a familiar construct.

Thus:

H1: Nostalgia increases inspiration to watch a movie at the movie theatre and through streaming.

An article on financial risk taking also found that consumers are more willing to incur higher risk when induced to feel nostalgic (Zou et al. 2018). This study manipulated nostalgia by asking participants to reflect about either a nostalgic event or an ordinary event from their past. After this first part, participants were instructed to play a game that consisted in pumping balloons with air without popping them. Participants were told the *breaking point* of the balloon,

measured in number of pumps. They were also told they would receive a small monetary reward for each pump, taking into account that popping a balloon would result in the loss of all gains. The results revealed that participants primed to feel nostalgic pumped the balloons significantly more times than participants writing about an ordinary event, suggesting that nostalgia decreases perceived risk. Hinsch et al. (2020) also suggest that, apart from being a form of meaningful association, Nostalgia could also increase Inspiration by mitigating risk perceptions associated with acting upon the stimulus.

Thus,

H2: The relationship between nostalgia and inspiration is mediated by perceived risk.

The risk associated with watching a movie at the cinema is likely higher than the risk associated with watching it at home because the consequences of not enjoying the movie carry more downsides in the cinema context. Going to the movie theatre requires more time, more effort, and likely more money than watching the movie at home. Further, when at home, if consumers are not enjoying the movie, they can easily switch to another, while the same is not true in the cinema context.

Therefore, perceived risk will be higher in the cinema context than in the streaming context, and thus:

H3: The effect of Nostalgia on Inspiration is stronger in the cinema condition.

The relationship proposed in H3 could also have an alternative explanation. Since movie theatres are more nostalgic by nature, it is possible that, in the cinema context, there is a direct effect of nostalgia on intention. Should this be the case, consumers would invoke more, or stronger meaningful associations related to cinema than related to streaming, when prompted to feel nostalgic, leading to a stronger effect of nostalgia on intention in the cinema context compared to the streaming context.

Then,

H4: The consumer perceives movie theatres to be more nostalgic than streaming.

H5: The effect of Nostalgia on Inspiration is stronger in the movie theatre context because cinema is perceived to be more nostalgic than streaming

Note that the validation of H5 does not disprove H2. If the relationships proposed in H2, H3, and H5 are validated, then, H3 is partially explained by a higher perceived risk in the cinema context compared to the streaming context. In this case, perceived risk partially mediates the relationship.

### **The role of shared experience**

Consumers often enjoy hedonic products in the company of others, finding value in shared consumption. People usually enjoy a restaurant meal, a music concert, or a sports match at the stadium, together with others, as sharing the consumption experience often increases one's enjoyment by promoting socialization and bonding (Delre et al. 2016). Watching a movie is another example of such an activity that is usually shared, especially at the theatre.

A study on the consumption of private and public hedonic experiences shows that consumers prefer to consume the former alone and the latter in groups because consuming public hedonic experiences alone threatens perceived social connectedness (Ratner & Hamilton 2015). In this study, this relationship was assessed for several hedonic activities, one of which was watching a movie at the cinema vs. at home. The same relationship held true: participants showed a clear preference for watching the movie at home when told they could only watch it alone. On the contrary, they preferred watching the movie at the cinema, rather than at home, when told their friends would accompany them. Other studies also suggest this relationship. For example, a different study found that shared experience – defined as the easiness with which consumers find companions – is the strongest driver of movie life cycles at theatres (Delre et al. 2016).

Thus, willingness to consume public hedonic experiences, like watching a movie at the theatre, is conditioned by the consumer's ability to find companions.

Thus,

H6: Consuming with others increases Inspiration to watch the movie, having a stronger impact in the cinema context compared to the streaming context.

If a threat to social connectedness deters consumers from participating in public hedonic experiences, then a way to disinhibit consumption is to buffer consumers from this threat. Nostalgia has been shown to increase perceived social connectedness (Lasaleta & Vohs 2014) and to buffer the self from threats (Weingarten & Wei 2023). Thus, when consumers cannot find companions, inducing the feeling of nostalgia may increase willingness to consume public hedonic experiences, such as watching a movie at the theatre.

We do not expect the same relationship to hold for the streaming context. Ratner & Hamilton (2015) showed that consumers prefer to consume private hedonic experiences alone, and this does not constitute a threat to perceived social connectedness. Further, previous literature on motivations to use streaming services do not typically mention social contact. Rather, they cite social influence (exclusive content) and habit forming (familiarity) as the main reasons to adopt and use streaming (Ma et al. 2021). Furthermore, the uses and gratifications framework does not associate streaming with the fulfilment of social needs.

Thus,

H7: When consumers cannot find companions, Nostalgia increases Inspiration to watch a movie at the theatre but not through streaming.

H8: This relationship is mediated by perceived social connectedness.

## Hypothesis

As we have seen, Nostalgia and Social Setting are possibly two of the most important influences on consumer motivation to watch a movie at the cinema and through streaming. Previous studies have shown consumers' preference for company when experiencing a hedonic activity in public, and for solitude when the same activity is experienced in private. The main psychological driver of this preference has been suggested to be perceived social connectedness, which is threatened when consumers experience public hedonic activities alone. As a known buffer for threats to the self, nostalgia could play a significant role, disinhibiting consumption when consumers cannot find companions. Further, nostalgia has also been shown to be a driver of psychological inspiration.

Thus, the purpose of this study is to assess the nostalgia-inspiration relationship in the context of the movie industry, and to explore the effects of social setting.

We will measure consumers' inspiration and intention to watch a movie, as well as willingness to pay, while manipulating the context, the social setting, and feelings of nostalgia. To manipulate context, we will restrict the availability of the movie, informing participants that it is only distributed through streaming – private context – or in movie theatres – public setting. To manipulate social setting, we will inform the participants, depending on the condition that they are randomly assigned to, that they can only watch the movie with their friends, or alone. Finally, we will also manipulate feelings of nostalgia by asking participants to reflect on specific events from their past (Lasaleta & Vohs 2014).

The hypothesis tested in this study are the following:

H1: Nostalgia increases the Inspiration to watch a movie.

H2: The relationship between Nostalgia and Inspiration is mediated by perceived risk.

H3: The effect of Nostalgia on Inspiration is stronger in the cinema condition.

H4: The consumer perceives movie theatres to be more nostalgic than streaming.

H5: The effect of Nostalgia on Inspiration is stronger in the movie theatre context because cinema is perceived to be more nostalgic than streaming.

H6: Consuming with others increases Inspiration to watch the movie, having a stronger impact in the cinema context compared to the streaming context.

H7: When consumers cannot find companions, Nostalgia increases Inspiration to watch a movie at the theatre but not through streaming.

H8: This relationship is mediated by perceived social connectedness.

## **Study 1:**

### **Methodology**

#### **Participants**

This study recruited 265 participants on a volunteer basis. The participants were mainly recruited through social media and were asked to complete an online survey developed with Qualtrics.

The sample was mainly composed of females (67.4%). The remainder of the respondents were males (31.2%), and one person selected the option “Prefer not to say”. The mean age was 26.67 years old ( $SD = 10.69$ ), and the average yearly gross household income was 46,470€ ( $SD = 33.83$ ).

## **Materials**

### **Dependent Variables**

This study evaluated three dependent variables: Inspiration, Intention, and Willingness to Pay. Unless stated otherwise, the range of all scales listed below was 1 (not at all) to 7 (extremely).

To measure Inspiration, we used a scale previously tested by Böttger et al. (2017). Participants were asked to rate the following statements: *“I was inspired to watch the movie”*, *“I felt a desire to watch the movie”*, *“I was motivated to watch the movie”*, *“My interest to pay for the movie was increased”*. [Cronbach Alpha was 0.823 for streaming and 0.90 for cinema]

To measure Intention, we directly asked participants their intention to watch the movie: *“I intend to watch the movie at the theatre/through streaming”*.

Lastly, we measured willingness to pay by asking participants to rate the statements: *“I am willing to pay for the movie”*, *“My willingness to pay for the movie increased”* [Cronbach Alpha was 0.90 for streaming and 0.88 for cinema]. We also asked participants the maximum they would be willing to pay to watch the movie through streaming/at the cinema, using a slider scale ranging from 1€ to 20€.

### **Independent Variables**

We manipulated three independent variables: Nostalgia (vs. Control), the Context (Cinema or Streaming), and the Social Setting (whether participants could watch the movie alone or with friends).

The nostalgia manipulation used in this study was adapted from Lasaleta & Vohs 2014. As in their study, we told respondents they were participating in two independent studies: the first was a life-events study, and the second was about the consumer experience watching a movie at the cinema and at home. Following Lasaleta & Vohs, under the guise of the first study, we

asked participants to reflect on a nostalgic event from their lives. At this stage, we presented participants with the same definition of nostalgia used in Lasaleta & Vohs 2014: “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266). We asked participants to reflect on the experience for about 3 minutes and write 3 words or short phrases that described it. The control group was asked to reflect on an ordinary event from their past. As manipulation checks, we also followed Lasaleta & Vohs, asking participants to rate the following statements on a scale of 1 (not at all) to 7 (extremely): “*Right now, I am feeling quite nostalgic*”; “*Right now, I am having nostalgic feelings*”; “*I feel nostalgic at the moment*”. [Cronbach Alpha was 0.953 for the nostalgia condition and 0.960 for the non-nostalgia condition]

To manipulate Context (cinema/streaming) and Social Setting (alone/with friends), we presented participants with different scenario descriptions. Participants were asked to imagine they had discovered a new movie that appealed to them. They were told that this movie had recently premiered in cinemas (group 1) / in a streaming platform (group 2) and that this was the only channel where the movie was available. Participants were also asked to imagine they were only able to watch the movie alone but not with friends (group A) / with friends but not alone (group B). Participants were told to consider the scenario that was presented to them when answering the questions that followed next. For example, participants randomly assigned to group 1A were asked to answer the next questions keeping in mind that they were able to watch the movie only in cinemas, not at home, and that they could only watch the movie alone, not with any of their friends.

## **Process Measures**

This study considers three process measures: Social Connectedness, Perceived Risk, and Nostalgic Value. The range of all scales used was 1 (not at all) to 7 (extremely).

We measured Social Connectedness in two situations. The variable was first measured after the nostalgia manipulation, using a scale adapted from Lasaleta & Vohs 2014 and from Ratner & Hamilton 2015. First, we asked participants to rate the degree to which they felt “loved” and “protected” (Lasaleta & Vohs 2014). We then also asked participants how many friends other

people would guess they have (Ratner & Hamilton 2015). [Cronbach Alpha was 0.7 for the nostalgia condition and 0.6 for the non-nostalgia condition]

We measured Social Connectedness again after presenting the Context (cinema/streaming) and Social Setting (alone/with friends). We defined Social Connectedness as “the degree to which you feel emotionally supported and helped by your family, friends, and significant others” and asked participants how socially connected they felt when thinking of watching the movie in the Context and Social Setting presented to them. We also asked participants how many friends others would guess they had, and how many friends would be willing to watch the movie with them. [Cronbach Alpha was 0.643 for streaming and 0.657 for cinema]

To measure Perceived Risk, we asked participants to think of the Context (cinema/streaming) and Social Setting (alone/with friends) presented, and rate the following statements: “*There is a lot to lose if I do not enjoy the movie*”; “*You are afraid of being disappointed by the movie*”; “*Watching the movie would be a waste of time*”; “*The effort I put to watch the movie may not pay off*”; “*Watching the movie is not worth the money*”. [Cronbach Alpha was 0.848 for streaming and 0.896 for cinema]

Finally, to measure Nostalgic Value, we provided participants with the same definition of nostalgia presented in the nostalgia manipulation: “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266). We then asked participants to rate the following statements according to their degree of nostalgia: “*Watching a new movie*”; “*Watching a new movie at the theatre*”, “*Going to the cinema*”, “*Watching a new film in a streaming platform*”, “*Netflix & Chill*”; “*Watching TV with a streaming service*” [Cronbach Alpha was 0.871 for streaming, and 0.774 for cinema].

## **Control Variables**

This study also accounted for five control variables: perceived hedonic benefits, other needs fulfilled by media, the influence of price on the decision to take part in an activity, the familiarity with cinema and streaming platforms, and the frequency with which respondents

watched movies at the cinema and through streaming. The range of all scales listed below was 1 (not at all) to 7 (extremely).

To measure perceived hedonic benefits, we used a scale adapted from Hinsch et al. 2020: “Please indicate the degree to which watching the movie would be fun”; “Please indicate the degree to which watching the movie would be entertaining” [Correlation was 0.857 for streaming and 0.879 for cinema].

To measure other needs fulfilled by media, we used a 12-item scale evaluating Affective needs (Tefertiller 2017): “*Allow you to have a good time*”; “*Be an emotional experience*”; “*Be visually exciting*” [Cronbach Alpha was 0.70 for streaming and 0.78 for cinema]; Cognitive needs (Tefertiller 2017): “*Allow you to experience something new*”; “*Allow you to learn about yourself*”; “*Be a thought-provoking experience*” [Cronbach Alpha was 0.813 for streaming and 0.833 for cinema]; and needs for Escapism and Relaxation (Camilleri & Falzon 2020): “*Allow you to break the routine*”; “*Allow you to occupy free time*”; “*Be a form of entertainment*” [Cronbach Alpha was 0.616 for streaming and 0.837 for cinema]. Participants answered the scale having in mind the scenario presented to them (cinema/streaming, alone/with friends).

To measure the influence of price on consumption decisions, we asked participants to which degree price influences their decision to take part in an activity.

Lastly, to measure familiarity and frequency, we asked participants their level of familiarity with movie theatres and with streaming, and how often they watched movies at the cinema and through streaming.

## **Procedure**

Participants were randomly assigned either to the *Nostalgia* or *Non-Nostalgia* condition, and to the *With Friends* or *Alone* condition. The Context manipulation was counterbalanced so that half of the participants were exposed to the Cinema Context first and the other half to the

Streaming Context first. Participants were sent the survey link through social media. (Appendix 1)

Before starting the questionnaire, participants were exposed to an introduction page that contextualized respondents about the research topics and allowed participants to provide their informed consent.

Participants were then told that the survey served two independent studies: the first was a life-events study and the second was about the consumer experience watching a movie at home and at the cinema. The purpose of this page was to replicate the nostalgia manipulation from Lasaleta & Vohs 2014. Next, the participants were exposed to the nostalgia manipulation and answered manipulation checks as in Lasaleta & Vohs. We then continued to follow Lasaleta & Vohs, measuring Perceived Social Connectedness using the same scale as in their study.

We continued, telling participants they would move on to the second study. We showed one of our scenarios (cinema/streaming; alone/with friends) depending on which condition they were assigned to.

We then measured perceived hedonic benefits and other needs fulfilled by media (control variables), followed by questions about respondent's Inspiration and Willingness to Pay (dependent variables). Next, we measured Perceived Risk (process variable), and the Intention to watch the movie (dependent variable). Finally, we measured Social Connectedness (process variable).

Participants were then informed we would move on to a different scenario and that they should disregard the previous one. At this point, we presented the same Social Setting (alone/with friends) with the remaining Context (cinema/streaming).

We then measured perceived hedonic benefits, other needs fulfilled by media, Inspiration, Willingness to Pay to watch the movie, Perceived Risk, Intention to watch the movie, and finally we measured Social Connectedness (process variable).

Lastly, we presented the remaining control variables: the influence of price on the decision to take part in an activity, familiarity, and frequency of use of cinemas and streaming platforms.

We then measured Nostalgic Value. At the end of the survey, we asked demographic questions and thanked respondents for participating.

## **Design**

We used a mixed design with repeated measures on the last factor: 2 (Nostalgia: Nostalgia vs No Nostalgia) x 2 (Social Setting: Together vs Alone) x 2 (Context: Cinema vs Streaming). The variables Nostalgia and Social Setting had a between-subjects design, and variable Context had a within-subjects design.

## **Data Analysis and Results**

The survey ran for two weeks, collecting 265 responses. After deleting blank submissions, we reached a total of 172 valid answers.

We started by assessing whether the respondents assigned to the Nostalgia condition felt more nostalgic than the control group. Indeed, the means for the treatment ( $M = 4.22$ ,  $SD = 1.89$ ) and control ( $M = 2.96$ ,  $SD = 1.70$ ) groups were significantly different, so we concluded that our Nostalgia manipulation was successful ( $t(169) = 4.455$ ,  $p < .001$ ).

Next, we tested whether the order in which the two Contexts (Cinema vs Streaming) were presented significantly influenced the responses. We conducted a series of t-tests, with our dependent variables, process measures, and controls as the test variables, and Context Order as the grouping variable. We concluded that the means were not significantly different for any of the tested variables (the lowest p-value was .153, reported for Willingness to Pay in the Streaming Context) (Please refer to Appendix 2 for this analysis). Thus, we considered that the within-subjects design, chosen for the variable Context, did not skew our results.

## Effects of Nostalgia and Social Setting

We conducted a 2 (Nostalgic vs non-Nostalgic) x 2 (Alone vs Together) x 2 (Cinema vs Streaming) analysis of variance (ANOVA) with repeated measures on the last factor. Nostalgia and Social Setting were the between-subjects factors, and the Context (Cinema vs Streaming) was the within-subjects factor. Using Inspiration as the dependent variable we found a main effect of Nostalgia ( $F(3, 144) = 6.49; p = .012$ ), indicating that Inspiration is significantly higher in respondents primed to feel nostalgic. This finding is consistent with our hypothesis 1, which predicted that Nostalgia increased Inspiration in both contexts. Additionally, we also verified that Inspiration to watch the movie in theatres ( $M = 4.522; SD = 1.44$ ) was significantly higher than through streaming ( $M = 4.217; SD = 1.253$ ) ( $F(3, 144) = 6.226; p = .014$ ), though the remaining main effects were not significant.

To further explore the effect of Nostalgia on Inspiration, we conducted two 2 (Nostalgic vs non-Nostalgic) x 2 (Together vs Alone) analyses of variance (ANOVA), one for each context. Contrary to what we predicted in hypothesis 3, Nostalgia was only statistically significant for the Streaming Context ( $F(2, 145) = 7.565; p = .007$ ) and not for the Cinema Context ( $F(2, 145) = 2.497; p = .116$ ). Thus, we find that Nostalgia increases Inspiration (*Nostalgia*:  $M = 4.48; SD = 1.17$ ; *No Nostalgia*:  $M = 3.97; SD = 1.27$ ) more in the Streaming Context than in the Cinema Context (*Nostalgia*:  $M = 4.68; SD = 1.49$ ; *No Nostalgia*:  $M = 4.35; SD = 1.37$ ).

In opposition, Social Setting had a significant and positive effect in the Cinema Context ( $F(2, 145) = 6.581; p = .011$ ) but was irrelevant for the Streaming Context ( $F(2, 145) = 1.714; p = .193$ ). As proposed in H6, watching the movie with friends had a stronger effect on Inspiration in the Cinema Context than in the Streaming Context. In the Cinema Context, watching the movie with friends increased Inspiration ( $M = 4.80; SD = 1.25$ ) compared to watching the movie alone ( $M = 4.20; SD = 1.55$ ). In the Streaming Context, there were no significant differences between treatment ( $M = 4.07; SD = 1.25$ ) and control ( $M = 4.33; SD = 1.17$ ).

We also predicted a significant interaction between Nostalgia and Social Setting in the Cinema Context (H7). Though we observed an interaction effect, it was not for the context we expected. Nostalgia and Social Setting interact, although marginally, in the Streaming Context ( $F(2, 145) = 2.929; p = .089$ ) but not in the Cinema Context ( $F(2, 145) = 0.598; p = 0.44$ ). For the

Streaming Context, when primed to feel nostalgic, watching the movie alone increased Inspiration ( $M = 4.78$ ;  $SD = 1.03$ ) compared to watching it with friends ( $M = 4.17$ ;  $SD = 1.26$ ) ( $t(83) = 2.765$ ;  $p = .007$ ). In the control group (no-nostalgia condition), there were no significant effects of Social Setting ( $t(87) = 1.882$ ;  $p = .061$ ).

Next, we repeated the previous analysis, first with Willingness to Pay as the dependent variable, and second with Intention as the dependent variable.

First, we verified that Willingness to Pay was significantly higher in the Cinema Context ( $M = 8.11$ ;  $SD = 3.93$ ), compared to the Streaming Context ( $M = 4.77$ ;  $SD = 3.77$ ) ( $t(1, 141) = 10.82$ ;  $p < .001$ ). Then, we ran two analyses of variance (ANOVA), one for each context, and found that Nostalgia increases Willingness to Pay in both contexts, though having a more powerful impact in the Streaming Context ( $F(1, 142) = 7.836$ ;  $p = .006$ ) compared to the Cinema Context ( $F(1, 142) = 3.504$ ;  $p = .063$ ). Thus, priming for Nostalgia increased Willingness to Pay in the Streaming Context ( $M = 5.56\text{€}$ ;  $SD = 4.26$ ) and in the Cinema Context ( $M = 8.70\text{€}$ ;  $SD = 4.50$ ), compared to the control group (*Streaming*:  $M = 3.85\text{€}$ ;  $SD = 2.93$ ; *Cinema*:  $M = 7.53\text{€}$ ;  $SD = 3.10$ ).

Aligned with our results for Inspiration, watching the movie with friends significantly increased Willingness to Pay in the Cinema Context ( $M = 8.87\text{€}$ ;  $SD = 3.64$ ), compared to watching the movie alone ( $M = 7.31\text{€}$ ;  $SD = 4.508$ ) ( $F(1, 142) = 6.621$ ;  $p = .011$ ). In the Streaming Context, the effects were not significant ( $F(1, 142) = 1.898$ ;  $p = .170$ ). The interaction term between Nostalgia and Social Setting was also not significant in either context (*Cinema*:  $F(1, 142) = 0.766$ ;  $p = .383$ ; *Streaming*:  $F(1, 142) = 0.780$ ;  $p = .379$ ).

Next, we analysed the impact of our independent variables on Intention, repeating the previous tests, with Intention as the dependent variable. First, we found that the Intention to watch the movie through streaming and at the cinema were not significantly different ( $-0.0226$ ;  $t(146) = -1.28$ ;  $p = 0.20$ ). Next, we ran the same two analysis of variance (ANOVA) as before, with Intention as the dependent variable. We found a significant effect of Social Setting (*together*) on the Intention to watch the movie at the cinema ( $M = 4.92$ ;  $SD = 1.65$ ) compared to the control group ( $M = 4.33$ ;  $SD = 1.69$ ) ( $F(1, 146) = 4.504$ ;  $p = .036$ ). All other effects were non-significant (Appendix 3)

Analysing our main effects, we found support for our predictions on the effect of Social Setting. As expected, watching the movie with friends increased Inspiration, as well as Intention and Willingness to Pay, in the Cinema Context, while having no effect for streaming. However, our results were not consistent with predictions regarding the effect of Nostalgia. We had hypothesised that Nostalgia would have a stronger effect on Inspiration for the Cinema Context, compared to the Streaming Context, and had proposed Perceived Risk and Nostalgic Value as possible mediators of this relationship. Our results showed the opposite main effect of Nostalgia. In the Streaming Context, we found that participants primed to feel Nostalgic were more inspired to watch the movie than those in the control group. The same was not true for the Cinema Context, for which we observed no significant effects of Nostalgia on Inspiration and Intention.

The explanation behind our results could lay on our process measures. One explanation might be that Nostalgic Value had the opposite influence than that proposed on our hypotheses. We had also suggested that Nostalgia would have a stronger influence in the Cinema Context because cinema was inherently more nostalgic (H5). However, it could be that manipulating Nostalgia is more effective for lower baseline levels of Nostalgic Value. That is, inducing the feeling of nostalgia may increase Nostalgic Value more for contexts that are not typically associated with the past, while having a mitigated effect when Nostalgic Value is already high. Thus, since movie theatres have a more nostalgic nature compared to streaming platforms, our manipulation could have been redundant in this context.

Further, we had also proposed that there would be a significant interaction effect between Social Setting and Nostalgia in the Cinema Context. Supported on previous studies, our prediction relied on the supposition that Nostalgia would increase Perceived Social Connectedness. Therefore, a failure of this relationship could explain our results.

We will discuss these hypotheses next, by exploring mediation effects of Nostalgic Value, Perceived Risk, and Perceived Social Connectedness.

## Process Measures

### The role of Nostalgic Value

To start, we assessed the role of Nostalgia Value as a mediator of the relationship between Nostalgia and Inspiration.

First, as predicted in hypothesis 4, we found that the Nostalgic Value of cinema ( $M = 3.739$ ;  $SD = 1.507$ ) was significantly higher ( $t(139) = 8.382$ ;  $p < .001$ ) than that of streaming ( $M = 2.659$ ;  $SD = 1.436$ ). With an exploratory goal, we also found that, compared to the Nostalgic Value of watching a movie in general ( $M = 3.04$ ;  $SD = 1.67$ ), watching the movie at the cinema has more ( $M_{\text{difference}}: 1.08$ ;  $t(142) = 6.20$ ;  $p < .001$ ) and watching it through streaming has less ( $M_{\text{difference}}: -0.40$ ;  $t(142) = -3.18$   $p = .002$ ) Nostalgic Value.

Next, we regressed Nostalgic Value on Inspiration and found a significant effect for both contexts. In the Cinema Context, Nostalgic Value significantly increased Inspiration ( $B = 0.221$ ;  $t(143) = 2.875$ ;  $p = .005$ ), and the same was true for the Streaming Context ( $B = 0.4717$ ;  $t(140) = 3.322$ ;  $p = .001$ ).

Following these results, we conducted two analyses of variance (ANOVA), one for each context. We found that, compared to the control group ( $M = 2.373$ ;  $SD = 1.239$ ), respondents primed to feel Nostalgic ( $M = 2.922$ ;  $SD = 1.559$ ) significantly attribute more Nostalgic Value to streaming ( $F(1, 139) = 5.261$ ;  $p = .023$ ). In the Cinema Context, there were no significant differences between the control group ( $M = 3.559$ ;  $SD = 1.5188$ ) and the treatment group ( $M = 3.904$ ;  $SD = 1.487$ ) ( $F(1, 139) = 1.835$ ;  $p = .178$ ), supporting our previous argument that manipulating Nostalgia was redundant in this context.

We continued our analysis by running a mediation model of the Nostalgia-Inspiration relationship for the Streaming Context, using Nostalgic Value as the mediator variable. Contrary to our prediction in hypothesis 5, there are no mediation effects for the Cinema Context since we found that Nostalgia does not significantly increase Nostalgic Value in this context ( $F(1, 139) = 1.835$ ;  $p = .178$ ). For the Streaming Context, we find a significant mediation, as the bootstrapping confidence interval did not include zero ( $B = 0.111$ ; 95% CI =

[0.009; 0.263]). This mediation is only partial as Nostalgia remains significant when Nostalgic Value is included in the model ( $B = 0.4717$ ;  $t(138) = 2.3279$ ;  $p = .0214$ ). Our mediation hypothesis is thus validated for streaming. Please refer to Appendix 4 for further analysis.

We had speculated that the non-effect of Nostalgia on Inspiration in the Cinema Context could have been due to higher baseline levels of Nostalgic Value in this context. Our results seem to suggest that this is indeed the case, as we have shown that Nostalgia increases Nostalgic Value attributed to streaming but has no significant effect on Nostalgic Value attributed to cinema. Moreover, our regression also showed that Nostalgic Value significantly increases Inspiration.

The unequal impact of our nostalgia manipulation on Nostalgic Value can explain the fact that Nostalgia was only significant for the Streaming Context and not for cinema. According to previous literature, Nostalgia allows consumers to recall positive experiences associated with the stimulus, which foster inspiration to act a behaviour (Hinsch, et al., 2020). Since movie theatres are, on average, perceived to be more nostalgic than streaming, consumers recall more positive memories associated to cinema than to streaming. These memories are invoked even in the absence of our Nostalgia manipulation (control group), leading to a higher Inspiration for the Cinema Context ( $M = 4.68$ ;  $SD = 1.37$ ) compared to the Streaming Context ( $M = 4.21$ ;  $SD = 1.25$ ). When we induce the feeling of Nostalgia, consumers were able to more easily recall positive past experiences associated with streaming, increasing Inspiration in this context (*Control*:  $M = 3.92$ ,  $SD = 1.27$ ; *Treatment*:  $M = 4.48$ ,  $SD = 1.17$ ). Since positive memories related to cinema were already very much present in the minds of consumers even without inducing Nostalgia, our manipulation was somewhat redundant in this context (*Control*:  $M = 4.34$ ,  $SD = 1.37$ ; *Treatment*:  $M = 4.68$ ,  $SD = 1.49$ ). Thus, Nostalgia had a much larger impact on Inspiration for the Streaming Context than for the Cinema Context.

Even though our findings support previous literature, in the sense that we do find a relationship between Nostalgia and Inspiration, our results may indicate a limited role of Nostalgia. Future research could explore the impact of Nostalgia on Inspiration for products that are inherently nostalgic versus for those that are not. We may see products not typically associated with Nostalgia benefiting the most from campaigns that prime consumers with this feeling.

## The role of Perceived Risk

Next, we analysed Perceived Risk as a mediator of the relationship between Nostalgia and Inspiration. First, we ran two analyses of variance (ANOVA), one for each context, with Perceived Risk as the dependent variable and Nostalgia as the fixed factor. We found a significant positive effect of Nostalgia on Perceived Risk for the Streaming Context ( $F(1, 146) = 5.886; p = .016$ ) and for the Cinema Context ( $F(1, 146) = 4.741; p = .031$ ). In the Streaming Context, Nostalgia increases Perceived Risk ( $M = 3.27; SD = 1.34$ ) compared to the control group ( $M = 2.77; SD = 1.14$ ). Similarly, in the Cinema Context, Nostalgia also increases Perceived Risk ( $M = 3.84; SD = 1.59$ ) compared to the control group ( $M = 3.33; SD = 1.19$ ).

We then ran two mediation models, one for each context, of the relationship between Nostalgia and Inspiration, with Perceived Risk as the mediator variable. We observed no mediation effects in either context, since the bootstrapping confidence interval included zero for the Streaming Context ( $-0.001; 95\% CI = [-0.115; 0.1013]$ ), and for the Cinema Context ( $-0.039; 95\% CI = [-0.173; 0.064]$ ). Thus, our findings are contrary to our predictions in H2.

Furthermore, contrary to existing literature, we found that Nostalgia increased Perceived Risk in both the Streaming Context ( $F(1, 146) = 5.886; p = .016$ ) and the Cinema Context ( $F(1, 146) = 4.741; p = .031$ ). A broader meaning of risk compared to previous studies could explain this diversion from literature. While previous papers examined the effect of Nostalgia on financial risk perception, our risk measure included financial and emotional risk, possibly leading to different results.

The effect of Nostalgia on emotional risk may be different from its effect on financial risk. Nostalgia can foster an idealization of the past, leading to high expectations and unfair comparisons with present experiences. Thus, in that case, Nostalgia would increase the risk of disappointment, which is what we were effectively measuring in our study. When conducting the same analysis of variance (ANOVA), excluding emotional risk from our measure (using our last scale item only), we found no effect of Nostalgia on Risk Perception for the Streaming Context ( $F(1, 146) = 0.347; p = .557$ ), or for the Cinema Context ( $F(1, 146) = 1.173; p = .281$ ). Inversely, when excluding financial risk (using the first 4 scale items only, Cronbach Alpha was 0.882 for cinema and 0.842 for streaming), we found that Nostalgia significantly increases

emotional risk in the Streaming Context ( $F(1, 146) = 7.705; p = .006$ ) and in the Cinema Context ( $F(1, 146) = 5.465; p = .021$ ).

Thus, we find evidence supporting our argument that a more extensive definition of Perceived Risk could explain our findings. In the matter of Perceived Risk, we find that Nostalgia has no effect on Financial Risk, while having a negative effect on Emotional Risk.

We ran two mediation models, one for each context, for the relationship between Nostalgia and Inspiration, using emotional risk as the mediator variable. We found no mediation effects, since, when analysing the indirect effects, the bootstrapping confidence interval included zero for streaming ( $B = 0.004; 95\% \text{ CI} = [-0.1212; 0.1319]$ ) and for cinema ( $B = -0.0321; 95\% \text{ CI} = [-0.1617; 0.0824]$ ). Since Nostalgia did not increase financial risk, this variable also does not mediate the Nostalgia-Inspiration relationship. Thus, neither measure of risk had a significant effect on Inspiration to watch the movie in the Cinema Context or in the Streaming Context.

### **The role of Perceived Social Connectedness**

Finally, our H8 proposed that the relationship between the interaction (Nostalgia \* Social Setting) and Inspiration was mediated by Perceived Social Connectedness. To test H8 we first assessed whether Nostalgia increased Social Connectedness. We ran three t-tests, with our three Social Connectedness measures as the test variables, and Nostalgia as the grouping variable. The three measures of Social Connectedness were the first measure after the Nostalgia manipulation, and the two Social Connectedness scales measured after each context was presented. We found no effect of Nostalgia on Perceived Social Connectedness neither for the first measure ( $t(159) = 0.199; p = .842$ ), nor for the measures that followed the Cinema Context ( $t(142) = 1.167; p = .245$ ) and the Streaming Context ( $t(147) = 0.268; p = .789$ ). Please refer to Appendix 5 for further analysis.

The absence of a relationship between Perceived Social Connectedness and Nostalgia disproves our H8 and sheds light on our findings regarding the interaction effect between Nostalgia and Social Setting. Our H7 relied on the assumption that Nostalgia would foster Perceived Social Connectedness, providing a buffer for the threat triggered by consuming alone in the Cinema

Context. Without this relationship, we simply expect respondents to be more inspired to watch the movie in theatres when able to share the experience with friends and would not foresee any impact of Nostalgia apart from its independent effect predicted in H1.

Lastly, we tested our process measures as mediators of the relationships between Nostalgia and Willingness to Pay, and between Social Setting and Intention.

First, we found that none of our three process measures – Perceived Social Connectedness, Nostalgic Value, and Perceived Risk – mediate the relationship between Nostalgia and Willingness to Pay (Appendix 6). The fact that Nostalgic Value mediated the relationship between Nostalgia and Inspiration, but not the relationship between Nostalgia and Willingness to Pay, suggests that while the effect of Nostalgia on Willingness to Pay is likely direct, its impact on Inspiration depends on whether the respondent was able to create meaningful connections with the stimuli.

Second, we found a significant mediation effect of Perceived Social Connectedness for the relationship between Social Setting and Intention, in the Cinema Context. To start, we ran an analysis of variance (ANOVA) and found that, compared to the control group ( $M = 3.31$ ;  $SD = 1.69$ ), watching the movie together with friends significantly increases Perceived Social Connectedness ( $M = 4.88$ ;  $SD = 1.34$ ) for the Cinema Context ( $F(1, 140) = 37.18$ ;  $p < .001$ ). Next, we ran a mediation model of the relationship between Social Setting and Intention, with Perceived Social Connectedness as the mediator. We found evidence of full mediation since the bootstrapping confidence interval did not cross zero ( $0.5367$ ; 95% CI =  $[0.2233; 0.9323]$ ), and Social Setting lost significance when Social Connectedness was included in the model ( $0.028$ ;  $t(147) = 0.097$ ;  $p = .923$ ). For the Cinema Context, we found no mediation effects of Nostalgic Value or Perceived Risk since Social Setting did not have a significant effect on these variables (*Nostalgic Value*:  $F(1, 140) = 0.383$ ;  $p = .537$ ; *Perceived Risk*:  $F(1, 140) = 0.343$ ;  $p = .559$ ). Please refer to Appendix 7 and Appendix 8 for further analysis.

## Exploratory Analysis

With an exploratory goal, we also tested mediation effects of Inspiration on the relationships between Nostalgia and Intention, and between Social Setting and Intention. Previous literature describes Inspiration as a motivator of action, leading to behaviour change. Since our variable Intention is a measure of reported future behaviour, we thought it could be interesting to evaluate the relationship between Inspiration and this variable.

We started by running a mediation analysis of the relationship between Nostalgia and Intention. For the Cinema Context, there were no mediation effects since Nostalgia did not have a significant effect on Intention ( $F(1, 146) = 0.148; p = .701$ ). In the Streaming Context, Nostalgia marginally increases Intention ( $F(1, 147) = 1.951; p = .165$ ), and loses significance when Inspiration is included in the model ( $t(146) = 0.285; p = .776$ ). Additionally, when analysing the indirect effects, the bootstrapping confidence interval did not include zero ( $B = 0.2849; 95\% CI = [0.0915; 0.4938]$ ).

Next, we ran a mediation model of the relationship between Social Setting and Intention. For the Streaming Context, there were no mediation effects since Social Setting did not have a significant effect on Intention ( $F(1, 147) = 1.666; p = .199$ ). In the Cinema Context, we found positive and significant mediation effects. First, in the Cinema Context, watching the movie with friends significantly increases Intention ( $F(1, 147) = 4.504; p = .036$ ). Further, Social Setting lost significance when Inspiration was included in the model ( $t(146) = 1.040; p = .299$ ), and the bootstrapping confidence interval did not include zero ( $B = 0.348; 95\% CI = [0.641; 0.6697]$ ).

Thus, our tests show a significant relationship between Inspiration and Intention, in accordance with previous literature. In the Streaming Context, Nostalgia increases Inspiration ( $F(2, 145) = 7.565; p = .007$ ), which drives Intention. In the Cinema Context, it is Social Setting that increases Inspiration ( $F(2, 145) = 6.581; p = .011$ ), leading to increased Intention.

We continue our analysis, assessing the role of the needs fulfilled by media as mediators of the relationships found so far.

We collected data on three needs fulfilled by media – Affective needs, Cognitive needs, and Escapism needs. For both Contexts, each need was tested as a mediator of the relationship between Nostalgia and Inspiration, and of the relationship between Social Setting and Inspiration.

Starting with the relationship between Nostalgia and Inspiration, we found a significant mediation effect of Cognitive needs in the Streaming Context. We verified that Nostalgia increased Cognitive needs ( $t(144) = 2.257; p = .0255$ ) and loses significance ( $B = 0.158; t(144) = 0.693; p = .489$ ) when Cognitive needs are included in the model. Further, when analysing the indirect effects, the bootstrapping confidence interval did not include 0 ( $B = 0.184; 95\% CI = [0.086; 0.3651]$ ). Thus, we find evidence of significant mediation effects. In the Streaming Context, Nostalgia increased Cognitive needs, in turn increasing Inspiration.

Nostalgia does not significantly increase Affective needs ( $0.235; t(144) = 1.274; p = .205$ ) or Escapism needs ( $0.215; t(144) = 1.192; p = .203$ ) in the Streaming Context. In the Cinema Context, since Nostalgia did not have a significant effect on any of the needs fulfilled by movie theatres, we found no mediation effects (Appendix 9).

Moving on to the relationship between Social Setting and Inspiration, in the Cinema Context, all three needs are mediators. Watching the movie with friends increased Affective needs ( $B = 1.00; t(149) = 4.873; p < .001$ ) and Escapism needs ( $B = 0.537; t(149) = 2.733; p = .007$ ), while decreasing Cognitive needs ( $B = -1.24; t(149) = -5.464; p < .001$ ). In turn, Affective needs significantly increased Inspiration ( $B = 0.6105; 95\% CI = [0.3290; 0.9369]$ ), as did Escapism needs ( $B = 0.3372; 95\% CI = [0.0961; 0.6264]$ ). Conversely, Cognitive needs decreased Inspiration ( $B = -0.662; 95\% CI = [-0.9986; -0.3888]$ ). Please refer to Appendix 9 for further analysis.

Next, we tested perceived needs as mediators of the relationship between Nostalgia and Willingness to Pay. Nostalgia increased Willingness to Pay both in the Streaming and in the Cinema Contexts. Previously, we found that neither Perceived Risk nor Nostalgic Value mediated this relationship. The same held true as we tested needs as mediators. In the Cinema Context, there was no mediation since we found that Nostalgia does not have a significant effect on the needs. In the Streaming Context, Nostalgia significantly increased Cognitive needs ( $t$

(144) = 2.257;  $p = .0255$ ). However, there were no mediation effects since the bootstrapping confidence interval crossed 0 ( $B = 0.017$ ; 95% CI = [-0.2723; 0.2709]).

We had also found that watching the movie with others increased Willingness to Pay. For the Cinema Context, this relationship is mediated by Affective needs and Escapism needs. As previously explained, the *Together* Social Setting increased perceptions of Affective needs ( $B = 1.00$ ;  $t(149) = 4.873$ ;  $p < .001$ ) and Escapism needs ( $B = 0.537$ ;  $t(149) = 2.733$ ;  $p = .007$ ) fulfilled by movie theatres. Here, we also find that this leads to an increased Willingness to Pay in the Cinema Context, as the bootstrapping intervals did not include 0 for Affective needs ( $B = 0.536$ ; 95% CI = [0.0267; 1.1575]) or Escapism needs ( $B = 0.3285$ ; 95% CI = [0.0028; 0.8218]). For the Streaming Context, we had found a weaker relationship between Social Setting and Willingness to Pay, and here we find no mediation effects (Appendix 9).

Lastly, we tested the needs as mediators of the relationship between Inspiration and Intention and found no mediation effects in either context (Appendix 9).

## **Discussion**

Our analysis suggests that both Nostalgia and Social Setting significantly impact Inspiration, Intention, and Willingness to Pay. Nostalgia increases Inspiration and Willingness to Pay in both the Streaming Context and the Cinema Context, though the effects are stronger for streaming. Social Setting has an impact in the Cinema Context only. In this context, watching the movie with friends increased Inspiration, Intention, and Willingness to Pay.

We also found that Nostalgic Value and the needs fulfilled by media are mediators of some of these relationships. Nostalgic Value mediates the relationship between Nostalgia and both Inspiration and Intention, in the Streaming Context. Inducing the feeling of Nostalgia increased the associations between streaming and positive memories evoked by respondents, leading to an increase in both Inspiration and Intention to watch the movie.

Cognitive needs mediate the relationship between Nostalgia and Inspiration in the Streaming Context, and between Social Setting and Inspiration in the Cinema Context. Nostalgia increases the perception that Cognitive needs are fulfilled by streaming, which in turn increases Inspiration. On the contrary, watching the movie with friends decreases Cognitive needs fulfilled by movie theatres, thus increasing Inspiration. Affective needs and Escapism needs are also mediators of the relationship between Social Setting and Inspiration and between Social Setting and Willingness to Pay, in the Cinema Context. Watching the movie together with friends increases Affective and Escapism needs, increasing Inspiration and Willingness to Pay.

Even though Perceived Risk was not a mediator for any of the relationships found, it had a significant impact on Intention. In the Cinema Context, an increase in Perceived Risk decreased Intention to watch the movie. This variable had no influence on the Streaming Context, and no effect on Inspiration to watch the movie in theatres.

Finally, we found that Inspiration is a mediator of the relationships between our independent variables – Nostalgia and Social Setting – and Intention. Nostalgia leads to an increase in Inspiration to watch the movie through streaming, which increases Intention. In the Cinema Context, watching the movie with friends increases Inspiration, leading to increased Intention to watch the movie. We found no mediators of the Inspiration-Intention relationship.

In sum, for the Cinema Context, we found that watching the movie with others, versus alone, increases Affective and Escapism needs and decreases the Cognitive needs. Together, this increases Inspiration and Intention to watch the movie in cinemas.

For the Streaming Context, we found that Nostalgia increases the Nostalgic Value of streaming and the perception that Cognitive needs are fulfilled in this context. As a result, this increases Inspiration and Intention of watching the movie through streaming.

The absence of an impact of Nostalgia on Inspiration in the Cinema Context may be explained by the already high Nostalgic Value in this context, making our Nostalgia manipulation redundant. We found that Nostalgic Value significantly increases Inspiration in both contexts, and that inducing the feeling of Nostalgia increases Nostalgic Value only when it is initially relatively low. Thus, it would be of interest to test whether this process also holds for even

lower baseline levels of Nostalgic Value. In our second study, we will continue our analysis of the impact of Nostalgia on Nostalgic Value.

## **Study 2:**

### **Methodology**

#### **Participants**

This study recruited 66 participants on a volunteer basis. The participants were mainly recruited through social media and were asked to complete an online survey developed with Qualtrics.

The sample was gender balanced, with 43.1% male respondents and 42.2% female respondents (7.7% of the respondents preferred not to disclose gender). The mean age was 30.91 years old ( $SD = 12.39$ ), and the average yearly gross household income was 44,780€ ( $SD = 25.93$ ).

#### **Materials**

This study uses the same materials as study 1 with the following differences:

First, we use only two independent variables – Nostalgia (between-subjects design) and Product (within-subjects design). For the Nostalgia manipulation, we used the same materials as in Study 1. To manipulate Product, we used similar materials to those used to manipulate Context in Study 1. We presented participants with two different scenario descriptions: participants were asked to imagine they had discovered a new movie (group 1) / a new series (group 2) that appealed to them, only available through a streaming platform.

Second, we considered only one process measure – Nostalgic Value –, and used the same measures from study 1, adapted to the scenarios presented in this study. The question description was the same and the scale items were: “*Watching a new movie*”, “*Watching a new movie through streaming*”, “*Watching a new series*”, “*Watching a new series in a streaming platform*”.

Lastly, we also adapted our frequency and familiarity measures to reflect the new scenario.

All Cronbach Alphas were above the generally recommended level of .70 (Appendix 11)

## **Procedure**

We also followed the same procedure as Study 1. We randomly assigned participants to either the Nostalgia or Non-Nostalgia condition and counterbalanced the Product manipulation so that half the participants were exposed to Films first and the other half to Series first. Participants were also sent the survey link through social media (Appendix 10).

The questions were shown in the same order as in Survey 1. We started by presenting the consent page, followed by our Nostalgia manipulation adapted from Lasaleta & Vohs. Next, we presented the two scenarios, counterbalancing the order. Finally, we presented the process measure (Nostalgic Value), our control variables, and, lastly, the demographic questions.

## **Design**

This study uses a mixed design with repeated measures on the second factor: 2 (Nostalgia: Nostalgia vs No Nostalgia) x 2 (Product: Movies vs Series).

## Data Analysis and Results

The survey ran for one week, collecting 66 responses, 65 of which were valid submissions.

First, we assessed whether the respondents assigned to the Nostalgia condition felt more nostalgic than the control group. We conducted a t-test, with Nostalgia as the grouping variable, and verified that the means for the treatment ( $M = 4.38$ ,  $SD = 1.50$ ) and control ( $M = 3.37$ ,  $SD = 1.80$ ) groups were significantly different, concluding that our Nostalgia manipulation was successful ( $t(63) = 2.415$ ,  $p = .017$ ).

Next, we conducted a series of t-tests with our dependent and control variables as the test variables and Product Order as the grouping variable. These tests allowed us to assess whether the order in which we presented the two Products (Series vs Films) significantly influenced the responses. We concluded that this was the case for Willingness to Pay (*Series*:  $t(63) = 1.80$ ;  $p = .038$ ; *Movies*:  $t(63) = 1.80$ ;  $p = .038$ ), and for Affective needs fulfilled by watching a series ( $t(63) = 1.80$ ;  $p = .038$ ). All other variables were not significantly impacted by our study design (Appendix 12).

After evaluating our manipulation checks, we assessed the main effects of Nostalgia on Inspiration, Intention, and WTP. We conducted three analyses of variance (ANOVA), with Nostalgia as the between-subjects factor and Product (series vs movies) as the within-subjects factor. The dependent variables were Intention, Inspiration, and Willingness to Pay.

We verified that the Willingness to Pay was significantly higher ( $F(1, 63) = 5.869$ ;  $p = .018$ ) for series ( $M = 5.75$ ;  $SD = 3.61$ ) than for movies ( $M = 4.94$ ;  $SD = 3.59$ ). The same was true for Intention (*Series*:  $M = 4.88$ ;  $SD = 1.24$ ; *Movies*:  $M = 4.65$ ,  $SD = 1.37$ ;  $F(1, 63) = 3.252$ ;  $p = .076$ ). For Inspiration, we found no significant differences ( $F(1, 63) = 1.368$ ;  $p = .246$ ) between series ( $M = 4.58$ ;  $SD = 1.14$ ) and movies ( $M = 4.49$ ;  $SD = 1.22$ ).

We also found no significant differences of the effect of Nostalgia between series and movies for Intention ( $F(1, 63) = 0.52$ ;  $p = .473$ ), for Inspiration ( $F(1, 63) = 0.06$ ;  $p = .81$ ), or for Willingness to Pay ( $F(1, 63) = 1.41$ ;  $p = .24$ ). The main effect of Nostalgia was not significant either for any of the variables: Intention ( $F(1, 63) = 2.245$ ;  $p = .139$ ), Inspiration ( $F(1, 63) =$

0.06;  $p = .81$ ), or Willingness to Pay ( $F(1, 63) = 0.917$ ;  $p = .342$ ). Thus, the data shows a clear tendency for a positive impact of Nostalgia on Intention, though, probably due to the reduced sample size ( $N_{non\ nostalgia} = 35$ ;  $N_{nostalgia} = 30$ ), this effect is non-significant.

To further explore the effect of Nostalgia on our dependent variables, we conducted a series of t-tests, with Nostalgia as the grouping variable. We found that Nostalgia significantly increases ( $t(60) = 1.81$ ;  $p = .075$ ) the Intention to watch a series ( $M = 5.17$ ;  $SD = 0.99$ ) compared to the control group ( $M = 4.63$ ;  $SD = 1.39$ ). All other effects were not significant (Appendix 13).

The fact that manipulating Nostalgia significantly increased the Intention to watch a series but not a movie, may indicate that our manipulation has stronger effects than originally thought. To test this theory, we analysed the role of Nostalgic Value as a predictor of Intention. First, we verified that movies ( $M = 3.60$ ;  $SD = 1.36$ ) are significantly ( $M_{difference} = 0.4609$ ;  $t(63) = 4.034$ ;  $p < .001$ ) perceived as more nostalgic than series ( $M = 3.14$ ;  $SD = 1.33$ ). Then, we regressed Nostalgic Value on Intention for both products and found that it significantly increases Intention to watch a movie through streaming ( $B = 0.428$ ;  $t(63) = 3.68$ ;  $p < .001$ ). However, we find that this effect was not significant for series ( $B = 0.091$ ;  $t(63) = 0.76$ ;  $p = .45$ ). (Please refer to Appendix 14)

So far, in our first study, we found that manipulating Nostalgia was effective for the Streaming Context but not for the Cinema Context. Finding this result, we had speculated that this was due to the higher Nostalgic Value of cinema, compared to streaming, making our manipulation redundant. In our second study, we find somewhat contradictory results. Nostalgia significantly increased Intention to watch a series, but not a movie. And this was not due to Nostalgic Value since this variable had no effect on the Intention to watch a series. Therefore, in both studies, we find that Nostalgia plays a more important role for the product or context with the least Nostalgic Value.

One explanation might be that series are so non-nostalgic that, even when manipulating Nostalgia, participants were not able to recall nostalgic past experiences. Should this be the case, manipulating Nostalgia could have been more effective than initially thought, increasing Intention through other processes, other than Nostalgic Value. To test this theory, we conducted a t-test specifying Nostalgic Value of series as the testing variable and Nostalgia as grouping

variable. We concluded that, indeed, manipulating Nostalgia did not significantly impact Nostalgic Value ( $M_{\text{difference}} = 0.02$ ;  $t(63) = 0.05$ ;  $p = .958$ ).

Thus, we continued our analysis by assessing the effect of Nostalgia on Needs, with the goal of assessing whether these could be the alternative process through which Nostalgia increases the Intention to watch a series. We conducted a series of analyses of variance (ANOVA) with Nostalgia as the fixed factor and the Needs as the dependent variables and found that Nostalgia significantly ( $F(1, 65) = 3.62$ ;  $p = .062$ ) increases Affective needs ( $M = 5.23$ ;  $SD = 1.01$ ), compared to the control group ( $M = 4.71$ ;  $SD = 1.17$ ). All other effects were not significant (Appendix 15).

We then ran a mediation model of the relationship between Nostalgia and Intention to watch a series, with Affective needs as the mediator variable and found significant mediation ( $B = 0.330$ ; 95% CI = [0.0019; 0.7613]). Thus, Affective needs might be a process through which Nostalgia increases Intention to watch a series. Nevertheless, since our study design significantly influenced participants' ratings of Affective needs, we would need further research to arrive at a more conclusive result.

We have focused our analysis, so far, on Intention since we found no significant effects of Nostalgia on Inspiration or Willingness to pay. It is important to note, however, that we might see a more important role of Nostalgic Value in fostering Inspiration, since previous literature highlights the importance of meaningful associations. In fact, regressing Nostalgic Value on Inspiration for both products, we find significant effects for movies ( $M_{\text{difference}} = 0.366$ ;  $t(63) = 3.49$ ;  $p < .001$ ) and marginally significant effects for series ( $M_{\text{difference}} = 0.182$ ;  $t(63) = 1.63$ ;  $p = .102$ ). Therefore, the fact that Nostalgia does not significantly increase Nostalgic Value may explain the lack of significant effects of Nostalgia on the Inspiration to watch a series.

Therefore, our results seem to suggest that manipulating Nostalgia has similar results for movies and series, though the effects are mediated by different processes. For products with some associations with the past, manipulating Nostalgia increases Nostalgic Value, in turn increasing Inspiration, Intention, and Willingness to Pay. For products with very little associations with the past – such as a series – Nostalgia does not increase Nostalgic Value, and thus, it does not influence Inspiration. Instead, our Nostalgia manipulation directly increased Intention.

## Theoretical and Managerial Implications

This thesis contributes to literature on the impact of Nostalgia and Social Setting on Inspiration and increments on existing knowledge on the movie and media industries. Our results support previous literature, finding further evidence of the role of Nostalgia in driving Inspiration. We also add value by finding that this role may be limited and dependent on the strength of natural connections to the past. On one hand, inducing Nostalgia may become redundant for products and services strongly associated with the past, such as movie theatres. On the other hand, manipulating Nostalgia may also become ineffective for products with too little Nostalgic Value. These would be products that are perceived as so innovative that consumers were not able to recall nostalgic past experiences associated with the product, even when we manipulated Nostalgia. Thus, Nostalgia seems particularly useful in increasing Inspiration for innovative products with some associations with the past, such as watching a movie through a streaming platform.

Further, we build on existing knowledge regarding the needs fulfilled by media. Congruently with previous studies, we find that cinema fulfils Affective needs to a larger extent than streaming, and that the opposite is true regarding Cognitive needs. However, contrary to previous studies, we find that cinema is more successful, compared to streaming, in fulfilling Escapism needs, since participants did not consider that streaming breaks their routine. A potential explanation may be that our sample, mainly comprised of young adults, is so familiar with streaming that it is no longer considered a deviation from, but rather a part of, their daily routine.

Additionally, this study also provides useful insights for managers in the movie industry, particularly cinema managers and managers of streaming platforms. First, our paper suggest that managers can use Nostalgia to increase Willingness to Pay. Additionally, managers of streaming platforms can also use Nostalgia in their advertisements since this feeling increases Inspiration for movies and Intention for series. Lastly, we find that Cognitive needs increase Inspiration to watch a movie through streaming, while Affective and Escapism needs have no effect. Thus, we find evidence that increasing the perception that watching a movie through streaming allows users to *get to know more about themselves* and *have thought provoking*

*experiences* has a positive effect on Inspiration. Managers of streaming platforms may find it valuable to highlight these messages in advertisement for example.

This thesis is also useful for cinema chain managers. First, we find evidence that campaigns promoting the purchase of two-ticket bundles are very much useful, since consumers prefer to go to the cinema accompanied. Furthermore, we find that Affective and Escapism needs increase Inspiration in the Cinema Context. As such, we find that cinema managers could find it advantageous to highlight the cinema experience as *emotional*, *visually exciting*, and a *way to break the routine*. Finally, since Social Setting had such an important role in driving Inspiration, Intention, and Willingness to Pay in this context, cinema managers could benefit from communicating cinema as a social experience and a way to connect with others.

## **Limitations and Further Research**

This thesis also has some important limitations. First, our first study did not find a relationship between Nostalgia and Perceived Social Connectedness, a link well established in previous literature. For example, Lasaleta & Vohs (2014) find a positive effect of Nostalgia on Social Connectedness, and Weingarten & Wei (2023) find that Nostalgia is a buffer for threats to the self. Thus, we would expect to see a similar relationship in our data. Its absence influenced our results, especially for the Cinema Context. Based on Ratner & Hamilton (2015), we expected that watching the movie alone at the cinema would create a threat to the self and lower Perceived Social Connectedness. Thus, we had hypothesized that Nostalgia would increase Inspiration in the *Alone* Setting, by buffering respondents from this threat. In fact, we did verify that watching the movie alone at the cinema lowers Perceived Social Connectedness (*Together Setting*:  $M = 4.69$ ;  $SD = 1.70$ ; *Alone Setting*:  $M = 3.16$ ;  $SD = 1.75$ ;  $F(1, 139) = 25.35$ ;  $p < .001$ ). Additionally, it also influenced the respondents' perception about others' opinion of them: when asked how many friends others would think they had, the response was much more negative in the *Alone* Setting ( $M = 3.36$ ;  $SD = 1.85$ ) versus the *Together* Setting ( $M = 4.77$ ;  $SD = 1.34$ ) ( $F(1, 143) = 27.63$ ;  $p < .001$ ). However, since Nostalgia did not increase Perceived Social Connectedness, we did not find an interaction effect between Nostalgia and Social Setting for the Cinema

Context. Further research could re-test this interaction when the relationship between Nostalgia and Perceived Social Connectedness is verified.

In addition, our study designs might also have influenced the results. In our first study, specifying the Context (cinema vs streaming) as a within-subjects factor might have influenced the results. Though we tested the effect of Context Order on our measures and found no significant differences, it might still be possible that presenting both contexts skewed responses. Similarly, on our second study, presenting movies and series in a within-subjects design influenced the results for some of the key variables. Thus, further research could re-analyse the impact of Nostalgia and Social Setting on consumer motivation, comparing these effects between cinema and streaming, and between films and series, using a between-subjects design for all variables.

Additionally, when presenting the context, we instructed participants to think of a film they already had an interest in, which could impact and skew our measure of Intention. A follow-up study could assess the impact of Nostalgia and Social Setting on Intention to watch a specific movie of the choice of the researchers, while controlling for interest in this movie.

Lastly, our sample is also a limitation. In both studies, participants were relatively young and financially well-off, possibly influencing measures such as the importance of price when deciding whether to take part in an activity. Further research could assess whether our findings hold for a more representative sample of society.

Our study also raises interesting questions regarding the role of Nostalgia in driving Inspiration to use products not typically associated with the past. Hinsch et al. (2020) had found a significant role of Nostalgia in fostering Inspiration in the context of an innovative product – augmented reality. Our first study assessed this role for two platforms that differ in terms of level of innovation and level of natural associations with the past – cinema and streaming. Contrary to what we expected, we found that inducing Nostalgia was more impactful in fostering Inspiration for the context with less natural associations with the past – streaming.

Both in our first study and in Hinsch et al. (2020), Nostalgia proved to be particularly useful for innovative products with some associations with the past. In Hinsch et al. (2020), though the product was Augmented Reality (AR), the subject used in their AR demo was LEGO, a very

well-known and nostalgic brand. In our study, though streaming could be considered an innovative media, films have some natural associations with the past. Our second study expanded on the results of the first, taking the least nostalgic context – streaming – and assessing the role of Nostalgia in driving consumer motivation to watch both movies and series. Though our study has important limitations related to sample size and study design, our results seem to suggest that Nostalgia may have a role in fostering Intention to consume products with little association with the past. Further research could explore whether the impact of Nostalgia holds as we move up the scale of innovation.

In addition, future research could explore the interconnectedness of cinema and streaming. Our first study evaluated Inspiration, Willingness to Pay, and Intention in the two Contexts as independent. In doing so, we did not account for possible influences of watching a movie in theatres in the Inspiration to watch the movie through streaming, nor vice versa. Recent research suggests that the two contexts are not necessarily perfect substitutes but can rather feed off each other. A recent study found that offline movie spending increased after consumers subscribed to Netflix, because watching a movie through streaming leaves social and hedonic needs unmet (Fang, et al. 2022). In this thesis, we found that cinema is perceived as more visually exciting, more entertaining, and as a more social activity compared to streaming. Follow-up research can assess whether these differences can decrease substitutability between cinema and streaming, and whether consuming one can even foster demand for the other.

On the same topic, we have also recently seen the movie theatre being used as promotion for streaming. To advertise the new Lord of The Rings series, an Amazon Prime exclusive, the streaming platform capitalized on the buzz created by movie theatre exhibitions to drive interest. In the United States, the two first episodes premiered in a movie theatre chain that partnered with Amazon for this initiative. This premiere occurred prior to the series release in streaming and made headline news in many blogs. Future research could assess the effects of campaigns, such as this one, that combine both platforms to drive the success of a movie or series.

Finally, future studies could explore ways to increase the complementarity of the two platforms, finding avenues for mutual gains. Existing research on multiformat goods indicates that one can mitigate substitutability by equalizing the perception of quality on salient attributes for both formats (Papies & van Heerde, 2017). Future research could explore the attributes of streaming

and cinema, discovering the most determinant in driving consumer choice. The role of Nostalgia can also be tested in this context, since previous studies indicate it might reduce risk perceptions, leading to increased cross-buy.

## **Conclusion**

The purpose of this study was to assess the role of Nostalgia and Social Setting in fostering consumer motivation in the context of the movie industry.

We explored whether Nostalgia and Social Setting would increase motivation to watch a movie at the cinema and through streaming. Social Setting had a significant effect in increasing Inspiration, Intention, and Willingness to pay for the Cinema Context, while having no effect for the Streaming Context. This result is aligned with previous literature, as Ratner & Hamilton (2015) have also found that consumers prefer to watch movies alone when at home, and with a group of friends when at the cinema. Further, we found that Nostalgia is effective in increasing Inspiration, Intention, and Willingness to Pay in the Streaming Context. For the Cinema Context, we found that Nostalgia had no significant effect on Intention and inspiration. The divergent effects of Nostalgia across contexts are likely explained by differences in the degree to which each context is naturally associated with the past. Inducing Nostalgia was effective for streaming but was redundant for movie theatres since this context already had a high Nostalgic Value.

Our second study expanded on these results. We compared the effect of Nostalgia on consumer motivation to watch a movie versus a series in the Streaming Context, finding that the role of Nostalgia in increasing Inspiration was also limited for products with too little Nostalgic Value. Thus, we conclude that inducing consumers to feel nostalgic is particularly effective in driving Inspiration for products that are not inherently nostalgic but have some associations with the past.

Thus, this thesis contributes to the expansion of knowledge on the relationship between Inspiration and Nostalgia. Moreover, we also add value for managers of movie theatres and streaming platforms, as we suggest ways through which they can increase consumption.

## Appendix 1: Questionnaire Study 1

Introduction:

*To see the Portuguese version, please click on the right corner at the top of the page  
(Para ver a versão em português, por favor clique no canto superior direito)*

Welcome and thank you for taking part in this study!

Your participation in the study is completely anonymous and voluntary. It does not collect any data that allows the identification of the participant.

Your participation in this study should take approximately 6 minutes.

By moving forward on this survey you are agreeing to voluntarily taking part in the study. Thank you for your attention!

-----Break-----

This questionnaire serves two independent studies. The first study is a life events study. The second study is about consumer's experience watching a movie at the cinema and at home.

We are aware that this is subjective and therefore there are no right or wrong answers.

You will first answer questions about the first study.

-----Break-----

(Manipulation): Adapted from Lasaleta & Vohs 2014

**Nostalgia:**

Defining nostalgia as “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266).

Please think about a time **when you felt nostalgic**. Reflect on this experience for around 3 minutes.

Think of 3 words or 3 short phrases that describe the experience and write them in the 3 text boxes below.

**Non-Nostalgia:**

Please think about an **ordinary event from your past**. Reflect on this experience for around 3 minutes.

Think of 3 words or 3 short phrases that describe the experience and write them in the text boxes below.

1. (Manipulation checks, adapted from Lasaleta & Vohs 2014.) *Please indicate how much you agree with the following statements (Scale: 1 = Strongly disagree; 7 = strongly agree)*
  - “Right now, I am feeling quite nostalgic”;
  - “Right now, I am having nostalgic feelings”;
  - “I feel nostalgic at the moment”
2. (Perceived social connectedness; adapted from Lasaleta & Vohs 2014 and from Ratner & Hamilton 2015)
  - Indicate the degree to which you feel loved (1 = not at all; 7 = extremely)
  - Indicate the degree to which you feel protected (1 = not at all; 7 = extremely)
  - How many friends would others guess you have? (1 = that I have few; 7 = that I have many)

-----*Break*-----

You will now answer questions regarding the second study

-----*Break*-----

We will move on to a different scenario. Please disregard the previous situation and focus your attention on the next scenario.

Please move forward to see the new scenario

-----*Break*-----

**(Context Cinema):**

Please imagine the following situation.

You have discovered a new movie that appeals to you.

This movie has very recently premiered in movie theatres and cannot yet be seen anywhere else.

Imagine you have the opportunity of watching the movie in group, that is, together with your friends. / Imagine you have the opportunity of watching the movie **alone**, that is, by yourself, without any of your friends.

Please consider the scenario of **watching the movie in theatres with friends/alone** and answer the following questions.

**(Context Streaming):**

Please imagine the following situation.

You have discovered a new movie that appeals to you.

This movie has very recently premiered in a streaming service\* and cannot yet be seen anywhere else.

Imagine you have the opportunity of watching the movie in group, that is, together **with your friends**. / Imagine you have the opportunity of watching the movie **alone**, that is, by yourself, without any of your friends.

Please consider the scenario of **watching the movie with friends/alone at home** through this streaming platform and answer the following questions

*\*Definition of streaming service: A streaming service is a service that sends video through the internet “so that people can watch or listen to it immediately rather than having to download it, or rather than having to watch or listen at a particular time”*

-----Break-----

3. Perceived hedonic benefits (adapted from Hinsch et al. 2020)
  - Please indicate the degree to which watching the movie would be fun (1 = not at all; 7 = extremely)
  - Please indicate the degree to which watching the movie would be entertaining (1 = not at all; 7 = extremely)

-----Break-----

4. Other needs fulfilled by media: Please indicate the degree to which watching a movie **with friends/alone at the theatre/through streaming** would:
- (Affective) (Adapted from Tefertiller 2017; 1 = not at all; 7 = extremely)
    - Allow you to have a good time
    - Be an emotional experience
    - Be visually exciting
  - (Cognitive) (Adapted from Tefertiller 2017; 1 = not at all; 7 = extremely)
    - Allow you to experience something new
    - Allow you to learn about yourself
    - Be a thought-provoking experience
  - Escapism/Relaxation (Adapted from Camilleri & Falzon 2020; 1 = not at all; 7 = extremely)
    - Allow you to break the routine
    - Allow you to occupy free time
    - Be a form of entertainment

-----Break-----

5. Dependent Variables (Inspiration, adapted from Böttger et al. (2017)) (scale 1 = not at all; 7 = extremely): Please fill in the following questions about watching the movie **with friends/alone at the theatre/through streaming**
- I was inspired to watch the movie
  - I felt a desire to watch the movie
  - I was motivated to watch the movie
  - My interest to pay for the movie was increased
  - I am willing to pay for the movie
  - My willingness to pay for the movie increased

-----*Break*-----

6. (Perceived risk): When you considering the decision to watch the movie **with friends/alone at the theatre/through streaming**, to what extent do you experience that:
- There is a lot to lose if I do not enjoy the movie (1 = not at all; 7 = extremely)
  - You are afraid of being disappointed by the movie (1 = not at all; 7 = extremely)
  - Watching the movie would be a waste of time (1 = not at all; 7 = extremely)
  - The effort I put to watch the movie may not pay off (1 = not at all; 7 = extremely)
  - Watching the movie is not worth the money (1 = not at all; 7 = extremely)

-----*Break*-----

7. Please indicate the maximum price you would be willing to pay to watch the movie **at the theatre/through streaming**
8. Dependent Variable (Intention to watch the film, scale 1 = not at all; 7 = extremely): I intend to watch the movie **at the theatre/through streaming**

-----*Break*-----

9. (Social connectedness) Defining social connectedness as the degree to which you **feel emotionally supported and helped** by your family, friends, and significant others:

When you think of the experience of watching a movie **at the theatre/through streaming alone/with your friends** how socially connected do you feel? (1 = not at all; 7 = extremely)

10. Thinking of this experience... (1 = Few friends; 7 = Many friends)
- How many friends would others guess you have?
  - How many friends would be willing to watch the movie with you in this context?

-----*Break*-----

11. (Control Price): Please indicate the degree to which price influences your decision to take part in an activity (scale 1 = not at all; 7 = extremely)

12. (Familiarity with platform): Please indicate your level of familiarity with
- movie theatres (1 = not familiar at all; 7 = extremely familiar)
  - streaming (1 = not familiar at all; 7 = extremely familiar)

13. (Frequency of use): Please indicate how often you watch movies
- at the theatre movie (1 = not often at all; 7 = extremely often)
  - through streaming (1 = not often at all; 7 = extremely often)

-----*Break*-----

14. (Nostalgic Value): Defining nostalgia as “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266), please tell us to **what extent the following experiences are nostalgic**: (1 = not nostalgic at all; 7 = extremely nostalgic)

- Watching a new movie
- Watching a new movie at the theatre
- Going to the cinema
- Watching a new film in a streaming platform
- “Netflix & Chill”
- Watching TV with a streaming service

-----*Break*-----

15. Demographic Variables

- Please indicate your gender: Female, Male, Non-binary, Other, Prefer not to disclose
- Please indicate your age
- Please indicate your yearly household income

-----*End*-----

## Appendix 2: Results table – impact of Context Order (Study 1)

Variable	Context Order	M	SD	<i>F</i> (1, 133)	<i>p</i>
Inspiration Cinema	0	4.46	1.39	0.597	.441
	1	4.65	1.49		
Inspiration Streaming	0	4.18	1.30	0.082	.774
	1	4.25	1.23		
Perceived Risk Cinema	0	3.70	1.41	1.980	.180
	1	3.48	1.33		
Perceived Risk Streaming	0	3.19	1.32	1.718	.192
	1	2.90	1.15		
Nostalgic Value of Cinema	0	3.73	1.39	0.003	.956
	1	3.75	1.62		
Nostalgic Value of Streaming	0	2.84	1.54	2.042	.155
	1	2.48	1.32		
Affective needs Cinema	0	4.84	1.33	0.000	.989
	1	4.85	1.30		
Affective needs Streaming	0	4.94	1.05	0.174	.678
	1	4.86	1.22		
Cognitive Needs Cinema	0	4.31	1.56	0.000	.987
	1	4.30	1.49		
Cognitive needs Streaming	0	3.80	1.35	0.000	.984
	1	3.80	1.55		
Escapism needs Cinema	0	5.44	1.25	1.082	.300
	1	5.66	1.16		
Escapism needs Streaming	0	5.16	1.00	0.541	.463
	1	5.03	1.22		
Intention Cinema	0	4.78	1.63	0.517	.473
	1	4.57	1.69		
Intention Streaming	0	4.38	1.34	0.024	.877
	1	4.34	1.60		

Willingness to Pay	0	8.15	3.67	0.000	.985
Cinema	1	8.16	4.24		
Willingness to Pay	0	5.07	2.96	2.069	.153
Streaming	1	4.15	4.41		
Cinema Social	0	3.96	1.64	2.049	.156
Connectedness	1	4.34	1.76		
Streaming Social	0	3.82	1.89	1.094	.298
Connectedness	1	4.16	1.88		

### Appendix 3: Effect of Nostalgia and Social Setting on Intention

We ran two 2 (Nostalgia: Non-Nostalgia vs Nostalgia) x 2 (Social Setting: Together vs Alone), one for each context, with Intention as the dependent variable. We found no significant effects of Nostalgia on Intention either for the Streaming Context ( $F(1, 144) = 1.951; p = .165$ ) nor for the Cinema Context ( $F(1, 144) = 0.148; p = .701$ ). Further, we found significant effects of Social Setting for the Cinema Context ( $F(1, 144) = 4.504; p = .036$ ), but not for the Streaming Context ( $F(1, 144) = 1.666; p = .199$ ). The interaction effect (Nostalgia x Social Setting) was not significant for either context (*Streaming*:  $F(1, 144) = 0.041; p = .840$ ; *Cinema*:  $F(1, 144) = 0.034; p = .855$ ).

### Appendix 4: Further Analysis on Nostalgic Value as a mediator for the Nostalgia-Inspiration relationship in the Cinema Context

We have shown that Nostalgia increases the Nostalgic Value of streaming but has no significant effect on the Nostalgic Value of cinema ( $F(1, 139) = 1.835; p = .178$ ). Additionally, we have also observed that the increase in Nostalgic Value is higher the lower the baseline levels, both in absolute and relative terms.

Nostalgic Value of...	Mean (Treatment)	Mean (Control)	Mean $\Delta$ (T – C)	% $\Delta$
...Watching a movie	3.280	2.830	0.450	15.90%
...Watching a movie at the cinema	3.919	3.500	0.419	11.97%
...Watching a movie through streaming	2.922	2.373	0.549	23.14%

Thus, contrary to the Streaming Context, there are no mediation effects for the Cinema Context. However, even though the indirect effects from bootstrapping crossed 0 ( $B = 0.0893$ ; 95% CI =  $[-0.013; 0.245]$ ), the Nostalgic Value of cinema had a positive and significant effect ( $B = 0.213$ ;  $t(138) = 2.7426$ ;  $p = .0069$ ) on Inspiration when included in the model together with Nostalgia. Further, we also observed that Nostalgia considerably loses significance in this model ( $0.169$ ;  $t(138) = 0.7204$ ;  $p = .4725$ ).

Our hypothesis is that with a more impactful influence of Nostalgia on Nostalgic Value, we would have seen a mediation effect for the Cinema Context similarly to the Streaming Context. The failure of the first part of the process would explain the less powerful than predicted impact of Nostalgia on Inspiration to watch the movie in theatres.

## **Appendix 5: Further Analysis on the relationship between Nostalgia and Perceived Social Connectedness**

Since the Cronbach Alpha for our three Social Connectedness measures was not higher than 0.7, the generally recommended value, we decided to run the test again excluding part of our scale items. Our first Social Connectedness measure included a scale item evaluating the respondents' thoughts about others' perception of how many friends they had ("*How many friends would others guess you have?*"). When we removed this item from our Social Connectedness scale, we obtained a much more reliable scale, with correlations of 0.960 for the nostalgia condition and 0.970 for the non-nostalgia condition. We then computed an aggregate measure of Perceived Social Connectedness by averaging the responses to the two-remaining scale-items.

Our second measure of Social Connectedness, presented after each Context, also included scale items evaluating the number of friends respondents were willing to share the experience with (“*How many friends would be willing to watch the movie with you in this context?*”) and the number of friends others would guess the respondent had (“*How many friends would others guess you have?*”). We removed these two items, remaining with a single-item scale (“*When you think of the experience of watching a movie at the theatre/through streaming alone/with your friends how socially connected do you feel?*”).

We run the test again, with the new measures of Perceived Social Connectedness as the test variables and Nostalgia as the grouping variable. However, as presented on the table below, we again found no connection between Nostalgia and Perceived Social Connectedness, with all p-values higher than .245.

<b>Social Connectedness measured...</b>	<b>t</b>	<b>p-value</b>
After Nostalgia Manipulation	-0.199	0.842
After Streaming Context	-1.167	0.245
After Cinema Context	-0.268	0.789

## **Appendix 6: Further Analysis on the process measures as mediators of the Nostalgia-Willingness to Pay relationship**

We tested Perceived Risk and Nostalgic Value as mediators of the relationship between Nostalgia and Willingness to Pay. A mediation by Perceived Social Connectedness was automatically ruled out since there was no effect of Nostalgia on Perceived Social Connectedness. As done for Inspiration, we used Hayes process macro with Willingness to Pay as the dependent variable (Y) and Nostalgia as the independent variable (X). We ran the process four times, twice for each mediator, assessing its impact on Willingness to Pay in the Streaming and Cinema Contexts independently. We found no mediation effects for the relationship between Nostalgia and Willingness to Pay in any of the four scenarios tested: none of the four

mediator variables had a significant impact on Willingness to Pay (all  $p > .10$  and all indirect effects from bootstrapping crossed 0). The results are presented in the table below.

<b>Model</b> (Outcome var. WTP)	<b>Coefficient</b>	<b>t</b>	<b>p-value</b>
Nostalgic Value (Cinema Context)	0.3527	1.6326	.1048
Nostalgic Value (Streaming Context)	0.1486	0.6725	.5024
Perceived Risk (Cinema Context)	-0.2738	-1.2224	.2235
Perceived Risk (Streaming Context)	-0.0078	-0.0313	.9751
<b>Indirect Effects from Bootstrapping</b>	<b>Effect</b>	<b>Boot LLCI</b>	<b>Boot ULCI</b>
Nostalgic Value (Cinema Context)	0.1320	-0.0497	0.4801
Nostalgic Value (Streaming Context)	0.0753	-0.1627	0.4096
Perceived Risk (Cinema Context)	-0.1484	-0.4953	0.1640
Perceived Risk (Streaming Context)	-0.0035	-0.3004	0.3339

## **Appendix 7: Further Analysis on the process measures as mediators of the Nostalgia-Intention relationship**

We considered Perceived Risk and Nostalgic Value as the mediator variables. Perceived Social Connectedness was automatically excluded since we had previously found that Nostalgia does not have a significant effect on Perceived Social Connectedness. The independent variable (X) was Nostalgia. We found significant mediation effects of Perceived Risk in the Cinema Context (negative effect), and of Nostalgic Value in the Streaming Context (positive effect). The table below presents a summary of the significant results.

<b>Model</b> (Outcome var. Intention)	<b>Coefficient</b>	<b>t</b>	<b>p-value</b>
Nostalgic Value (streaming context)	0.2055	2.4373	.0161
Perceived Risk (cinema context)	-0.2452	-2.5569	.0116
<b>Indirect Effects from Bootstrapping</b>	<b>Effect</b>	<b>Boot LLCI</b>	<b>Boot ULCI</b>
Nostalgic Value (streaming context)	0.1129	0.0026	0.2519
Perceived Risk (cinema context)	-0.1309	-0.3382	-0.0059

As previously described, in both contexts, Nostalgia increases Perceived Risk and Nostalgic Value. Thus, in the Streaming Context, Nostalgia has a positive effect, increasing Nostalgic Value, which in turn increase Intention to watch the film. In the Cinema Context, Nostalgia has a non-significant ( $F(1, 145) = 0.148; p = .70$ ) negative effect on Intention to watch the movie, since it increases Perceived Risk. Another important note to add is that Perceived Risk only had a significant impact on Intention for the Cinema Context and not for the Streaming Context ( $t(145) = 0.992; p = 0.323$ ).

### **Appendix 8: Further Analysis on mediation of the Social Setting-Intention relationship in the Streaming Context**

We started by analysing the effect of Social Setting on our process measures: Perceived Risk, Nostalgic Value, and Perceived Social Connectedness. We ran three analyses of variance (ANOVA) and concluded that, for the Streaming Context, there were no significant effects of Social Setting on Perceived Risk ( $F(1, 139) = 0.642; p = .424$ ) or on Nostalgic Value ( $F(1, 139) = 0.472; p = .493$ ). We also verified that watching a movie with others (*together* Social Setting) significantly increased Perceived Social Connectedness ( $M = 4.69; SD = 1.70; F(1, 139) = 25.35; p < .001$ ) compared to watching a movie alone ( $M = 3.16; SD = 1.75$ ).

Then, we ran a mediation model of the relationship between Social Setting and Intention to watch a movie in the Streaming Context, with Perceived Social Connectedness as the mediator variable. We find that there are significant mediation effects since the bootstrapping confidence

interval did not include zero ( $B = 0.2576$ ; 95% CI = [0.0003; 0.5192]). Perceived Risk and Nostalgic did not mediate the relationship between Social Setting and Intention since the effects of Social Setting on these process measures was not significant.

## **Appendix 9: Further Analysis on perceived Needs as mediators**

In the Streaming Context, watching the movie in group also decreased Cognitive needs fulfilled by streaming ( $F(1, 147) = 2.52$ ;  $p = .114$ ), though this effect was weaker compared to the Cinema Context. However, we do not see a significant mediation effect since the indirect effects from bootstrapping cross 0 ( $-0.1307$ ; 95% CI = [-0.3271; 0.0236]).

Furthermore, Social Setting did not have a significant effect on Affective needs ( $F(1, 146) = 1.65$ ;  $p = .201$ ) or Escapism needs ( $F(1, 146) = 1.306$ ;  $p = .255$ ) in the Streaming Context. Therefore, these needs are not mediators.

Next, we assessed the relationship between Nostalgia and needs in the Cinema Context. We concluded that Nostalgia did not have a significant effect on any of the needs fulfilled by movie theatres: Affective needs ( $F(1, 146) = 0.227$ ;  $p = .634$ ), Escapism needs ( $F(1, 146) = 1.104$ ;  $p = .295$ ), or Cognitive needs ( $F(1, 146) = 0.011$ ;  $p = .915$ ). Thus, we found no mediation effects.

## Appendix 10: Questionnaire Study 2

Introduction:

*To see the Portuguese version, please click on the right corner at the top of the page  
(Para ver a versão em português, por favor clique no canto superior direito)*

Welcome and thank you for taking part in this study!

Your participation in the study is completely anonymous and voluntary. It does not collect any data that allows the identification of the participant.

Your participation in this study should take approximately 6 minutes.

By moving forward on this survey you are agreeing to voluntarily taking part in the study. Thank you for your attention!

-----Break-----

This questionnaire serves two independent studies. The first study is a life events study. The second study is about consumer's experience watching a movie at the cinema and at home.

We are aware that this is subjective and therefore there are no right or wrong answers.

You will first answer questions about the first study.

-----Break-----

(Manipulation): Adapted from Lasaleta & Vohs 2014

**Nostalgia:**

Defining nostalgia as “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266).

Please think about a time **when you felt nostalgic**. Reflect on this experience for around 3 minutes.

Think of 3 words or 3 short phrases that describe the experience and write them in the 3 text boxes below.

**Non-Nostalgia:**

Please think about an **ordinary event from your past**. Reflect on this experience for around 3 minutes.

Think of 3 words or 3 short phrases that describe the experience and write them in the text boxes below.

1. (Manipulation checks, adapted from Lasaleta & Vohs 2014.) *Please indicate how much you agree with the following statements (Scale: 1 = Strongly disagree; 7 = strongly agree)*
  - “Right now, I am feeling quite nostalgic”;
  - “Right now, I am having nostalgic feelings”;
  - “I feel nostalgic at the moment”
  
2. (Perceived social connectedness; adapted from Lasaleta & Vohs 2014)
  - Indicate the degree to which you feel loved (1 = not at all; 7 = extremely)
  - Indicate the degree to which you feel protected (1 = not at all; 7 = extremely)

-----Break-----

You will now answer questions regarding the second study

-----Break-----

We will move on to a different scenario. Please disregard the previous situation and focus your attention on the next scenario.

Please move forward to see the new scenario

-----Break-----

**(Context Series):**

Please imagine the following situation.

You have discovered a new series that appeals to you.

This series has very recently premiered in a streaming platform and cannot yet be seen anywhere else.

Please consider the scenario of **watching the series through the streaming platform\*** and answer the following questions.

*\*Definition of streaming service: A streaming service is a service that sends video through the internet “so that people can watch or listen to it immediately rather than having to download it, or rather than having to watch or listen at a particular time”*

**(Context Movies):**

Please imagine the following situation.

You have discovered a new movie that appeals to you.

This movie has very recently premiered in a streaming service\* and cannot yet be seen anywhere else.

Please consider the scenario of **watching the movie at home** through this streaming platform and answer the following questions

*\*Definition of streaming service: A streaming service is a service that sends video through the internet “so that people can watch or listen to it immediately rather than having to download it, or rather than having to watch or listen at a particular time”*

-----Break-----

3. Other needs fulfilled by media: Please indicate the degree to which watching a movie/series **through streaming** would:
- (Affective) (Adapted from Tefertiller 2017; 1 = not at all; 7 = extremely)
    - Allow you to have a good time
    - Be an emotional experience
    - Be visually exciting
  - (Cognitive) (Adapted from Tefertiller 2017; 1 = not at all; 7 = extremely)
    - Allow you to experience something new
    - Allow you to learn about yourself
    - Be a thought-provoking experience
  - Escapism/Relaxation (Adapted from Camilleri & Falzon 2020; 1 = not at all; 7 = extremely)
    - Allow you to break the routine
    - Allow you to occupy free time
    - Be a form of entertainment

-----Break-----

4. Dependent Variables (Inspiration, adapted from Böttger et al. (2017)) (scale 1 = not at all; 7 = extremely): Please fill in the following questions about watching the movie/series **through streaming**
- I was inspired to watch the movie
  - I felt a desire to watch the movie
  - I was motivated to watch the movie
  - My interest to pay for the movie was increased

-----Break-----

5. Please indicate the maximum price you would be willing to pay to watch the series/movie **through streaming**
6. Dependent Variable (Intention to watch the film/series, scale 1 = not at all; 7 = extremely): I intend to watch the movie/series **through streaming**

-----Break-----

7. (Control Price): Please indicate the degree to which price influences your decision to take part in an activity (scale 1 = not at all; 7 = extremely)
8. (Familiarity with platform): Please indicate your level of familiarity with watching
- A series through streaming (1 = not familiar at all; 7 = extremely familiar)

- A movie through streaming (1 = not familiar at all; 7 = extremely familiar)
9. (Frequency of use): Please indicate how often you watch
- A series through streaming (1 = not often at all; 7 = extremely often)
  - A movie through streaming (1 = not often at all; 7 = extremely often)

-----*Break*-----

10. (Nostalgic Value): Defining nostalgia as “a sentimental longing for a personally experienced past” (New Oxford Dictionary of English 1998, p. 1266), please tell us **to what extent the following experiences are nostalgic**: (1 = not nostalgic at all; 7 = extremely nostalgic)
- Watching a new movie
  - Watching a new movie through streaming
  - Watching a new series
  - Watching a new series in a streaming platform

-----*Break*-----

11. Demographic Variables
- Please indicate your gender: Female, Male, Non-binary, Other, Prefer not to disclose
  - Please indicate your age
  - Please indicate your yearly household income

-----*End*-----

## Appendix 11: Results Table – Cronbach Alphas (Study 2)

Variable	Scale Items	Cronbach's Alpha
Manipulation Checks (Nostalgia)	<i>"Right now, I am feeling quite nostalgic"</i>	<i>Nostalgia: .996</i>
	<i>"Right now, I am having nostalgic feelings"</i>	<i>Non-Nostalgia: .990</i>
	<i>"I feel nostalgic at the moment"</i>	
Affective Needs	<i>"Allow you to have a good time"</i>	
	<i>"Be an emotional experience"</i>	<i>Movies: .847</i>
Cognitive Needs	<i>"Be visually exciting"</i>	<i>Series: .807</i>
	<i>"Allow you to experience something new"</i>	<i>Movies: .816</i>
	<i>"Allow you to learn about yourself"</i>	<i>Series: .816</i>
Escapism Needs	<i>"Be a thought-provoking experience"</i>	
	<i>"Allow you to break the routine"</i>	<i>Movies: .752</i>
	<i>"Allow you to occupy free time"</i>	<i>Series: .778</i>
Inspiration	<i>"Be a form of entertainment"</i>	
	<i>"I was inspired to watch the movie / series"</i>	
	<i>"I felt a desire to watch the movie / series"</i>	<i>Movies: .893</i>
	<i>"I was motivated to watch the movie / series"</i>	<i>Series: .872</i>
Nostalgic Value	<i>"My interest to pay for the movie / series increased"</i>	
	<i>"Watching a new movie"</i>	
Nostalgic Value	<i>"Watching a new movie through streaming"</i>	<i>Movies: .877</i>
	<i>"Watching a new series"</i>	
Nostalgic Value	<i>"Watching a new series in a streaming platform"</i>	<i>Series: .959</i>

## Appendix 12: Impact of Product Order (Study 2)

We found that the Affective needs perceived by watching a series were significantly higher ( $t(63) = 1.80; p = .038$ ) when respondents evaluated series first and movies second ( $M = 5.24; SD = 0.98$ ), compared to the reversed order ( $M = 4.74; SD = 1.19$ ). Additionally, we found that for both products, Willingness to Pay was significantly higher (*Series*:  $t(63) = 1.80; p = .038$ ; *Movies*:  $t(63) = 1.80; p = .038$ ) when series was shown first and movies second (*Series*:  $M = 6.93; SD = 4.00$ ; *Movies*:  $M = 6.07; SD = 4.24$ ), compared to the reverse order (*Series*:  $M = 4.86; SD = 3.05$ ; *Movies*:  $M = 4.08; SD = 2.76$ ).

All other effects were non-significant:

For series, Inspiration was not significantly higher ( $t(63) = 1.35; p = .181$ ) when series were shown first ( $M = 4.80; SD = 1.21$ ) compared to when movies were shown first ( $M = 4.41; SD = 1.07$ ). The same was true for movies (*Series First*:  $M = 4.69; SD = 1.36$ ; *Movies First*:  $M = 4.34; SD = 1.11$ ) ( $t(63) = 1.11; p = .27$ ).

For series, Nostalgic Value was not significantly higher ( $t(63) = -0.74; p = .46$ ) when series were shown first ( $M = 3.00; SD = 1.38$ ) compared to when movies were shown first ( $M = 3.25; SD = 1.29$ ). The same was true for movies (*Series First*:  $M = 3.42; SD = 1.48$ ; *Movies First*:  $M = 3.74; SD = 1.24$ ) ( $t(63) = -0.92; p = .35$ ).

The same was true for Cognitive needs and Escapism needs. For series, Cognitive Needs were not significantly higher ( $t(63) = -0.26; p = .79$ ) when series were shown first ( $M = 3.78; SD = 1.22$ ) compared to when movies were shown first ( $M = 3.86; SD = 1.18$ ). The same was true for Escapism needs (*Series First*:  $M = 5.23; SD = 1.09$ ; *Movies First*:  $M = 4.84; SD = 1.10$ ) ( $t(63) = 1.42; p = .16$ ). We also verified the same for movies, regarding Cognitive needs (*Series First*:  $M = 4.14; SD = 1.09$ ; *Movies First*:  $M = 3.96; SD = 1.14$ ) ( $t(63) = 0.63; p = .53$ ) and Escapism needs (*Series First*:  $M = 5.26; SD = 1.15$ ; *Movies First*:  $M = 4.93; SD = 1.05$ ) ( $t(63) = 1.18; p = .24$ ). For movies, there were also no significant differences for Affective needs (*Series First*:  $M = 5.07; SD = 1.18$ ; *Movies First*:  $M = 4.72; SD = 1.04$ ) ( $t(63) = 1.26; p = .21$ ).

Lastly, there were also no significant differences for Intention either for series (*Series First: M* = 5.00; *SD* = 1.22; *Movies First: M* = 4.78; *SD* = 1.27) ( $t(63) = 0.69; p = .49$ ) or for movies (*Series First: M* = 4.75; *SD* = 1.53; *Movies First: M* = 4.57; *SD* = 1.26) ( $t(63) = 0.52; p = .60$ ).

### **Appendix 13: Further analysis on the effect of Nostalgia (Study 2)**

For movies, Nostalgia did not significantly impact Inspiration ( $t(63) = 0.831, p = .409$ ), Intention ( $t(63) = 1.017, p = .313$ ), or Willingness to Pay ( $t(63) = 1.172, p = .246$ ). For series, Nostalgia did not significantly impact Inspiration ( $t(63) = 1.027, p = .308$ ), or Willingness to Pay ( $t(63) = 0.300, p = .765$ ). We believe that the lack of significant results could have been due to the small sample size. Our study design might have also influenced the results, since it affected, for example, how the participants rated their Willingness to Pay. Thus, we conclude that, though the general tendency was for a positive effect of Nostalgia, it did not have a significant effect for these variables.

### **Appendix 14: Further Analysis on the relationship between Nostalgic Value and Inspiration, and between Nostalgic Value and WTP (Study 2)**

We regressed Nostalgic Value on Inspiration for both products and found that it significantly ( $B = 0.366; t(63) = 3.49; p < .001$ ) increases Inspiration to watch a movie through streaming. However, we find that this effect is only marginally significant ( $B = 0.162; t(63) = 1.50; p = .138$ ) for series.

We also regressed Nostalgic Value on Willingness to Pay and found that it has no significant effects for either series ( $0.513; t(63) = 1.51; p = .136$ ) or movies ( $0.042; t(63) = 0.126; p = .90$ ).

## **Appendix 15: Further Analysis on relationship between Nostalgia and Needs (Study 2)**

For series, Nostalgia significantly increased Affective needs ( $F(1, 64) = 3.62; p = .062$ ) while having no significant effects for Cognitive needs ( $F(1, 64) = 1.37; p = .246$ ) or Escapism needs ( $F(1, 64) = 0.581; p = .449$ ).

For movies, Nostalgia significantly increased Cognitive needs ( $F(1, 64) = 4.565; p = .037$ ), while having no significant effects for Affective needs ( $F(1, 64) = 2.342; p = .131$ ) or Escapism needs ( $F(1, 64) = 0.561; p = .457$ ).

Next, we ran two mediation models of the relationship between Nostalgia and Nostalgic Value. For movies, we used Cognitive needs as the mediator variable and found significant mediation effects since the bootstrapping confidence interval did not include 0 ( $B = 0.2635; 95\% CI = [0.0250; 0.6247]$ ). For series, we used Affective needs as the mediator variable and found no significant mediation effects ( $B = 0.0399; 95\% CI = [-0.1992; 0.2760]$ ). We then ran a mediation model of the relationship between Nostalgia and Intention to watch a series, with Affective needs as the mediator variable and found significant mediation ( $B = 0.330; 95\% CI = [0.0019; 0.7613]$ ).

## **Appendix 16: Data preparation**

Before testing our hypothesis, we coded the data and assessed our manipulation checks. First, we created three extra variables to track the survey version each data line corresponded to. The variable Nostalgia identifies whether a response was related to the treatment group – receiving the Nostalgia manipulation – or the control group – asked to reflect about an ordinary event. The Nostalgia Treatment group was attributed the value 1 and the control group was assigned the value 0. We conducted a similar procedure for the variables Social Setting and Context Order. We attributed the value 1 to the variable Social Setting when the entry corresponded to the treatment group – respondents told they would watch the movie in the company of friends. The value 0 was assigned to the control group (watching the movie alone). Similarly, we

assigned the value 1 to the variable Context Order when the Cinema Context was presented first and the Streaming Context second; the value 0 corresponds to the reverse order. For study 2, we assigned the value 1 to the variable Product Order when series was presented first and movies second; the value 0 corresponds to the reverse order.

## **Appendix 17: Effect of Control Variables (Study 1)**

We also analysed the degree to which familiarity with the platforms, frequency of use, and the influence of price in the decision to take part in an activity (Price Control), influence our dependent variables – Inspiration, Intention, and Willingness to Pay, for each context. We reached our conclusions by running a series of linear regressions.

Starting with the Cinema Context, we verified that our Price Control marginally influenced Inspiration ( $B = .130$ ;  $t(141) = 1.735$ ;  $p = .085$ ), and Willingness to Pay ( $B = -.35$ ;  $t(140) = -1.727$ ;  $p = .086$ ), while having no significant effect on Intention ( $B = -.11$ ;  $t(141) = -1.235$ ;  $p = .219$ ). Inversely, the frequency which respondents go to the cinema had a positive and significant effect on Intention ( $B = .299$ ;  $t(142) = 3.434$ ;  $p < .001$ ), while having no effect on Inspiration ( $B = .025$ ;  $t(142) = 0.318$ ;  $p = .751$ ) or Willingness to Pay ( $B = .025$ ;  $t(141) = 0.121$ ;  $p = .904$ ). Next, we found that Familiarity with cinema had a positive and significant effect on all three variables: Inspiration ( $B = .192$ ;  $t(142) = 2.298$ ;  $p = .023$ ), Intention ( $B = .325$ ;  $t(142) = 3.385$ ;  $p < .001$ ), and Willingness to Pay ( $B = .461$ ;  $t(141) = 2.013$ ;  $p = .046$ ).

Next, we did the same tests for the Streaming Context, finding that our Price Control had no effect on Intention ( $B = .083$ ;  $t(141) = 1.086$ ;  $p = .280$ ) or Inspiration ( $B = .035$ ;  $t(141) = 0.532$ ;  $p = .596$ ). However, it had a significant negative effect on Willingness to Pay ( $B = -.422$ ;  $t(140) = -2.132$ ;  $p = .035$ ). Next, familiarity had no effect on Inspiration ( $B = .048$ ;  $t(141) = 0.687$ ;  $p = .493$ ), Intention ( $B = .098$ ;  $t(141) = 1.220$ ;  $p = .225$ ), or Willingness to Pay ( $B = .219$ ;  $t(140) = 1.046$ ;  $p = .298$ ). Frequency did not significantly influence Inspiration ( $B = .014$ ;  $t(141) = 0.242$ ;  $p = .809$ ), or Willingness to Pay ( $B = .201$ ;  $t(140) = 1.178$ ;  $p = .241$ ), while having a significant positive effect on Intention ( $B = .195$ ;  $t(141) = 3.085$ ;  $p = .002$ ).

Thus, we find that the degree to which price influences consumers' decisions has a negative impact on Willingness to Pay for the Streaming Context. Additionally, frequency positively influences Intention for both the Cinema Context and the Streaming Context. Lastly, familiarity was only significant for the Cinema Context, having a positive impact on all three variables. The lack of an impact of Familiarity on the Streaming Context might be related with the average age of our sample, given that the young adult population is particularly familiar with streaming.

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