

THE NEW INFLUENCER MARKETING ON TWITCH

TOWARDS A MODEL FOR PURCHASE INTENTION OF SKINS

Wetenschappelijk artikel

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Javad Kashefi

Stamnummer: 01800114

Promotor: dr. Hayley Pearce

Commissaris: Barbara Behre

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Abstract

The gaming industry has been on the rise during the past years, and this growth is predicted to continue at faster rates. Due to this popularity, the financial and social importance of the gaming industry and how different genres of games are marketed continue to increase in relevance. Especially the games that are made available free of charge but appear to have the largest profits. Yet, the academic research seems to be lagging in studying and even defining the marketing methods used in this context. In this paper, we will elaborate on how these games operate, how they monetise their playerbase, why players buy in-game goods such as skins, and what marketing techniques are employed by the game developers to increase the sale of in-game goods. Additionally, a research model is proposed and tested using a survey based on the peripheral route within the framework of the elaboration likelihood model to study the decision-making process of the players exposed to *League of Legends* partnered Twitch streamers regarding their purchase intention of skins. The collected data were subsequently analysed using structural equation modelling. The findings indicated that the parasocial relationship between the streamer and viewer is the main factor contributing to purchase intention within the proposed model. Finally, shortcomings and possibilities for further research are discussed.

Introduction

As the gaming industry continues to grow at a staggering rate worldwide with a projected value of 200 billion US dollars by 2023, so does its impact on the global economy (Newzoo, 2020; Statista, 2021d). This makes studying and researching the gaming industry important in the context of an increasingly global civilization to understand this growth and what drives it. One crucial catalyst for this growth has been the rise of free-to-play games; These are – as the name suggests – initially free to play but make their revenue through the sale of in-game goods (Alha et al., 2014). This genre features a PC gaming segment that generates an approximate yearly revenue of 20 billion US dollars (Statista, 2021b; SuperData,2021). This is mostly made possible by the wildly popular games such as League of Legends and Counter-Strike: Global Offensive (Sandqvist & Lilljegen, 2016). Therefore, this paper will primarily focus on the former, League of Legends, as a case study to investigate virtual consumer behaviour.

Although the abovementioned games are free to play, they succeed in generating substantial amounts of revenue with League of Legends surpassing the one billion US dollars mark in 2020 (SuperData, 2021). All this is made possible with the use of microtransactions. Microtransactions take the form of various small virtual items such as character skins that one can buy in-game, thus providing these gamers with virtual goods. Examples of these goods can be a virtual currency, additional content or, in most cases regarding PC games, aesthetic changes, i.e., skins (Alha et al., 2016).

An additional factor that must be accounted for in the success of these games is the presence of an active online community, both on different forum sites such as Reddit and video sharing/streaming platforms such as YouTube and Twitch. Here, numerous content creators contribute to an already substantial body of work in which gameplay and commentary videos of these games are widely present. This could also be a driving factor in the success of these games (Chuang, 2020). The use of these content creators could be similar to how brands use traditional marketing to attract customers using tactics such as influencer marketing and product placement (Wu, 2016).

Some of these games, such as League of Legends, provide relatively popular content creators with partner programs in which paid elements of the game such as skins are made available to them for free. These skins can be defined as visual modifications to in-game character models which alter their appearance (Mertens, 2017). These partner programs are potentially set up to increase the reach and awareness of these paid items to eventually drive up their sales and revenues (Riot Games, 2020). The decision-making process of

viewers when exposed to such marketing tactics should be studied to bring attention to its implications. Although there already exists a great body of academic literature surrounding in-game purchases, this literature is generally focused on loot boxes and their possible relation to gambling (Zendle & Cairns, 2018).

At this point, the academic sphere lacks literature acknowledging these marketing strategies. Therefore, more studies should be conducted to provide a greater understanding of what their possible effects are on the consumption behaviour of gamers. Moreover, such academically relevant investigations may also have societal relevance, given the omnipresence of gaming in our current society, not only among youngsters but also in growing numbers among adults (Statista, 2021a), and practical relevance as these investigations deal with potential marketing strategies regarding virtual consumer behaviour which could be of use to marketers.

The primary goals of this paper are then to bring academic awareness to the existence of marketing strategies using gaming content creators and secondly to propose a model to better understand the decision-making process of gamers exposed to LPP streamers.

In the following pages, we will be discussing free-to-play games and the in-game goods with an emphasis on skins as they are most prominent in these games. Furthermore, the online communities and the video-sharing/streaming websites will be addressed to provide the context needed to understand the significance of the content creators on these websites. Also, concepts such as parasocial relationships and parasocial interaction will be discussed to better understand the relationship between influencers and their audience. Additionally, the marketing techniques used by free-to-play games will be analysed. Finally, a research model based on the elaboration likelihood model will be proposed and studied to better understand the decision-making process of the players exposed to LPP streamers regarding their purchase intention of skins.

Literature review

Free-to-play games

Free-to-play (F2P) games or freemium games describe an emerging category of digital games that are increasingly used by developers because of the global success that they have booked during the past years. The name refers to the business model utilized to generate revenue. A F2P game is made available to all players, free of charge but generates revenue by either having advertisements (which is mostly the case with mobile F2P games) or by selling in-game items (Alha et al., 2016; Hamari et al., 2017).

The challenge for the game developers lies in monetising these games and making them profitable. The gamers need to be convinced of the extra value that these paid items provide, for them to consider buying such things in an otherwise free game (Hamari & Keronen, 2016). Thus, F2P games such as League of Legends generate their revenue through the sale of paid visual customizations known as 'skins'. These skins do not change the nature of the game itself or provide an inherent advantage to their owner, but they do offer considerable value to the player. They provide the possibility of self-presentation within the game by enabling the players to express and differentiate themselves from others. Additionally, these skins offer hedonic value due to their pleasing and unique aesthetic (Kordyaka & Hribersek, 2019).

In-game purchases

As mentioned before, due to the nature of free-to-play games, only acquiring players does not generate any revenue for the developers unless they purchase in-game items. Therefore, although these games are playable without spending any money, players are encouraged to do so. These items can be divided into two main categories: functional and hedonic or aesthetic items. Functional items increase the player's chances of success, but this is perceived negatively by many players as it makes a game 'pay-to-win'. For example, this can be an item that increases the in-game character's damage. Hedonic or aesthetic items, however, are purely visual alterations to elements of the game and do not bear any apparent advantage. Skins are a prime example of such items, utilized in most F2P games such as League of Legends (Millar, 2017; Reikki, 2016 Wang et al., 2020).

Why buy virtual games

Looking at the games mentioned above and how they are financially structured, it is clear that there is a rich supply of virtual goods – such as skins – to be bought by their players. Therefore, it is important to establish what the motivating factors are in purchasing such seemingly ‘useless’ products. The current literature suggests three main factors; game design (Hamari & Keronen, 2017; Lehdonvirta, 2009), player enjoyment (Alha et al. 2014) and social aspects of the game (Fan, 2019; Kordyaka & Hribersek, 2019; Mäntymäki et al., 2014; Millar, 2017).

In a meta-analysis of 30 research papers concerning the consumption of virtual goods, Hamari and Keronen (2017) found the consumption of virtual goods to be highly dependent on the specific platform, i.e., the game. It is the main design of the platform or game itself that encourages and motivates players to buy these goods. The game developers essentially create a simulated economy in which they control many aspects like price or exclusivity. It is through this virtual economy that goods are created and given a certain value chosen by the game developers. Value is essentially created out of nothing due to certain choices. However, one must spend ‘real’ money to participate in this economy (Lehdonvirta, 2009).

Additionally, player enjoyment of the core product should also be considered as another main attracting factor. If users are not satisfied with the main product, which is the game itself, they will not be interested in the further investment of their money into it, such as buying skins and expanding their collection. Therefore, the developers should prioritize the quality of the game to attract and sustain an active playerbase (Alha et al. 2014). This player enjoyment could also be seen in the broader context of the game, specifically the effects of media enjoyment when consuming media related to the game. The experienced viewing enjoyment of a game could potentially influence the consumption of virtual goods shown within the game, for example, skins used by the content creators (Wulf et al., 2021).

Finally, social aspects also play an important role in the purchase decision-making process. Examples of these social aspects are the player’s network size, self-presentation needs, subjective norms and social presence (Kordyaka & Hribersek, 2019; Mäntymäki et al., 2014). This was confirmed by the findings of Millar (2017) which identified the social motivators as one of two main motivating factors for the purchase intention of skins, specifically in F2P games such as League of Legends. The same was later confirmed once more by Fan (2019) who identified praise – which is comparable to the previously mentioned social motivators of Millar (2017) – as a possible predictor of purchase intention

of skins in F2P games. Furthermore, both Millar (2017) and Fan (2019) mention the severe lack of academic research surrounding the topic of in-game purchases in F2P games despite its significance and the need for further exploration to have a better understanding of the subject.

It is important to note that there seems to be little consensus in the literature regarding the most suitable theoretical framework for studying the purchase intention and behaviour of gamers (Fan, 2019; Hamari & Keronen, 2017; Millar, 2017). Thus, exploration of new and underutilised theoretical frameworks should be encouraged to pursue one that satisfies most researchers.

Marketing strategies

Even though there is some academic attention paid to the business model and revenue streams of free-to-play games, academic research regarding the marketing strategies used by the game developers, especially those of F2P games seem to be scarce. Hardly any academic research has been conducted to explore the possible strategies used by game developers to push their virtual items and encourage players to buy them. Nevertheless, two main tools can be considered: the use of esports and the use of content creators.

Esports

Hamari and Sjöblom (2017) describe esports as “a form of sports where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams as well as the output of the esports system are mediated by human-computer interfaces.” (p. 211). It can be more simply described as organised competition activities between teams or individuals to be the best at a certain game and ultimately win the prize, which in some cases can be millions of dollars (Hallmann & Giel, 2017). As the leagues are ultimately controlled by the game developers – unlike physical sports – attention towards the esports means attention towards their game. The existence of these esports leagues could be seen as an enormous and continuously ongoing marketing campaign to gather attention and interest in the game. As with most free-to-play games such as League of Legends, player retention is one of the most important goals to have a large and stable enough playerbase that can be monetised using in-game items such as skins. Thus, player retention is one of the main reasons for the existence of esports leagues, which are utilized by game developers to not only retain the current players but also to attract new ones (Davidovici, 2017).

Using esports and tying it in with the next strategy – Twitch and content creators – creates a large community of players who are invested in the game, which can potentially increase their purchase intention of in-game items such as skins (Alha et al. 2014; Davidovici, 2017; Hamari & Keronen, 2017).

Twitch and streamers

Twitch is the largest streaming platform for video games on which esports events and content creators essentially share their game screen and commentary to provide a form of live entertainment for their viewers. Viewers can also chat among themselves or with the streamer, follow them or replay recordings of previous livestreams (Deng et al., 2015; Gerber, 2017). In turn, most streamers receive monetary donations and subscriptions from the viewers, directly through Twitch, as their main source of income (Tang & Huang, 2019). The streaming platform has known unprecedented growth in the past few years. In August 2014, a peak of 934,000 simultaneous viewers was reported (Deng et al., 2015). In May 2021, the average number of viewers on the platform reached a high of 3,000,000 (Statista, 2021c).

This increasing popularity brings about several implications due to the open and free nature of Twitch as a content creation and distribution platform.

On the one hand, Twitch serves as an enabler for esports by providing a popular platform for game developers to easily distribute their content to millions of viewers. By doing so they are reaching their (potential) playerbase and providing them with free entertainment which could keep them satisfied with the game and keep it relevant in the minds of the players. This could be seen as an indirect form of marketing as mentioned before, whereby game developers invest money in free entertainment for the players to keep them satisfied with the game and therefore indirectly try to positively influence their purchase intentions (Burroughs & Rama, 2015; Davidovici, 2017; Deng et al., 2015; Hamari & Keronen, 2017). Due to such great reach and value provided, Twitch itself has become a valuable asset in the gaming industry. This is reflected in the purchase of Twitch by Amazon in 2014 with a reported price of 970 million dollars (Kim, 2014).

On the other hand, thanks to Twitch's popularity, anyone can easily create relatively high-quality content, distribute it to a large audience, monetise their interest by using donations and subscriptions and potentially have an impact on those viewers' perception of the game being played. Therefore, the game developers lose much of their control over how the game is portrayed to players. This democratization of content creation and consumption brings about 'influencers' who potentially possess a significant amount of influence over

their followers. This reshapes the gaming industry in a way that forces game developers to react, either by embracing the changes and using them as an additional marketing tool or by trying to resist the changes which could potentially harm their image (Johnson & Woodcock, 2019).

To understand how these gaming influencers potentially have an impact on their audience's purchase intention of in-game items such as skins, we must define what makes someone an influencer, how we distinguish them in a gaming context and how they are used to monetise free-to-play games.

Influencers

Due to the relatively recent rise of influencers and influencer marketing, a clear-cut definition of these concepts is hard to come by. The most frequently used definition of an influencer was formulated by Brown and Hayes (2008) "A third-party who significantly shapes the customer's purchasing decision, but may ever be accountable for it." (p. 50). A rather general definition written before the surge of online influencers and the rise of social media platforms such as Instagram or Twitch (Johansen & Guldvik, 2017). As the name itself suggests, influencers are individuals who have a certain amount of influence over a substantial group of people. Due to their popularity, brands use these individuals' influence to positively alter their audience's attitude and by extension their purchase intention towards their products. In return, the brand provides the influencer with free products, money, or other rewards (Coco & Eckert, 2020; Kádeková & Holienčinová, 2018). Celebrities such as movie stars or athletes can be seen as an early example of this and a predecessor of the online influencers who seemingly rise to fame out of nowhere (Backaler, 2018).

The concept of an influencer could also be linked with that of an opinion leader. However, some authors argue that they should be considered as two different concepts, with an opinion leader being the more influential one of the two concepts (Arrami et al., 2018). Others argue that an influencer is also an opinion leader by definition. By contextualizing the term in a specific domain, such as gaming in our case, both terms come to the same meaning (Bamakan et al., 2019).

Parasocial relationship

Another important concept regarding influencers that needs consideration is the parasocial relationship between the influencer and their followers. Parasocial relationships can be compared to day-to-day friendships, as they also form due to the inherent nature of humans to form connections with others. The difference between parasocial relationships and ordinary friendships lies in the fact that the former is generally one-sided. The follower or viewer forms a connection with the influencer and sees the influencer's behaviour regularly but the same cannot be said for the influencer (Bond, 2016; Breves et al., 2021). These parasocial relationships are further strengthened by platforms like Twitch due to the immediate nature of the platform and the ability to instantly react to viewers. The interaction of streamers with their chat and how they are addressed can positively influence the experience of parasocial interaction between both parties. This further increases the impact that the influencer may have on the viewers and their behaviour (Leith, 2021; Wulf et al., 2021).

In a persuasion context where the goal is to sway the intentions of an actor, various authors have identified parasocial relationships as a key influencing factor of purchase intention (Chung & Cho, 2017; Lou & Yuan, 2019; Masuda et al., 2022). As mentioned, this is reinforced by the ability of viewers to immediately comment on the influencer's actions. However, many of these chat messages are simply ignored by the influencer, especially in the case of more popular streamers, due to the continuous barrage of chat messages. And so, this form of non-reciprocal communication becomes a form of parasocial interaction, essentially an extension of the parasocial relationship. Although the viewer often does not receive a response to their comment, they do experience a form of perceived self-disclosure. Self-disclosure can be crudely defined as the communication of personal information about oneself to another person, which in turn contributes to the development of interpersonal relationships (Cozby, 1973; Taylor et al., 1981). However, in the case of Twitch chat messages, the perception of self-disclosure alone can also contribute to the parasocial relationship between the viewer and streamer (Chung & Cho, 2017).

It is noteworthy to say that more interaction with the chat by the streamer does seem to increase the perceived experience of parasocial interaction by the viewer. Nevertheless, besides individual interaction with messages which has the largest effect on parasocial interaction, both collective and no addressing of the messages also do elicit the perceived experience of parasocial interaction. Showing that even an influencer not engaged with their audience still does, although less, benefit from the abovementioned advantages of parasocial interaction (Wulf et al., 2021).

When applying the abovementioned insights to the context of influencer marketing, the literature suggests that parasocial relationship has a positive influence on the trustworthiness of influencers advertising a product such as skins (Chung & Cho, 2017; Lou & Kim, 2019). Source trustworthiness can be seen as an attribute of the streamer, which describes the likelihood of them displaying any form of expected behaviour. This would be the truthful disclosure of information about a certain product in the context of advertisement (Bauer, 2019). In turn, source trustworthiness positively influences the purchase intention of skins for example, which would be the goal of game developers (Chung & Cho, 2017; Lou & Kim, 2019).

Influencer marketing

The same theoretical problems regarding the concept of influencers apply to influencer marketing. Although influencer marketing has gathered significant attention from researchers, a clear overview of the concept, an agreed-upon definition and consensus regarding its effects are yet to be found (Taylor, 2020). However, being a marketing technique based on the interaction between actors, connections have been made between influencer marketing and word-of-mouth marketing due to their certain similar qualities such as the use of a third party for marketing and its less formal approach to the customers (Bakker, 2018). The main difference between the two is that influencer marketing exists mostly in the digital context and can be transmitted from one actor (the influencer) to many actors (the customers). In this sense, influencer marketing can be more closely related to the concept of e-WOM (electronic word-of-mouth) whereby the communication about the product takes place on the internet without direct and face-to-face contact (Gupta & Harris, 2010). Influencer marketing also bypasses the need to use established media such as TV and radio which lowers cost and increases the efficiency of the marketing technique. Therefore, influencer marketing can be described as word-of-mouth 2.0, due to its greater reach and higher efficiency in terms of money spent (Backaler, 2018; Kádeková & Holienčinová, 2018).

Product placement

Product placement is a more established marketing technique used by companies to incorporate their brand or products into entertainment content that is not mainly focused on the promotion of the brand or product. Its use has been increasing steadily over the past decades and so have the budgets invested in it (Karr et al., 2003). Winkler and Buckner (2006) describe product placement in the context of gaming as “the positioning of images of a brand or product in an entertainment medium such as an online game.” (p. 24).

This technique can be effectively used to achieve several marketing goals such as exposing the audience to a brand or its products, increasing brand awareness, increasing customer-brand (or product) memory and recall just to name a few (Williams et al., 2011).

Product placement itself can be further divided into three main categories (d’Astous, A & Séguin, 1999):

Implicit product placement: The brand or product is shown but not discussed or focused on in the content.

Integrated explicit: The brand or product plays an explicit role and is relatively focused on in the content.

Non-integrated explicit: The brand or product is mentioned or shown before or after the content, similar to sponsoring.

Additionally, parallels can be drawn between the use of product placement in games and the concept of stealth marketing. Stealth marketing can essentially be seen as a form of ‘low-observable’ advertising whereby the targeted consumers are not (entirely) aware of being subjected to advertisement (Roy & Chattopadhyay, 2010). Kaikati and Kaikati (2004) even went as far as categorizing all marketing within video games as stealth marketing.

Who is an influencer?

We have described above, what constitutes an influencer and how an influencer is used by brands to promote products, but it is still unclear how and when an individual transforms from being an ordinary person with limited influence over others to an influencer. There seems to be little academical effort done to make such a distinction, but Campbell and Farrell (2020) have made some preliminary steps toward the categorisation of influencers regarding their reach based on insights from industry sources.

They divide social media influencers into five different categories as shown in Figure 1. Each category resembles a type of influencer with an increasing number of followers. The higher the follower count, the higher the perceived expertise and cultural capital of the influencer, but also the lower the accessibility and (perceived) authenticity of the influencer. This means that each category comes with its distinct (dis)advantages.

Nano-influencers are typically smaller influencers with a maximum of 10,000 followers. Due to their relatively small audience, their followers usually perceive them as more authentic compared to the larger influencers (Campbell & Farrell, 2020). When looking at the context of Twitch streamers, these nano-influencers or streamers can pay more attention to their audience and chat messages which can positively influence the parasocial relationship experienced by their viewers with its subsequent advantages regarding advertising (Chung & Cho, 2017; Wulf et al., 2021).

Micro-influencers are one degree 'bigger' with follower counts between 10,000 and 100,000. Still, due to their relatively small audience, they are often seen as more authentic and accessible when compared to more popular influencers (Campbell & Farrell, 2020).

Macro-influencers can be seen as successful influencers with follower counts between 100,000 and 1,000,000. Although this reach has its advantages of high cultural capital and perceived expertise, it also diminishes their perceived authenticity and accessibility to the viewer (Campbell & Farrell, 2020).

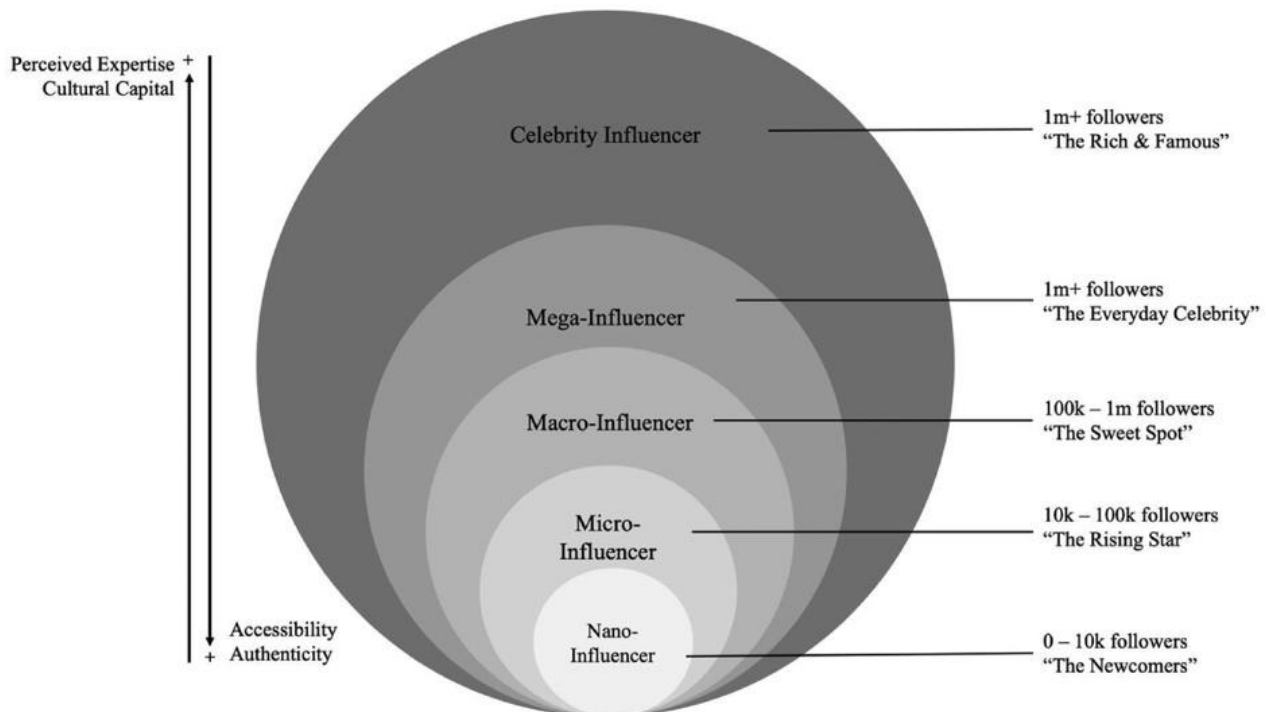
Mega-influencers are usually perceived as experts within their field, often with more than 1,000,000 followers and significant influence within their specific context. But due to their 'fame', viewers generally perceive them as the least accessible and authentic type of influencer (Campbell & Farrell, 2020). In the case of Twitch streamers, this large reach results in more viewers during streams which makes it harder to actively respond to all chat messages which could potentially lower the perceived parasocial relationship (Chung & Cho, 2017; Wulf et al., 2021).

Celebrity influencers are left outside of the reach of this study because they are seen as mainstream celebrities who frequently appear in traditional media such as TV which is not often the case with gaming streamers.

This categorisation of influencers will also be used in our research to make a distinction between different streamers, regarding their reach and perception.

Figure 1

Types of social media influencers



To summarise, game developers can use implicit product placement as a main marketing technique to incorporate their products, such as skins, into the streams of Twitch streamers. By doing so, they benefit from the unique features of each streamer. This can be their different levels of reach, providing the game developers with various advantages and disadvantages in terms of advertising as discussed above. (Campbell & Farrell, 2020). In addition, game developers can also benefit from the parasocial relationship between streamers and their viewers, which could positively influence the purchase intention of the advertised skins (Chung & Cho, 2017; Lou & Kim, 2019). Furthermore, the subtle nature of this marketing technique could also benefit the game developers due to the low advertisement awareness of the Twitch viewers (Kaikati & Kaikati, 2004; Roy & Chattopadhyay, 2010).

Influencers on twitch

We have illustrated above that a distinction between an influencer and a non-influencer can be challenging, especially in a theoretical sense. Campbell and Farrell (2020) pointed out that such a distinction should ideally be based on the brand and its specific needs. In the case of many brands, such decision processes are not made transparent. But fortunately, the *League of Legends* partner program (LPP), which can essentially be seen as a form of influencer marketing using product placement, has a clear set of inclusion criteria. The following are the minimum requirement (Riot games, 2020):

- At least 30% of content needs to be a mix of these games (*these games being League of Legends, Teamfight Tactics, or Legends of Runeterra, games owned by Tencent, the parent company of League of Legends*).
- Minimum 50+ average concurrent viewers on your livestreams from the last 30 days and/or 5,000 average views on your video content in the past 30 days or at least 1,000 YouTube subscribers
- Must be at least 16 years of age.
- Must adhere to our behaviour expectations.
- Must sign a Non-Disclosure Agreement.

Once a content creator meets these requirements and agrees to the contract, they are essentially an influencer for *League of Legends* promoting their brand and products. Some perks of the LPP are the official promotion of the influencer on the *League of Legends* social media, exclusive items to giveaway to their audience, additional sponsor collaboration opportunities and much more. Yet, there seems to be no mention of an obligation for the influencers to indicate this partnership status to their viewers (Riot games, 2020).

Theoretical framework and research hypotheses

Theory of persuasion and the elaboration likelihood model

When studying concepts related to the persuasion of actors, in our case gamers, one of the evident theoretical frameworks is that of the theory of persuasion. It is through the persuasion or convincing of the actors that brands try to increase the sale of their products. This could be achieved using different techniques involving numerous arguments focused on various aspects of one's product (Funkhouser & Parker, 1999; O'Keefe, 2015). For example, in the case of a car, one's persuasion efforts could be focused on objective parameters and features such as the horsepower or efficiency of the car's engine to convince the potential buyer of their products through objective superiority. This however is not always possible nor advisable. Not all decisions are made through reason and objective consideration of facts. This is because humans do not always make decisions as purely logical actors, especially in the case of less utilitarian products (Erwin, 2001; Gardikiotis & Crano, 2015).

Because of this complicated reality and the multifaceted decision-making processes of individuals, it seems more reasonable to use an approach that tries to explain these processes on a more subliminal and cognitive level. Therefore, when studying the decision-making process of buying skins, utilising the elaboration likelihood model seems fitting. It is one of the most popular and proven conceptual frameworks to understand and describe the persuasion process (El Hedhli & Zourrig, 2022). Yet, it has been underutilised when studying the purchase intention of virtual goods such as skins. Additionally, the lack of consensus among researchers regarding the preferred conceptual framework to study this subject warrants the exploration and utilisation of new frameworks (Hamari & Keronen, 2017).

The elaboration likelihood model tries to explain why people do not always make the purely logical choice, for example, when voting or buying products. This model argues that an actor processes information regarding a decision in one of two ways. If one is particularly invested in something and has a lot of energy, attention, and effort to spare, they will use the central route of information processing (O'Keefe, 2015; Petty & Cacioppo, 1986). Here information is taken in, carefully deliberated, and compared to other options. Therefore, one makes an informed and convinced decision which potentially leads to a longer-term attitude or behaviour change.

On the other hand, when the actor is not particularly interested in the subject, when the product holds more of a hedonic value or when the actor is not prepared to invest a time or energy into information processing regarding a product, the decision-making path changes to the peripheral route (Petty & Cacioppo, 1986). The actor will spend less energy processing specific and objective information and instead takes cognitive shortcuts by focusing on heuristics and surface-level information. Since this decision-making process is less deliberated and grounded in thoughtful consideration, its possible changes in attitude and behaviour are usually less long-term and subject to change more easily (Gardikiotis & Crano, 2015; O'Keefe, 2015).

When looking at skins in the context of this study, we can reasonably argue that due to the cosmetic and hedonic nature of the products and their low effect on the game and gamers' performance, an actor would use the peripheral route when processing information about them. Also, the fact the marketing technique itself, product placement using influencers, is mixed in with the entertainment content leaves less cognitive ability for the gamer to focus on the persuasive message being received, contributing to the assumption that the peripheral route would be used (Donohew et al., 1988).

When using this peripheral route for the decision-making process, the deciding factor is no longer the product's objective information, but the focus instead shifts to easier process shortcuts or heuristic principles. These heuristics are mostly based on surface-level information regarding the source of the message, e.g., the perception of a specific LPP streamer. O'Keefe (2015) makes a distinction between three types of heuristic principles:

Credibility heuristic: Academic literature has shown that credibility has a significant impact on persuasive outcomes when elaboration likelihood is relatively low. This heuristic has to do with whether the viewer perceives the source as a trustworthy source of information (Chaiken & Maheswaran, 1994; Metzger & Flanagin, 2013). For example, whether a viewer believes the information that a Twitch streamer is conveying.

Liking heuristic: The liking heuristic is based on the fact that liked sources of information are much more preferred over disliked sources of information. This effect is especially true and increases when the elaboration likelihood is low (Roskos-Ewoldsen & Fazio, 1992; Sinclair et al., 2010). This could for example mean that more liked streamers would possess a higher persuasive power in a low elaboration likelihood context.

Consensus heuristic: This heuristic revolves around the reaction of the other. If others agree with the persuasive message, then it must be true. In this case, the decision is externalized to make the decision-making process easier when elaboration likelihood is low (Darke et al., 1998; Martin et al., 2007).

It should be clear that the last heuristic is more applicable when the decision-making actor is in direct contact with others during both the exposure to the persuasive message and the decision-making process. This is however not usually the case with platforms like Twitch, which are predominantly watched alone. Therefore, it will not be taken into consideration in our research.

These heuristics on their own, are not easily applicable to research and should be further operationalized. The liking heuristic can be operationalized using the previously discussed concept of parasocial relationship (PSR). Although liking and PSR are not the same concept, it is relatively safe to assume that PSR can be used as a liking heuristic. It is arguably a more nuanced approach to the concept of liking because it encompasses the relationship between the influencer and the viewer in a mediated context (Kreissl et al., 2021; Schmid & Klimmt, 2011). Multiple studies have also indicated PSR as an important factor contributing to purchase intention in the context of influencer marketing (Chung & Cho, 2017; Lou & Yuan, 2019; Masuda et al., 2022; Sokolova & Kefi, 2020). Therefore, it is reasonable to hypothesize that:

H1: The parasocial relationship with a streamer positively influences the purchase intention of promoted skins

The credibility heuristic should also be operationalized using proven concepts from the literature. In this case, trustworthiness and expertise have been widely accepted concepts adopted from the Ohanian model of source credibility which focuses on the source characteristics (Abdullah et al., 2020; Corina, 2006; Ohanian, 1990), similar to the peripheral decision-making path in the ELM.

Trustworthiness has been studied as one of the main components of source credibility (Hovland et al., 1953) and it can be described as the degree to which the viewers believe the information coming from the influencer to be true (Sternthal et al., 1978). Its significant positive effect on purchase intention in the context of influencer marketing has been shown by various researchers in the literature (Chung & Cho, 2017; Ismagilova et al., 2020; Lou & Yuan, 2019; Masuda et al., 2022; Pornpitakpan, 2004; Wang & Scheinbaum, 2017). Therefore, it should also be incorporated into our research model. We hypothesize that:

H2: Trustworthiness of the influencer positively influences the purchase intention of promoted skins

Perceived expertise is another dimension of credibility that has been widely accepted as a main contributing component of credibility (Hovland et al., 1953). The perceived expertise of an influencer can be described as their perceived knowledge, skill or understanding of a certain topic. Higher expertise would suggest that the influencer's message is correct, due to their knowledge of the subject matter (Sternthal et al., 1978). Perceived expertise is often studied together with trustworthiness to form a better picture of the source credibility and, as is the case with trustworthiness, expertise has also been shown to positively influence the purchase intention (AlFarraj et al., 2021; Chung & Cho, 2017; Ismagilova et al., 2020; Lou & Yuan, 2019; Masuda et al., 2022; Pornpitakpan, 2004; Wang & Scheinbaum, 2017). It is noteworthy to say that the importance of the concept expertise could potentially be elevated due to the predominantly skill focussed nature of *League of Legends*. Therefore, we hypothesize that:

H3: Perceived Expertise of the influencer positively influences the purchase intention of promoted skins

According to ELM, the abovementioned heuristics are based on cues which themselves are based on attributes of the influencer (O'Keefe, 2015; Petty & Cacioppo, 1986). Although it is often only the personal attributes of the influencer that are considered as cues, it is also of interest to study the content/platform level indicators which contribute to those heuristics.

Parasocial interaction with the influencer can also be seen as an important factor when studying the relationships between an influencer and their viewers. Horton and Wohl (1956) initially described the concept as the imaginary interaction of people with media personae. However, they used the terms parasocial interaction and parasocial relationship interchangeably, but more recent research has indicated that the two terms should be seen as different concepts (Giles, 2002; McLaughlin & Wohn, 2021). Furthermore, the literature suggests that parasocial interaction with influencers, specifically in the context of Twitch, significantly contributes to parasocial relationship (McLaughlin & Wohn, 2021). Therefore, we hypothesize that:

H4: Parasocial interaction with the influencer positively influences the parasocial relationship with the influencer

Media enjoyment is another influencer-content related factor that potentially contributes to the experience of parasocial relationship. Media enjoyment can be simply defined as the

pleasure or satisfaction experienced from the consumption or use of certain media (Tamborini et al., 2010; Vorderer et al., 2004). This should be seen as a relatively important factor in mediated platforms and has a significant influence on the experience of the parasocial relationship with the influencer (Wulf et al., 2018). Therefore, we hypothesize that:

H5: Media enjoyment positively influences the parasocial relationship with the influencer

Physical attractiveness has been repeatedly studied in the context of persuasive communication and its positive effect on the credibility of the source has been proven (Joseph, 1982). The same effect has also been studied in the context of livestreaming on Twitch and the positive influence seems comparable (Hansen & Doodoo, 2021). Physical attractiveness has also been researched with parasocial relationship, but the results are somewhat contradictory (Hansen & Doodoo, 2021; Masuda et al., 2022; Sokolova & Kefi, 2020). Nevertheless, the possible effect of physical attractiveness on parasocial relationship could be of interest. Therefore, we hypothesize that:

H6a: Physical attractiveness positively influences the perceived expertise

H6b: Physical attractiveness positively influences the perceived trustworthiness

H6c: Physical attractiveness positively influences the parasocial relationship with the influencer

Attractiveness is generally seen as one concept and studied as such, but research suggests that a distinction should be made between its physical and social aspects (Masuda et al., 2022; Rubin & Step, 2000). Consequently, the concept of social attractiveness specifically has been incorporated in studies and its positive effect on both source credibility and parasocial relationships has been indicated. It should also be noted that several studies found social attractiveness to be more important than physical attractiveness (Hansen & Doodoo, 2021; Masuda et al., 2022; Rubin & Step, 2000; Schmid & Klimmt, 2011; Sokolova & Kefi, 2020). Therefore, we hypothesize that:

H7a: Social attractiveness positively influences the perceived expertise

H7b: Social attractiveness positively influences the perceived trustworthiness

H7c: Social attractiveness positively influences the parasocial relationship with the influencer

Methods

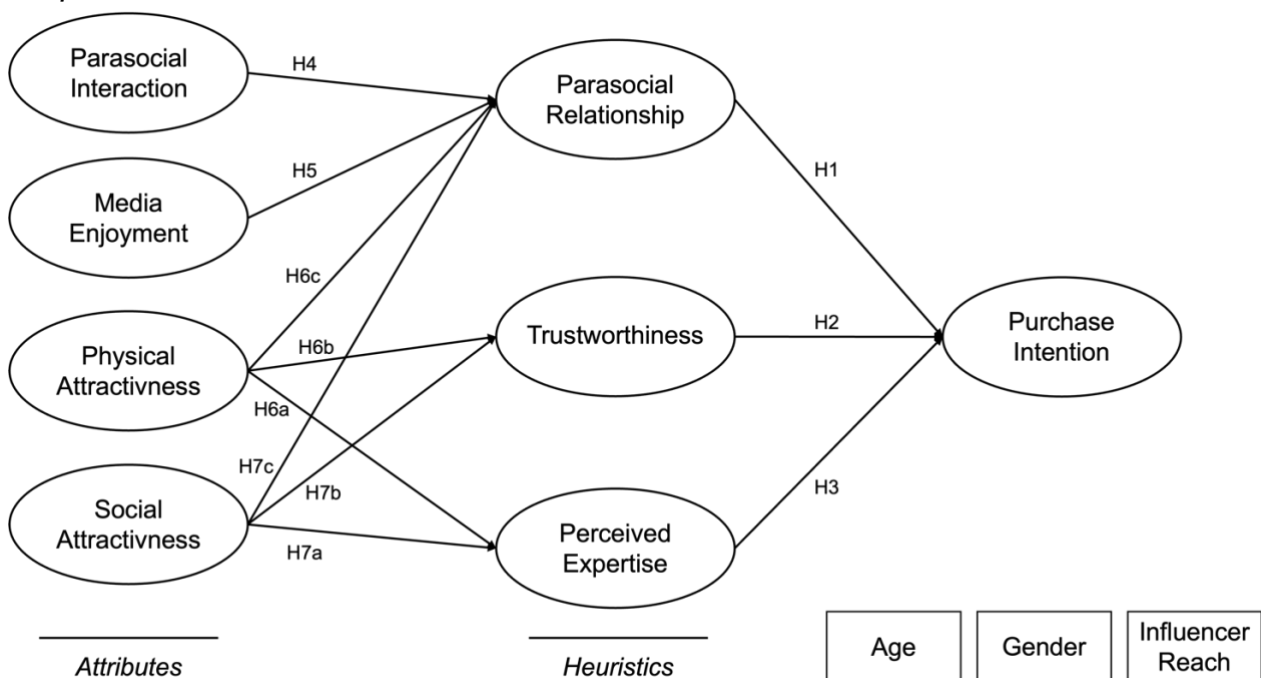
Research model

As explained above, this paper will study the purchase intention of gamers who regularly watch LPP Twitch streamers, by exploring and studying the factors contributing to their decision-making process. This will be based on the peripheral route of the elaboration likelihood model and assumes that the viewers are in a low elaboration state when being exposed to the 'low-observable' form of product placement of skins when watching LPP streamers. Combining the hypotheses formulated in the previous chapter, we arrive at the model below (Figure 2). According to the peripheral route of ELM, consumers in a low elaboration state base their decision-making on heuristics which are in turn based on various attributes of the source. The same distinction has been made in the model below whereby attributes of the streamer, fuel the heuristics on which viewers base their purchase intention of skins. Additionally, three control variables are included in the model. These are the common control variables of age and gender but also the influencer reach/popularity which might have some influence on various factors.

To reiterate, the goal of this paper is to first bring about academic attention to the use of such subtle marketing tactics within the context of F2P games. Secondly, we try to map the decision-making process regarding the purchase intention of skins when exposed to LPP streamers using the - in this context - underutilised theoretical framework of the elaboration likelihood model.

Figure 2

Proposed research model



The abovementioned proposed research model can best be implemented into a survey questionnaire which simplifies the data collection process and makes participation accessible to many gamers. The use of a survey to achieve such a goal has been demonstrated numerous times in literature and is the preferred method of research in this context (Hamari & Keronen, 2017). Multiple question items, using various Likert scales, derived from literature are used to accurately measure each construct. Ultimately, the data is analysed using the preferred statistical method with such relatively complex models, structural equation modelling. This method also finds support in literature when studying models regarding influencers (Chung & Cho, 2017; Lou & Yuan, 2019; Masuda et al., 2022). Using SEM, the data from the survey is analysed to study the fit of the proposed model with the data and to better understand the relationships and effects of each construct.

Participants

A total of 905 participants filled out the survey and of that, 470 participants agreed to the use of their data, passed the inclusion criteria and the attention test. The participants had an average age of 21.9 ($SD = 4.6$), ranging from 13 to 66 with most of the participants (91%) being between the age of 16 and 27.

The sample consisted of 91% males, 7% females and 2% non-binary participants. This predominant share of male participants could be explained by the *League of Legends* playerbase that uses Reddit. A player conducted study found a similar gender distribution amongst players with 87% male, 12% female and 1% non-binary participants (Celianna, 2020).

Concerning the optimal sample size when using SEM, the literature suggests a minimum of 200 cases and an optimal sample size of around 500 cases as a rule of thumb (Kyriazos, 2018). Thus, the final 470 cases eligible for data analysis were in the optimal range for SEM with no missing data.

Procedure

Participants were recruited using several online social platforms, such as Reddit, Facebook and Discord. Several fora and groups related to *League of Legends* and streamers exist on these platforms – for example, r/LeagueofLegends, r/LoLstreams, and r/tyler1 on Reddit – which allow any registered member to publish posts. The survey was posted multiple times on several fora and groups to ensure sufficient participants were recruited. The posts were mostly published during the weekends and especially on Sundays at around 7:00 AM CET. This was due to the higher activity and engagement of social media members during these periods. The data collection ran for three weeks. The cooperation of participants was encouraged by the possibility of winning a €50 *League of Legends* gift card, with which they were able to buy the discussed skins. This further increased the chance of recruiting players who are interested in purchasing skins. This would also lower the chances of incomplete data since only participants who completed the survey fully and correctly were eligible to win the gift card. Additionally, the possibility of multiple entries by one participant was counteracted by restricting the survey to be filled in once per IP-address. After the three-week data collection period, the gift card was awarded to a randomly selected participant. Furthermore, to only focus on active gamers who would potentially buy skins, the participants were only allowed to fill in the complete survey if they had played *League of Legends* and watched a stream of an LPP Twitch streamer at least twice in the last month. The participants were also informed about how their data would be used and were debriefed at the end of the survey.

When filling out the survey, participants were asked to choose their favourite streamer from a list of LPP streamers provided by Riot games. Their choice was recorded and later replace the parameter 'my favourite streamer' to personalise the survey for each participant and focus their thinking on one LPP streamer. Additionally, an attention control question was added to the survey in which the participants were instructed to choose the option 'Strongly disagree' to make sure that the questions and statements were being read. The data from the participants who did not pass the attention test were considered invalid and were excluded from the data analysis. Furthermore, after passing the inclusion criteria, the order of the questioning of each scale was randomized. This was done to avoid any possible systematic errors when collecting data in a certain order.

Measure

To accurately measure the concepts included in the model, several Likert scales, adopted from various studies were used. The wording of all scales was slightly altered to correspond to the context of this study, which is Twitch streamers and *League of Legends*. All questioned items can be found in the appendix (Table 1).

Media enjoyment was measured using a 5-point Likert scale (Wulf et al., 2018), consisting of four items such as “I enjoy watching (my favourite streamer)”. The scale exhibited good internal consistency (Cronbach’s $\alpha = .846$).

Physical attractiveness and social attractiveness were measured using 5-point Likert scales (Duran & Kelly, 1988), each with four items. Items such as “I think (my favourite streamer) is handsome/pretty” and “I think (my favourite streamer) could be my friend” were used in the scales. Both scales showed acceptable internal consistency (Cronbach’s $\alpha = .755$ and $.783$, respectively).

Parasocial interaction was evaluated using the experience of parasocial interaction (EPSI) scale (Hartmann & Goldhoorn, 2011), a 7-point Likert scale consisting of six items such as “(My favourite streamer) knows I pay attention to him/her”. This scale showed excellent internal consistency (Cronbach’s $\alpha = .922$).

The concepts of trustworthiness and perceived expertise were measured using 7-point Likert scales (Munnukka et al., 2016), each with four items. These included statements such as “I feel (my favourite streamer) is honest” and “I consider (my favourite streamer) as an expert on his/her area”. Both scales showed good internal consistency (Cronbach’s $\alpha = .881$ and $.814$, respectively).

Furthermore, parasocial relationship was measured utilising a 7-point Likert scale (Lou & Kim, 2019), with 12 items. It included statements such as “(My favourite streamer) makes me feel comfortable, as if I am with a friend”. This scale also exhibited good internal consistency (Cronbach’s $\alpha = .853$).

Finally, purchase intention was assessed using the in-game content purchase intention scale (Chung & Ha, 2021). The original 7-point Likert scale consists of 10 items but due to the non-applicability of some items to *League of Legends*, for example, “I want to continue the game even after I have reached the time limit”, only eight items were adopted. “I gain happiness through buying skins” is an example of the included items. Nevertheless, the scale showed good internal consistency (Cronbach’s $\alpha = .809$).

Results

Model analysis

The analysis of the data was done using AMOS 26 to perform the structural equation modelling. Note that standardized mean scale scores were calculated for the analysis due to the utilised Likert scales having different resolutions.

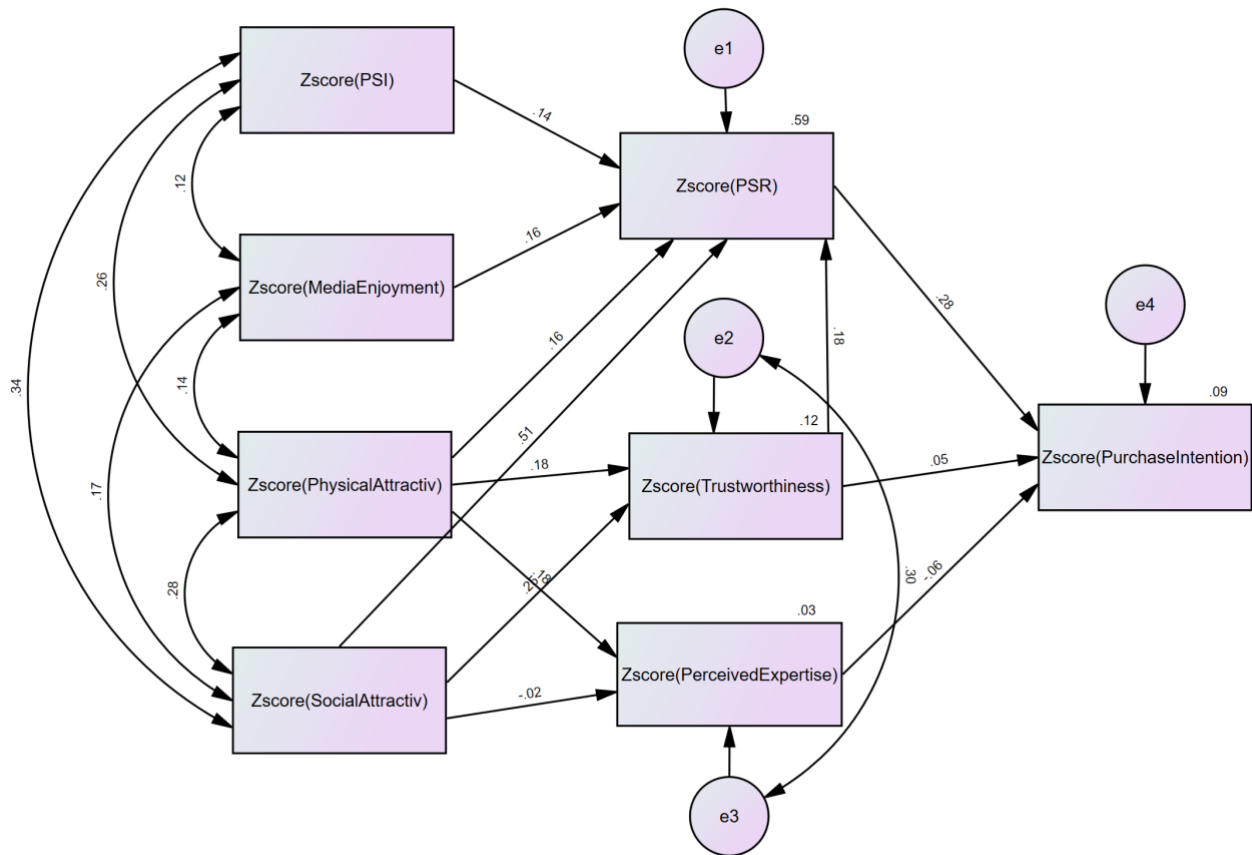
Initially, when assessing the goodness of fit of the proposed research model, the chi-square statistics and the model fit parameters were not satisfactory ($\chi^2 (11) = 108.417$, $p < .001$, RMR = .072, GFI = .942, AGFI = .810, RMSEA = .137). Additionally, both Delta and rho parameters were also below the .90 acceptable threshold. Meaning that the data does not fit the proposed model. However, utilizing the modification indices calculated by AMOS, two modifications were made to improve the model fit.

Firstly, a correlation was found and added between the unexplained residuals of trustworthiness and perceived expertise, e2 and e3 as seen in Figure 3. Such a correlation is not beyond imagination because both concepts reflect the source credibility heuristics. Secondly, trustworthiness was also found to be an explaining factor of parasocial relationship. Dunn (2019) suggests that trustworthiness could influence parasocial relationship, validating this addition to the model.

After these modifications, the chi-square statistics are still significant ($\chi^2 (9) = 31.083$, $p < .001$) meaning that we reject the zero hypothesis that the model fits the data. However, the use of the chi-square statistics to assess the model fit has been discouraged in recent literature due to its sensitivity to small changes in data and sample sizes (Yuan & Chan, 2016). Therefore, when looking at the other goodness of fit parameters, we can determine that they indicate a satisfactory model fit (RMR = .042, GFI = .984, AGFI = .936, RMSEA = .072). Both Delta and rho parameters are also above the .90 acceptable threshold.

Figure 3

Analysis model used in AMOS with β and R^2



Having established that the modified model fits the data, we can now analyse the calculated paths to answer the previously formulated hypotheses. An overview of all the structural paths can be seen in Table 2.

H1 hypothesises that parasocial relationship with an LPP streamer positively influences the purchase intention of promoted skins. This hypothesis is supported by the results ($\beta = .278, p < .001$).

The results show that both trustworthiness ($\beta = .051, p = .317$) and perceived expertise ($\beta = -.063, p = .179$) of the influencer did not significantly influence the purchase intention of promoted skins. Thus, H2 and H3 are not supported.

The opposite was revealed for H4 and H5. The results indicated that parasocial interaction ($\beta = .135, p < .001$) and media enjoyment ($\beta = .161, p < .001$) did positively influence the parasocial relationship with the influencer. Therefore, supporting both H4 and H5.

H6 predicts that physical attractiveness positively influences perceived expertise (a), trustworthiness (b) and parasocial relationship (c). In support of H6, results revealed that physical attractiveness does positively and significantly influence perceived expertise ($\beta = .185, p < .001$), trustworthiness ($\beta = .182, p < .001$), and parasocial relationship ($\beta = .158, p < .001$).

Further, H7 also posits that social attractiveness positively influences perceived expertise (a), trustworthiness (b) and parasocial relationship (c). The results indicated that social attractiveness does positively influence trustworthiness ($\beta = .247, p < .001$) and parasocial relationship ($\beta = .158, p < .001$) but does not significantly influence perceived expertise ($\beta = -.022, p = .636$).

Finally, trustworthiness also positively and significantly influences parasocial relationship ($\beta = .183, p < .001$) which was not hypothesised before the analysis of the results.

Table 2

Summary of hypotheses testing

	Hypothesis/Structural Path	β	<i>p</i> value	Result
H1	Parasocial relationship → Purchase intention	0.278	< 0.001	Accepted
H2	Trustworthiness → Purchase intention	0.051	0.317	Rejected
H3	Perceived expertise → Purchase intention	-0.063	0.179	Rejected
H4	Parasocial interaction → Parasocial relationship	0.135	< 0.001	Accepted
H5	Media enjoyment → Parasocial relationship	0.161	< 0.001	Accepted
H6a	Physical attractiveness → Perceived expertise	0.185	< 0.001	Accepted
H6b	Physical attractiveness → Trustworthiness	0.182	< 0.001	Accepted
H6c	Physical attractiveness → Parasocial relationship	0.158	< 0.001	Accepted
H7a	Social attractiveness → Perceived expertise	-0.022	0.636	Rejected
H7b	Social attractiveness → Trustworthiness	0.247	< 0.001	Accepted
H7c	Social attractiveness → Parasocial relationship	0.511	< 0.001	Accepted
/	Trustworthiness → Parasocial relationship	0.183	< 0.001	Accepted

In addition, an overview of the correlations of exogenous variables within the model can be seen in Table 3. All exogenous variables were found to be positively and significantly correlated. The same can be said for the unexplained residuals of trustworthiness and perceived expertise.

Table 3

Correlation weights

Correlation	Estimate	p value
PSI ↔ Media enjoyment	0.120	0.010
PSI ↔ Physical attractiveness	0.258	< 0.001
PSI ↔ Social attractiveness	0.340	< 0.001
Media enjoyment ↔ Physical attractiveness	0.137	0.003
Media enjoyment ↔ Social attractiveness	0.172	< 0.001
Physical attractiveness ↔ Social attractiveness	0.277	< 0.001
e2 ↔ e3	0.305	< 0.001

Next, the control variables were also analysed. Table 4 presents the results of their structural paths. The results only indicate two significant effects, the positive influence of gender on purchase intention ($\beta = .128$, $p = .003$) and the positive influence of influencer reach on parasocial relationship ($\beta = .0.75$, $p = .012$).

Table 4*Structural paths of control variables*

Structural Path	β	<i>p</i> value	Result
Age → Parasocial relationship	0.003	0.933	Rejected
Age → Trustworthiness	0.040	0.365	Rejected
Age → Perceived expertise	0.021	0.643	Rejected
Age → Purchase intention	-0.029	0.502	Rejected
Gender → Parasocial relationship	0.003	0.912	Rejected
Gender → Trustworthiness	-0.018	0.682	Rejected
Gender → Perceived expertise	-0.021	0.648	Rejected
Gender → Purchase intention	0.128	0.003	Accepted
Influencer reach → Parasocial relationship	0.075	0.012	Accepted
Influencer reach → Trustworthiness	-0.082	0.059	Rejected
Influencer reach → Perceived expertise	0.037	0.417	Rejected
Influencer reach → Purchase intention	-0.043	0.325	Rejected

To conclude, a summary of the explained variation of the independent variables in the model can be found in Table 5.

Table 5*R² of the dependent variables*

Variable	<i>R</i>²
Trustworthiness	0.119
Perceived expertise	0.032
Parasocial relationship	0.588
Purchase intention	0.089

Discussion and conclusion

This study attempted to bring about academic attention to the underexplored subject of marketing within F2P games such as *League of Legends* and how influencers on new media platforms such as Twitch are defined and used to promote revenue-generating goods such as skins. A new form of hybrid marketing is illustrated in this paper, whereby product placement in media content of Twitch influencers is used to promote the skins in a 'low-observable' fashion. In the context of the elaboration likelihood model, such a marketing technique would activate the peripheral decision-making route so that the viewers exposed to it base their opinions on surface-level heuristics, mostly related to the influencer. Several hypotheses were formulated regarding the purchase intention and the possible factors contributing to it.

Further, a novel and integrated research model was presented and tested to better understand this decision-making process of gamers, exposed to these new media influencers, regarding their purchase intention of skins. This model also served as a tool to answer the previously formulated hypotheses. The results indicated several interesting findings.

Most importantly, parasocial relationship was found to be the only significant liking heuristic that contributes to the variance in purchase intention. It also had the second-highest standardised estimate, showing its importance within the model. Parasocial relationship has already been identified as an important factor when explaining purchase intention within the context of influencer marketing (Chung & Cho, 2017; Lou & Yuan, 2019; Masuda et al., 2022) but its relevance was yet to be confirmed in the context of LPP Twitch influencers promoting skins. Such a result was to be expected within the context of Twitch, an environment wherein parasocial interaction with the influencer is heightened (Wulf et al., 2021). All the attributes defined in the model were also found to positively influence parasocial relationship, with social attractiveness being the most contributing factor. Following it in importance were trustworthiness, media enjoyment, physical attractiveness and parasocial interaction. Surprisingly, parasocial interaction, a factor found to be a direct predictor of parasocial relationship within the context of livestreaming (McLaughlin & Wohn, 2021), was the least contributing factor within this model. This could be because the scale utilised to measure parasocial interaction was not specially developed for the context of live-streaming and Twitch, but for that of television (Hartmann & Goldhoorn, 2011).

The second most important finding was that the credibility heuristics were surprisingly not found significant in explaining the purchase intention of skins. This is notably interesting

since source credibility, trustworthiness and perceived expertise, are repeatedly shown as significant contributing factors to the purchase intention in the context of influencer marketing (AlFarraj et al., 2021; Chung & Cho, 2017; Ismagilova et al., 2020; Lou & Yuan, 2019; Masuda et al., 2022; Pornpitakpan, 2004; Wang & Scheinbaum, 2017). This non-significance of source credibility could potentially be explained by the highly hedonic nature of skins and the low elaboration likelihood when thinking about them. Therefore, even less attention would be paid to concepts such as credibility and more attention would go towards surface-level heuristics such as liking, operationalised by parasocial relationship in our model.

Another important finding was the positive influence of the control variable influencer reach on parasocial relationship. This could potentially be because influencer reach – or their number of followers – is a pseudo-indicator of the consensus heuristic which was left outside the scope of this paper. However, preliminary experimental data does not seem to support this assumption (Yeojin, 2020). Additionally, the control variable gender was also found to positively influence the purchase intention, but this could simply be due to the overrepresentation of males within the data, which could falsely trigger significance due to small differences.

Finally, it is important to note that the explained variances of the model are relatively low, especially that of purchase intention. This can have two explanations. Firstly, the scale used to capture purchase intention is a novel scale developed for the context of free-to-play games, but with more of a focus on mobile games. Secondly, due to the credibility heuristics, trustworthiness and perceived expertise, not being significant in this context, only one variable – parasocial relationship – contributed to the explanation of variance in purchase intention. Therefore, it is extremely unlikely and difficult to explain a high percentage of variance in a concept with only one variable.

Theoretical implications

This paper is the first in its kind to study the relationships of various concepts to understand the decision-making process regarding the purchase intention of skins when exposed to LPP streamers. We shed light on a new form of hybrid marketing used in free-to-play games. Thus, this study can be used as starting point for academics interested in researching this novel marketing technique. In addition, the findings add to the already significant scientific literature confirming the importance of parasocial relationships in the context of influencer marketing (Chung & Cho, 2017; Lou & Yuan, 2019; Masuda et al., 2022).

Ultimately, we expect this study to serve as a justification for future exploration of this new and often overlooked subject within marketing studies. Regardless, we have argued that its importance should not be minimized within the growing gaming industry and further academic attention is needed (Newzoo, 2020; Statista, 2021d).

Practical implications

The findings of this paper can also be utilised by both game developers and influencers when trying to improve connections with their audience to increase purchase intention. Both parties should acknowledge the importance of parasocial relationship when considering their potential influence over audiences. Twitch streamers should build more 'friendship'-like relationships with their audience by increasing their enjoyment of streams and increasing their interaction with chat to positively influence their purchase intention of skins. The most improvement however can be achieved by increasing their social attractiveness and trustworthiness in the eyes of the viewers, which is easier said than done. Game developers can also consider these factors before sponsoring streamers and adding them to their partner programs.

The use of influencer marketing to promote skins in free-to-play games can also be important information for policymakers when thinking about marketing regulations, especially considering that children from the age of 13 can both play games such as *League of Legends* and watch Twitch streamers (Riot Games, 2021; Twitch, 2021).

Limitations and future directions

This study is not without its limitations. First and foremost, a quantitative survey design is unable to indicate causal relationships between concepts. Therefore, studies with experimental designs could be set up to offer more robust scientific data regarding these new marketing techniques.

Moreover, the low elaboration in the context of marketing skins in the content of streamers is implied in this paper but this is yet to be experimentally proven. Thus, follow-up studies could put this assumption to the test.

Additionally, new latent variables could be added to our model to increase the explained variance in purchase intention, which was one of the main shortcomings of the current research model. The use of other scales can also improve the model, especially to measure the concept of purchase intention. A self-developed scale to measure the purchase intention of skins within the context of free-to-play games can also be of interest.

Finally, consensus heuristics could also be added to the model to increase its scope and potentially increase its lacklustre explaining power. The control variable influencer reach (i.e., number of followers) can be seen as a proxy indicator of consensus and it, significantly influencing parasocial relationship can be seen as justification for future studies to include consensus heuristics in the model.

Conclusion

This study has shown that marketing within the context of free-to-play games takes place on new media platforms such as Twitch using subtle product placement in Twitch streams. Within the context of the F2P game, League of Legends, this form of hybrid influencer marketing is shown to be mainly dependent on the parasocial relationship of the viewer with the streamer, to influence the purchase intention of skins which is the main revenue stream for such games. This paper has laid the groundwork for future studies exploring this subject.

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Appendix

The Dutch version of the abstract (as required by OER art 59)

De gaming industrie is de laatste jaren bezig aan een opmars en er wordt voorspeld dat het in de toekomst nog sneller zal groeien. Door deze populariteit, blijven de financiële en sociale belangen van de gaming industrie en de manier waarop verschillende soorten games geadverteerd worden alleen maar stijgen. Vooral de games die gratis beschikbaar zijn maar het meest winstgevend blijken te zijn. Echter blijkt de academische sfeer achter te lopen in de onderzoeken of zelfs definiëren van de marketingtechnieken die in deze context gebruikt worden. In deze paper, trachten we een beeld te schetsen van hoe deze gratis games functioneren, hoe zij geld verdienen aan de hand van hun spelers, waarom spelers in-game goederen zoals skins kopen en welke marketingtechnieken game ontwikkelaars gebruiken om de verkoop van de in-game goederen te stimuleren. Daarnaast stellen wij een onderzoek model voor en testen die aan de hand van een survey gebaseerd op de perifere route van de elaboration likelihood model om het beslissingsproces van spelers die blootgesteld zijn aan LPP Twitch streamers in verband met hun aankoop intentie te bestuderen. De verzamelde gegevens werden vervolgens getoetst en geanalyseerd door structural equation modeling. De bevindingen duiden aan dat de parasociale relatie tussen de streamer en de kijker de belangrijkste factor is in het beïnvloeden van de aankoopintentie binnen ons model. Afsluitend worden de tekortkomingen en mogelijkheden voor toekomstige onderzoek besproken.

Survey content

Table 1

Survey constructs and items

Construct	Item
Parasocial interaction (1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	(My favourite streamer) is aware of me. (My favourite streamer) knows I am there. (My favourite streamer) knows I am aware of him/her. (My favourite streamer) knows I pay attention to him/her. (My favourite streamer) knows that I react to him/her. (My favourite streamer) reacts to what I say or do.
Media enjoyment (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	Watching (my favourite streamer) is fun. I enjoy watching (my favourite streamer). It's a pleasure watching (my favourite streamer)'s stream. Watching (my favourite streamer) is entertaining.
Physical attractiveness (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	I think (my favourite streamer) is handsome/pretty. (My favourite streamer) is somewhat attractive. I have a better relationship with (my favourite streamer) than other Twitch streamers. I find (my favourite streamer) very attractive physically.
Social attractiveness (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	I think (my favourite streamer) could be my friend. I want to have a friendly chat with (my favourite streamer). (My favourite streamer) and I could be able to establish a personal friendship with each other. (My favourite streamer) would be pleasant to be with.
Parasocial relationship (1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	(My favourite streamer) makes me feel comfortable, as if I am with a friend. I look forward to watching (my favourite streamer)'s stream.

I see (my favourite streamer) as a natural, down-to-earth person.

If (my favourite streamer) starts another social media channel, I will also follow.

(My favourite streamer) seems to understand the kind of things I want to know.

If I saw a story about (my favourite streamer) in other places, I would read it.

I would love to meet (my favourite streamer) in person.

(My favourite streamer) would fit in well with my group of friends.

If something happens to (my favourite streamer), I will feel sad.

I would invite (my favourite streamer) to my party.

(My favourite streamer) is the kind of person I would like to hang out with.

If (my favourite streamer) lived in my neighbourhood, we would be friends.

Trustworthiness

I feel (my favourite streamer) is honest.

(1 = *strongly disagree* to 7 = *strongly agree*)

I consider (my favourite streamer) trustworthy.

I feel (my favourite streamer) is truthful.

I consider (my favourite streamer) earnest.

Perceived expertise

I feel (my favourite streamer) knows a lot.

(1 = *strongly disagree* to 7 = *strongly agree*)

I feel (my favourite streamer) is competent to make assertions about things that he/she is good at.

I consider (my favourite streamer) as an expert on his/her area.

I consider (my favourite streamer) sufficiently experienced to make assertions about his/her area.

Purchase intention

I want to invest in my gaming hobby with skins.

(1 = *strongly disagree* to 7
= *strongly agree*)

I gain happiness through buying skins.

I want to personalise my game using skins.

I find that skins are reasonably priced.

I want to show off to my friends with my skins.

I want to increase the value of my account by buying skins
on sale.

I want to support a free-to-play game that I enjoy.

I want to receive skins as gifts.
