The Influence of Parenting on FPS eSports involvement: a Comparison Between Europe and Asia

Picture taken from: Sports Business Journal (2023)

Anselm Bakker, S4340736
Supervisor: Gunnar Mallon
University of Groningen
Faculty of Spatial Sciences
Bachelor's Project
15-12-2023

Abstract

Over the recent years, the emergence and popularity of electronic sports (eSports), has seen an unprecedented rise, particularly among adolescents and young adults. At the intersection of this cultural phenomenon lies the influence of parenting styles, which are proven to vary in some aspects between certain geographical regions, such as Europe and Asia. This thesis will compare these two regions with regards to parenting styles and parental involvement, and investigate the implications posed by the parenting styles on individuals' involvement with eSports, with a focus on First Person Shooter (FPS) games. Through a robust theoretical framework, this study identifies the nuances of eSports and normal sports, the different interactions individuals can have with eSports, the magnitude of regional differences in parenting styles, and the ways in which different generations perceive eSports differently. Employing a combination of the Theory of Planned Behaviour and the Uses and Gratifications Theory, a comprehensive questionnaire will be capturing primary data from eSports participants, revealing critical insights for both regions. The results highlight an absence of substantial differences in time spent on eSports, self indicated openness with parents, and the influence of the generation gap on the decision to inform their parents about their involvement in eSports. Nuanced differences were found in the influence of sports families on interaction with eSports, and parenting style on perception of benefits being involved with eSports. The main difference between the regions lies in the influence of parenting style on eSports involvement. For Asia there was no influence, for Europe strictness of parents resulted in less time playing and working in eSports.

Keywords: eSports, Parenting Styles, First-Person Shooter Games, Cultural Comparison, Regional Comparison, Europe, Asia.

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Introduction

The advent of video games over the last decades has given rise to a segment of individuals who aspire to excel in competitive gaming, also popularly known as eSports. ESports as discussed in this research and others in this field is defined as a form of sports where the primary aspects of the sport are facilitated by computers or other types of electronic systems, and where the input of players or teams and the output of the eSports system are mediated by human-computer interfaces (Hamari & Sjöblom, 2017). Among the various gaming genres, First Person Shooters (FPSs) stand out as one of the most widely played categories (Statista, 2022). One of the main reasons FPS games have gained immense popularity is due to their design, which promotes online competition among players (Harris et al., 2020). The study underscores competitiveness as a primary driver of problematic gaming behaviour and Internet Gaming Disorder, defined as individuals undergoing difficulties with regards to gaming behaviour over a spectrum, and clinically significant impairment or distress caused by excessive and prolonged use of internet games respectively. Both of which are reinforcing existing research findings in this domain, as the amount of time spent playing video games is one of the main indicators for problematic gaming behaviour, entailing problems such as higher levels of entitlement (Potard et al., 2020).

In recent years, eSports has witnessed a surge in popularity, with spectatorships overtaking numbers of regular sports, with peak concurrent viewerships reaching well into the millions (Sjöblom et al., 2020; Escharts, 2023a). These viewership numbers are accompanied by substantial revenue and sponsorships, and prize money for tournaments going into tens of millions of dollars per year for multiple game titles (Escharts, 2023b). This burgeoning industry has become a source of livelihood for numerous individuals, including players, support staff, and equipment engineers. While existing literature, exemplified by Wong and Meng-Lewis (2022), predominantly focuses on the economic aspects of eSports, there is a noticeable absence of research concerning its cultural and geographical dimensions. The literature review by Reitman et al. (2019) highlights this gap, revealing that culture

and geography have been relatively underexplored areas in the eSports research landscape, thereby presenting a compelling avenue for future investigation.

The scope of eSports as an industry is vast, reflecting the significance of gaming as a popular pastime. Concerns regarding the impact of children's gaming habits on their academic performance have been a subject of interest for many parents. Gnambs et al. (2020) demonstrated a modest yet discernible negative association between increased video game playtime and school performance in children. This negative association between gaming and academic performance can influence parental attitudes and, consequently, impact eSports involvement.

Parenting styles, particularly the dimensions of warmth and control, are central to the discussion, with four main parenting styles identified: authoritative (high warmth and high control), authoritarian (low warmth and high control), permissive (high warmth and low control), and neglectful (low warmth and low control). The authoritative parenting style showed to be the most prevalent parenting style, having less association with internalising and externalising problems for children in both Asia and Europe (Pinquart and Kauser, 2018). Lansford's meta-analysis in 2021 revealed cross-cultural variations in parenting by using two ways to describe parenting behaviour: form and function. Drawing from these two categories, a matrix could be made to describe different parenting behaviours across cultures, and similar (or different) behaviours between cultures could be identified. Some of the most outstanding differences between cultures were attributed to differing norms of expected behaviour, environmental constraints, and legal policies.

Research Problem

This research project seeks to investigate the different interactions with eSports based on cultural factors between regions, with a specific focus on First Person Shooter games. The cultural dimension will explore the social backgrounds of individuals involved in eSports, mainly encompassing aspects of parental relationships and different parenting styles. The regional component will involve a

comparative analysis of Asia and Europe. The primary research question guiding this study is:

"Do different upbringing and parenting styles influence interaction with eSports, comparing Europe with Asia?"

The sub-questions guiding the research include:

1. What are the disparities in parenting style and upbringing between Europe and Asia?
2. How do eSports interactions vary between Europe and Asia?
3. How do perceptions of interacting with eSports differ between Europe and Asia?

Since the topic is a combination of multiple disciplines, the line throughout the theoretical framework will start with a comparison of eSports with traditional sports, to ensure there is a common and relatable "playground" for the reader. After this, the text will take a deeper dive into the realm of eSports, particularly how people are involved in its different areas and the scientific theories supporting the different types of involvement. This is followed by the second part of this research: parenting styles and the contrasts and similarities between Europe and Asia. Finally, the theoretical framework will touch upon the generation gap, which is often mentioned by young adults active in the eSports communities (Örsoglu, Yüzbaşıoğlu & Pekel, 2023). Continuing after the theoretical framework with the methodology, followed by the results and a discussion before concluding this research.

Theoretical framework

eSports & traditional sports

The progress of literature on eSports is still in its infancy. However, its close relation to what some call traditional sports entails that some concepts show a possible overlap. Active discussions in both the scientific and the social communities

underscore this idea (Hamari & Sjöblom, 2017). One example of such a concept from traditional sports is family sport culture, defined as a family culture with a strong affinity for sports, and its relationship to youths' participation in club-organised sport (Strandbu, Bakken & Stefansen, 2019). In their article, they showed that children who grow up in a family with a history of involvement in and affinity for sports, are more likely to join club-organised sports. This could possibly also have a spillover into eSports: growing up in a household with a competitive nature may lead children to be more competitive, therefore the step from seeing gaming as a pastime to seeing gaming as something comparable to traditional sports to compete in is small. Additionally, Mathisen et al (2023), showed how the combination of a mother's physical activity and emotional support from a father, linked together with the increasingly active trajectory when compared to the low active trajectory in normal sports. In other words, when the mother was active in sports and the father was emotionally supportive of the child, the child was more active in sports as well. This supports the notion that parents active in sports carry that activeness over to their children.

Another overlap between normal sports and eSports is the methodical way of improving the physical and mental states of the players: comparable to normal sports, eSports athletes warm up prior to playing, exercise in ways such as resistance training to build muscle, and even get psychological training to increase their mental strength. Just like normal sports, eSports teams use strategies to improve team cohesion. But also individually: eSports athletes use strategies to regulate emotions, like breathing techniques or tactical breaks (NL Sportpsycholoog, 2023). The workload, or time spent practising and playing, for athletes in eSport ranges from around twenty to forty hours per week, which is very similar to normal sports and its preparation of professional players (Biddle, 1985; Carrani et al., 2022; Poulus et al., 2022,).

eSports involvement

Since eSports is predominantly based around an ecosystem involving (social)media, and within those media mainly streaming and video platforms, and the players being watched on those streams, the consumption of eSports will be one of the main focal points explored in this study, along with motivating factors for the players themselves. There have been multiple theories and metrics identified with sufficient explanatory power regarding media consumption and motivating factors for players, the main ones being the Theory of Planned Behaviour (TPB), the Uses and Gratifications Theory (UGT) and the Motivations Scale of Sports Consumption (MSSC)(Hamari & Sjöblom, 2017), all of which will be explored further in this section.

Firstly, the Theory of Planned Behaviour, which proposes that behaviour is predicted by behavioural intention. This intention is in turn forecasted by three primary factors: attitudes toward the behaviour, subjective norms regarding the behaviour, and perceived control over the behaviour (Sussman & Gifford, 2019). Leung et al. (2021), created a reliable questionnaire using the TPB, by sending their questionnaire to Hong Kong middle schools for their first study, and universities for their second study. They did this to check whether the questionnaire was in line with other approaches using the TPB (e.g. shopping behaviour), and whether it kept its explanatory power. The outcomes of the eSports intended participation survey they created were that the survey was reliable and valid in examining intended eSports participation. Certain factors impacting their decisions included family and friends' perspective on involvement with eSports.

The Uses and Gratifications Theory, introduced by Katz et al. in 1974, can offer insights into motivation behind engagement. It is one of the most accepted theories in research regarding media consumption, and is a theoretical approach to understand how and why people consume different types of media, to satisfy their different wants and needs. The UGT focuses on the consumer's perspective, rather than the type of media. This results in the UGT considering consumers as aware of

their consumption, and that the media are competing with one another for the consumer's gratification. Gratifications in eSports come in a number of ways, mainly as competition and entertainment. Following these gratifications, acquiring knowledge about the game (competing) and escaping everyday life (through entertainment) were among the highest explaining factors about the reasons why people watch eSports (Hamari & Sjöblom, 2017).

One of the main metrics used to measure spectatorship in normal sports is the Motivations Scale of Sports Consumption (MSSC). The MSSC is similar to the UGT in that it focuses on the gratifications that come forth from spectating sports, and takes into account things such as escapism from everyday life and social interactions. It differs from the UGT in constructs such as aesthetics and drama of sport, and the behaviour of athletes (Hamari & Sjöblom, 2017) . As demonstrated by Macey et al. (2022) and Hamari & Sjöblom (2017), the MSSC can also be used to adequately describe eSports spectator behaviour, as it poses the aforementioned constructs in a manner that makes individuals relate to the sports player from the individual's perspective. However, the explanatory power of MSSC for playing is not as strong as for instance the TPB, as it only describes the individual consuming, rather than the possibility to describe their own engagement.

Competition is not just a gratification either: it is a main driver of motivation for people to play games. Topping the list of types of game genre to implement competitive play are FPS games, making them the most popular type of game there is. In their study on problematic gaming, Harris et al (2020) showed how competitiveness was the only factor directly predicting problematic gaming score. Adding to this, all these FPS games have a factor of communication to them: in online FPS games you usually play in teams, and to coordinate with your teammates, having communication devices such as a headset with a microphone turns out to be crucial in the path to victory. However, such communication is another factor that heavily influences the same problematic gaming behaviour, since it allows for socialising to take place, which in turn keeps the individual playing the game for extended periods of time (Brandtner et al, 2022). This results in FPS games being

played very frequently due to its addictive nature, which in turn makes a strong foundation for eSports.

While the majority of people are just spectators of eSports, there is a small number of individuals who make a living out of playing. These professionals are usually signed to an organisation, on contracts similar to normal sports players. Notably in this context there appears to be another difference in regions: according to Nicolaescu, Sangiorgi and Bell (2023), Asian eSports organisations get more funding than European organisations, averaging over 2.2% extra funding. This could be a factor in eSports being seen as a real profession by parents, resulting in parents being potentially more accepting of their children's decision to pursue eSports.

Regional differences in parenting

Scientists have been researching parenting for decades, with the first works on parenting styles by Baumrind being published as early as 1966. However it appears that the research is predominantly carried out in the United States. Lansford's (2021) meta analysis indicated that over 60% of research into parenting was conducted in the US, about 11% in Europe and only about 4% in Asia, and the studies published in high-impact journals only accounted for 8% of the world's children. This begs the question how accurate those findings are in those different parts of the world and the children who were unaccounted for.

As discussed in the introduction, warmth and control are the two main components used to measure the different types of parenting. Research by Deater-Deckard et al (2011), revealed how different regions had different parental warmth and control relations with their children, and, contrary to the general assumption, that Chinese parents were less controlling than other regions. Additionally, the other Asian countries in that research also scored relatively low on "control". Furthermore, in a large study on parenting across different culture zones, Lin et al (2022) found that Western parenting culture revolved mainly around the theme "love", whereas Asian parenting revolved mainly around "family", supporting the claim that there are

differences in parenting across different cultural regions. The combination of these differences leads to the assumption that European parents will be more supportive of their children interacting with eSports, whereas Asian parents will not care as much.

The cultural differences may also influence parents' behaviour and interpretation of parenting styles (Pinquart & Kauser, 2018), i.e. cultural differences change the perceived definition of what "warmth" and "control" are. These differences may therefore also influence the outlook on eSports during the upbringing of children in these areas, potentially affecting children's opportunities to engage in eSports without parental repercussions.

Additional differences in parenting styles between Asia and Europe are apparent in the impact of the authoritarian parenting style: in European countries the authoritarian parenting style has a clear negative impact, whereas in Asia there seems to be no negative effect (Cheung & Lim, 2022). The permissive parenting style showed to have more internalising problems in South-East Asia, but less internalising problems in Western Europe, meaning the Asian children had more internal problems such as mental health issues (Pinquart & Kauser, 2018). This may also have implications regarding problematic gaming behaviour.

Taking it a step further, Chao (1995), claims that parenting styles in Asia don't necessarily follow the same course as Western parenting styles. Parenting styles in Asia are often seen as controlling, or - following the previously mentioned model of warmth and control - authoritarian. Chao claims that this model is somewhat ethnocentric, and doesn't capture the success of Asian children brought up in this style. He attributes this to the concept of "training" used by Asian parents to prepare their children for academic success.

Generation gap

The generation gap is widely applicable in the context of parenting, but also very prevalent in eSports (Örsoglu, Yüzbaşıoğlu & Pekel, 2023). The generation gap

entails a situation of misunderstanding between younger and older generations, based on the circumstances growing up. Interviews with Turkish eSports athletes revealed how there is a general consensus amongst the gaming communities that older generations are unable to grasp the underlying factors that make people be involved in eSports, such as the competitiveness. With this, the generation gap could prove to be an explaining factor for misunderstandings between parent and child when it comes to them being involved in eSports.

This notion is also supported by Rhee and Kim (2023), who showed how a number of adolescents felt they were misunderstood by predominantly older generations. They attributed it to the fact that the older generation didn't grow up with eSports as their own generation does now: the older generation might have watched sports such as football on TV, whereas the younger generation has access to a number of streaming platforms to watch eSports on. This generation gap may also have implications for parents letting their children be involved in eSports: parents who have a closer relationship with the younger generations and technological advancements might be more lenient towards their children being involved in eSports, specifically having a warmer parenting style could prove this.

Hypotheses

Drawing from the theories discussed in the previous section, the following hypotheses have been established:

H1: Sports families will positively influence the time interacting with eSports

H2: Europeans spend more time interacting with eSports

H3.1: The perception of eSports will be more positive in Asia

H3.2: Warm parenting will positively influence the perception of eSports

H4: There is a difference in warmth and strictness of parents between Asia and Europe

H5.1: Parenting styles will influence the time spent interacting with eSports

H5.2: The influence of parenting style on time spent on eSports will be lower for Asia than Europe

H6: The generation gap is a reason to hide involvement in eSports, more so in Europe than Asia

Conceptual model
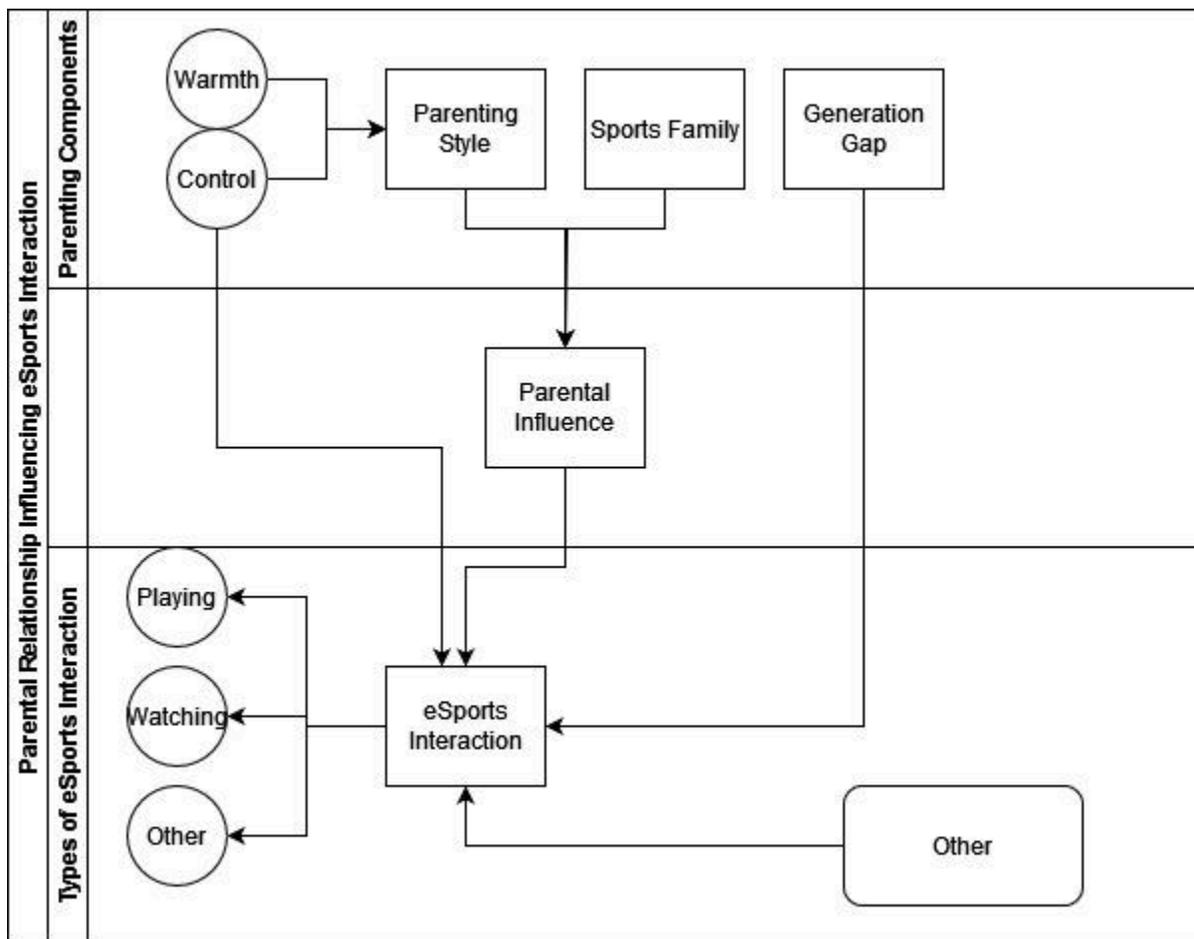
Methodology

In line with the research and theories mentioned in the theoretical framework, this research aims to combine those theories with real life practice, to establish whether the hypotheses can be proven to be correct. Since the questionnaire by Leung et al. (2021) proved its explanatory power on people's intentions regarding eSports, and the TPB touches on both the attitude towards and control over the behaviour, it will be used to create a questionnaire more specifically aimed at the research question at hand, i.e. more catering towards parent-child relationships and FPS eSports. The questionnaire will also involve a select amount of questions that follow the principles of the UGT, as that allows for additional questions towards their perspective as consumers. The changes to the questionnaire will particularly be the following: questions regarding the behavioural beliefs about participating in eSports and normative beliefs about participating in eSports competitions will be reduced, and questions regarding parenting and subject's perception of the parenting style they experienced growing up will be added. Additionally, the control beliefs about participating in Esports questions will be removed, as it has no added value for the research questions at hand. One of the questions added was: Do your parents know that you are involved in FPS eSports?, to locate a sub sample for the question: I think my parents wouldn't understand my involvement in FPS eSports due to a generation gap. This question was put in to investigate the perceived presence of the generation gap and whether or not it was a reason not to tell their parents about their involvement in eSports. Since participants are assumed to be unfamiliar with parenting styles, the two main components said parenting styles are based upon are used for the questionnaire, namely: warmth and control.

The sample was obtained through stratified sampling from 21-10-2023 to 14-11-2023. The questionnaire was distributed amongst European and Asian communication forums specifically created for FPS game players and enthusiasts (namely Discord and Reddit) and through social media. A number of eSports organisations were contacted to ask for the questionnaire to be distributed in their social spheres, as those will have the target audience of people who work behind the scenes, viewers and players all in one place, increasing the chances of getting

responses from the target audience. Amongst the organisations that were contacted were: Boom Esports (Indonesia based), DRX-Vision Strikers (South-Korea based), Paper Rex (Singapore based), Team Liquid (Netherlands based) and Voltaic (international). The main reason most of these are located in (East) Asia is because the European FPS social spheres were more easily accessible, with fora specifically created for the European communities. Therefore responses from Europe were able to be recorded relatively more efficiently than responses from Asia through those same channels. The majority of the responses from Asia came through the Paper Rex community, as Paper Rex was the only organisation to approve of the survey being conducted in their community, while the other organisations failed to reply. A small number of responses came from the distribution of the questionnaire on open social media such as reddit or twitter. By only collecting data in these communities, it is ensured that the respondents represent the eSports population, and therefore reduce possible outliers and incorrect data.

After distributing the survey for a period of 24 days, the total number of respondents was 83. This number then was reduced to 50, due to incomplete or faulty responses. Out of the 50 valid responses, 28 were recorded from Europe and 22 were recorded from Asia. Once collected, Kendall's tau b, Spearman's rho and Mann-Whitney U tests were performed on the variables to explore the potential relationships or distributions between the different factors and groups. Cleaning up the data meant removing any incomplete responses, removing responses from regions not relevant to this research and removing preview responses.

Since the data collection is aimed at a very specific target audience, there might be some implications regarding bias: the people who are active in these forums and communities, already prove to be relatively more active than most people, possibly leading to a bias around the question "how many hours per week did you spend on FPS eSports". Another bias might come from a language barrier, as this survey is only in English, and levels of English may vary per region. Another risk is that, even though the number of responses from both regions are similar, most of the Asian

responses are recorded through slightly different channels, i.e. the Paper Rex community server, where a large portion of people are from Singapore (since Paper Rex is based there). However in general they are the same target audience and retrieved in a similar way. Due to a relatively small number of respondents, only non-parametric tests could be used, which could result in less powerful statements compared to a situation where parametric tests could be used with a larger amount of responses.

The outcomes of this research might have an impact on the stereotypes set around certain cultural or regional stereotypes, as well as stereotypes involving eSports in general. All the data is anonymous and handled in line with the current values on data protection, i.e. responses to be stored privately and on protected servers, consent is guaranteed by informing the people on the first page of the questionnaire about the goal and usage of their responses, and only relevant data is stored and used.

Results

Firstly, H4 was tested to establish whether there were differences in distribution of warmth and strictness between both regions. The Mann-Whitney U test showed no significant differences, with a value of 0,254 for warmth and 0,369 for strictness.

To answer H6 regarding the generation gap, a filter question was created to investigate the openness of participants with their parents about their involvement in eSports, between both regions. The Mann-Whitney U test showed that openness of participants with their parents about their involvement with eSports was evenly distributed between the regions, with a 0,806 significance level. As for the generation gap being a reason not to tell their parents, the test result showed it was also evenly distributed between the regions, with a 0,694 significance level. This question however received a very low number of responses because of the filter question (N for Asia was 7, N for Europe was 8).

H2 regarding time spent interacting with eSports used the subcategories of playing, watching and work/other to show potential differences between the regions. The values coming forth from the Mann-Whitney U test however showed that both regions had similar distributions, with significance levels of 0,869 for watching, a significance of 0,111 for playing and a significance of 0,872 for other/work.

Investigating H1, the subcategories for interactions with eSports - watching, playing and work/other - were used on different forms of parenting with regards to traditional sports, namely: parents aiming to involve their children in traditional sports, parents' influence on their children's competitiveness, and the parents affinity towards traditional sports. For Europe there were no correlations between any of the subcategories, with significance values always being above 0,05. For Asia, there was one combination that showed a significant correlation: parents having a strong affinity for traditional sports negatively correlated with time spent watching eSports, with a moderate negative correlation coefficient of -0,422 and significance of -0,027.

The results for H5 regarding the relationship between parenting styles and time interacting with eSports - with time interacting with eSports again tested in the subcategories of watching, playing and work/other - showed there was an absence of a monotonic relationship for both Asia and Europe. The significance values of the kendall's tau test for Asia using those subcategories were 0.812, 0.3 and 0.494 respectively. For Europe, those values were 0.957, 0.558 and 0.486 respectively. When testing for the monotonic relationship between strict parenting and time spent interacting with eSports, Asia again showed no significant results, with values of 0.381 for watching, 0.112 for playing and 0.689 for work/other. Europe on the other hand showed significant negative relations between strict parents and playing, and strict parents and work/other, with significance values of 0.027 and 0.044 respectively. Watching in combination with strictness did not show a significant monotonic relationship, having a significance value of 0.189.

Testing H3 for the correlation between parenting style (warm or strict) and the perception of being involved in eSports - subdivided into useful, pleasant, beneficial, and good - showed no significant correlations for Asia, with significance levels staying well above 0,05, with the lowest (strict and useful) being 0,108. For Europe however, some test results did show a significant correlation: pleasant and warmth showed a moderate positive correlation of 0,483 with a significance of 0,003. Good also showed a positive correlation with warmth, with a correlation coefficient of 0,403 with a significance of 0,013.

Discussion

When comparing these results from the primary data analysis to the assumptions that arose from the theory of prior research, some factors seem to comply with previous findings. It was expected for the strict parenting style to have an influence on the time spent playing and watching eSports, more so in the European population than in the Asian population. This was supported by Cheung & Lim (2022)'s findings, which showed how the authoritarian parenting style had a clear negative effect on European children. The compliance with the literature also occurred in the sense that there was a negative correlation between strict parenting and time spent playing and working/other, as stricter parenting was shown to be a more prevalent occurrence in Europe. In the grand scheme of the ways in which people can interact with eSports, working/other as single indicator of strict parenting having a correlation with less time interacting with eSports is a bit of a stretch, considering that the other ways in which one can interact with eSports - playing or watching - are generally of a larger scale and indicated no correlation. The results are however an indicator that parenting in relation to interaction with eSports are different between Europe and Asia.

On the other hand, the lack of correlation between participants' perceptions of eSports and parenting style in Asia, contradicts the findings of Leung et al. (2021). Their research demonstrated that Hong Kong students' perceptions of their involvement with eSports was influenced by their parents and social circles, and was

thought to show similar results for more parts of Asia. The results for Europe were similar to the results of Asia in most ways. However, there was an exception for warm parenting style in correlation with pleasant and good perceptions of interacting with eSports in Europe, which had a moderately positive correlation. This is especially interesting since the expectations regarding strict parents was that they would be influencing their children's view in a negative way.

Taking into account that Asian parents were deemed less controlling (Deater-Deckard et al., 2011), the assumption arose that the hours spent on eSports would be higher in Asia. However, the opposite was proven to be true, as the test showed no differences in distribution between Europe and Asia.

Considering that Asian parents were less controlling and had lower levels of warmth, as demonstrated by Deater-Deckard et al. (2011), the assumption had arisen that there would be a difference between the two regions. This was however contradicted in this research, with the test results showing that the distributions of warmth and control were similar for both regions. This could be an indication that the understanding of what warmth and control mean in parenting style differs per region or culture, as was brought forward by Pinquart & Kauser (2018), but cannot be fully explained from the data collected in this research.

As Hamari & Sjöblom (2017) indicated, sports families are present with regard to traditional sports. The assumption created here was that this might also be the case for eSports, as arguments could be made for the influence of competitive parents trying to project that competitiveness onto their children. However, the statistics showed that sports families are of next to no influence regarding involvement with eSports. In Europe, there were no correlations at all between the different types of interaction with eSports, and the presence of a sports family. As for Asia however, between the time spent watching and parents having a strong affinity towards club organised sports, there was a significant negative correlation value, contradicting the assumption that parents who are active in sports would influence the

competitiveness of their children in eSports. Even though it contradicts the presumption, the result does highlight another difference regarding parental influence on eSports interaction between Europe and Asia.

Lastly, the results for the generation gap were interesting, as both regions indicated in a similar distribution that a generation gap was a reason to shy away from telling their parents about their involvement in eSports. The differences in parenting between the regions initially led to the assumption that individuals from Europe would have less trouble telling their parents about being involved in eSports. Specifically, the aspect of love being the main theme of European families fed this assumption. This, in combination with the majority of people indicating that they had told their parents about their involvement in eSports, means that the generation gap might not be as big of a deal as initially was portrayed by the literature.

Conclusion

In summary, the study compared primary data analysis results with prior research assumptions. The expected influence of strict parenting on eSports engagement in Europe aligned with Cheung & Lim's findings. Correlations between strict parenting and less time spent on eSports, limited to working/other activities, varied between Europe and Asia. No correlation was found between participants' perceptions of eSports and parenting style in Asia. While European results mirrored Asia, a positive correlation between warm parenting and positive perceptions in Europe defied assumptions about strict parents. The assumption that less controlling Asian parents would lead to higher eSports engagement was contradicted, as no distribution differences were found. Expectations of warmth and control differences between regions challenged, suggesting cultural variations in interpreting parenting styles. Assumptions about sports families influencing eSports involvement were contradicted in Europe but revealed a significant negative correlation in Asia between time spent watching eSports and parents with an affinity for traditional sports. The study also explored the generation gap, finding similar distributions in both regions regarding

reluctance to disclose eSports involvement, challenging assumptions about Europeans having fewer reservations. In essence, the research highlights nuanced cultural differences in parental influence on eSports interaction between Europe and Asia, challenging preconceived notions and adding depth to the understanding of these dynamics.

The main shortcoming of this research is the amount of responses to the questionnaire, which led to the use of only non-parametric tests and decreased the explanatory power of the results. Since this research was focused on individuals participating in eSports as a target audience, the questionnaire and a considerable portion of the theoretical framework revolved around individuals' self perceived relation with their parents. During the theoretical stage of the research, it became apparent that there was a lack of research into parenting styles in Asian regions, excluding China and to a certain extent Singapore. It is therefore recommended for other Asian countries and cultures to be explored further. During the primary data collection, the target audience consisted primarily of individuals who were involved in eSports themselves. However, for future research, it is recommended to involve the parents themselves in the research, to shed light on eSports involvement of their children from their perspective.

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Appendix

Survey response data

https://docs.google.com/spreadsheets/d/19xcS88A9NsrlfpRIBiciSP-61wncm2D--KpPs1TWzis/edit?usp=sharing

Survey

eSports

Survey Flow

Block: Default Question Block (17 Questions)

Page
Break

Start of Block: Default Question Block

Q1

This is a survey on FPS (First Person Shooter) eSports interaction and social background, and takes about 5-10 minutes. This survey is for scientific purposes only. You will remain completely anonymous. If you do not wish to participate in this survey, please click away.

All questions about eSports are aimed at FPS games specifically, not eSports in general.

Page
Break

Q13 What main region are you from?

- ○ **Asia (1)**
- ○ **Europe (2)**
- ○ **North America (3)**
- ○ **South America (4)**

- ○ **Africa (5)**
- ○ **Oceania (6)**

Skip To: End of Survey If What main region are you from? = North America

Skip To: End of Survey If What main region are you from? = South America

Skip To: End of Survey If What main region are you from? = Africa

Skip To: End of Survey If What main region are you from? = Oceania

Q14 How old are you?

- ○ **12-15 (1)**
- ○ **16-19 (2)**
- ○ **20-23 (3)**
- ○ **Over 23 (4)**

Q2 In the past six months, in which way(s) have you interacted with an FPS eSports?

     ▫   **I have watched FPS eSports (1)**

     ▫   **I have played FPS eSports (2)**

     ▫   **I have interacted differently with FPS eSports (work behind the scenes, casting etc.) (3)**

     ▫   **I have not interacted with FPS eSports (4)**

Skip To: Q7 If In the past six months, in which way(s) have you interacted with an FPS eSports? = I have not interacted with FPS eSports

Q3 Which FPS eSports did you interact with?

     ▫   **Counter Strike: Global Offensive (CS:GO) (1)**

     ▫   **VALORANT (2)**

     ▫   **Call of Duty (3)**

     ▫   **PUBG (4)**

     ▫   **Apex Legends (5)**

     ▫   **Rainbow 6 (6)**

     ▫   **other: (7) _____**

Q14 How many hours per week did you spend on FPS eSports?

	0-5 (1)	6-10 (2)	11-15 (3)	16-20 (4)	over 20 (5)
Watching (1)	○	○	○	○	○
Playing (2)	○	○	○	○	○
Working/Other (3)	○	○	○	○	○

Page

Break

Q7

PART II

Intentions for interacting with FPS eSports.

Q8 The following describes your intentions for interacting with FPS eSports in the coming six months.

	strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I will interact with FPS eSports in the next six months (1)	○	○	○	○	○
I expect to interact with FPS eSports in the next six months (2)	○	○	○	○	○
I would like to interact with FPS eSports in the next six months (3)	○	○	○	○	○

I plan to interact with FPS eSports in the next six months (4)	○	○	○	○	○

Q9 Do you think interacting with FPS eSports in the next six months will be...

	Not at all (1)	Slightly (2)	Moderately (3)	Very (4)	Extremely (5)
Useful (1)	○	○	○	○	○
Pleasant (2)	○	○	○	○	○
Beneficial (3)	○	○	○	○	○
Good (4)	○	○	○	○	○

Q11 The following describes how easy or difficult it will be for you to interact with FPS eSports (events) in the next six months

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I believe I will be able to interact with FPS eSports (1)	○	○	○	○	○
It will be easy for me to interact with FPS eSports (2)	○	○	○	○	○
I have full control over my decision to interact with FPS eSports (3)	○	○	○	○	○

Q12 The following is a description of the benefits and drawbacks of your interaction with FPS eSports in the coming six months

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My involvement in FPS eSports will help define my life goals (1)	○	○	○	○	○
Setting goals in life is important to me (2)	○	○	○	○	○
I will feel fulfilled by interacting with FPS eSports (3)	○	○	○	○	○
Feeling fulfilled is important to me (4)	○	○	○	○	○

My involvement in FPS eSports will be my hobby for the next six months (5)	○	○	○	○	○
My interests are important to me (6)	○	○	○	○	○
My interaction with FPS eSports will be beneficial to me in a monetary way (7)	○	○	○	○	○
making money is important to me (8)	○	○	○	○	○

Page
Break

Q16

Part III

Relationship with parents

Q17 The following describes your relationship with your parents during your upbringing

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My parents treat(ed) me with warmth during my upbringing (1)	○	○	○	○	○
My parents are/were very strict about controlling my life and	○	○	○	○	○

decisions in general (2)	
I value(d) my parents' opinions highly (3)	○ ○ ○ ○ ○

Q5 Do your parents know that you are involved in FPS eSports?

○ **No (1)**

○ **Yes (2)**

Skip To: Q10 If Do your parents know that you are involved in FPS eSports? = Yes

Q18 The following describes your desire to tell your parents about your involvement with FPSeSports

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I am afraid to tell my parents that I am involved in FPS eSports (1)	○	○	○	○	○
FPS eSports is not important enough to me to tell my parents (2)	○	○	○	○	○
I think my parents wouldn't understand my involvement in FPS eSports due to a generation gap (3)	○	○	○	○	○
There is another reason I don't tell my parents, namely: (4)	○	○	○	○	○

Display This Question:

> **If Do your parents know that you are involved in FPS eSports? = Yes**

Q10 The following describes the impact of your parents on your interaction with FPS eSports in the next six months

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My parents think I should be interacting with FPS eSports (1)	○	○	○	○	○
My parents expect that I will be interacting with FPS eSports (2)	○	○	○	○	○
Peer pressure from my parents is driving me to interact	○	○	○	○	○

**with FPS
eSports (3)**

Q19 The following describes how active your parents have been in (normal) sports, and how that influenced your upbringing

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My parents have a strong affinity towards club organized sports (1)	○	○	○	○	○
My parents tried to involve me in club organized sports (2)	○	○	○	○	○
My parents influenced my competitiven	○	○	○	○	○

ess in
general (3)

End of Block: Default Question Block

SPSS tests

"There is a monotonic relationship between warm parenting styles and more time interacting with eSports"

Asia:

-not for warm+watching (kendalls tau sig is 0.812 / spearman's rho is 0.0.813)

- not for warm+playing (kendalls tau sig is 0.3 /spearman's rho is 0.283)

- not for warm+work/other (kendalls tau sig is 0.494 / spearman's rho is 0.532)

- not for strict+work/other (kendalls tau sig is 0.689 / spearman's rho is 0.655)

- not for strict+playing (kendalls tau sig is 0.112 / spearman's rho is 0.107)

- not for strict+watching (kendalls tau sig is 0.381 / spearman's rho is 0.387)

Europe

- not for warm+watching (kendalls tau sig is 0.957, spearman's rho is 0.932)

- not for warm+playing (kendalls tau sig is 0.558, spearman's rho is 0.595

- not for warm+work/other (kendalls tau sig is 0.486, spearman's rho is 0.486)

- yes NEGATIVE for strict+work/other (kendalls tau sig is 0.044, spearman's rho is 0.042

- yes NEGATIVE for strict+playing (kendalls tau sig is 0.027, spearman's rho is 0.020)

- not for strict+watching (kendalls tau sig is 0.189, spearman's rho is 0.194)

Correlations

			The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general	How many hours per week did you spend on FPS eSports? - Playing
Kendall's tau_b	The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general	Correlation Coefficient	1,000	-,389[*]
		Sig. (2-tailed)	.	,027
		N	28	23
	How many hours per week did you spend on FPS eSports? - Playing	Correlation Coefficient	-,389[*]	1,000
		Sig. (2-tailed)	,027	.
		N	23	23
Spearman's rho	The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general	Correlation Coefficient	1,000	-,480[*]
		Sig. (2-tailed)	.	,020
		N	28	23
	How many hours per week did you spend on FPS eSports? - Playing	Correlation Coefficient	-,480[*]	1,000
		Sig. (2-tailed)	,020	.
		N	23	23

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

Correlations

			How many hours per week did you spend on FPS eSports? - Working/Other	The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general
Kendall's tau_b	How many hours per week did you spend on FPS eSports? - Working/Other	Correlation Coefficient	1,000	-,363*
		Sig. (2-tailed)	.	,044
		N	24	24
	The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general	Correlation Coefficient	-,363*	1,000
		Sig. (2-tailed)	,044	.
		N	24	28
Spearman's rho	How many hours per week did you spend on FPS eSports? - Working/Other	Correlation Coefficient	1,000	-,418*
		Sig. (2-tailed)	.	,042
		N	24	24
	The following describes your relationship with your parents during your upbringing - My parents are/were very strict about controlling my life and decisions in general	Correlation Coefficient	-,418*	1,000
		Sig. (2-tailed)	,042	.
		N	24	28

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

Additional hypotheses:

"Asian participants are more open with their parents about eSports than European participants"

Mann-Whitney U test was not significant

"European participants will be less likely to tell their parents due to generation gap"

Mann-Whitney U test was not significant 0,694

"Asian participants spend more time playing eSports than European participants"

Independent-Samples Mann-Whitney U test shows the mean rank of European participants being higher than the Asian participants, the test was not significant

"European participants spend more time watching eSports than Asian participants"
Mann-Whitney U test showed test was not significant

"Asian participants have more positive associations with eSports than European participants"
Useful, beneficial, pleasant and good all showed no significant difference in Mann-Whitney U test.

"Stricter parents will negatively influence participants perceptions of eSports"
Asia:
- no relation between strict+useful
- no relation between strict+ pleasant
- no relation between strict+benficial
- no relation between strict+good
Europe:
- no relation between strict+useful
- no relation between strict+pleasant /POSITIVE relation warm+pleasant (0.003)
- no relation between strict+beneficial
- no relation between strict+good/ POSITIVE relation warm+good (0.013)

Correlations

			The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing	Do you think interacting with FPS eSports in the next six months will be... - Pleasant
Kendall's tau_b	The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing	Correlation Coefficient	1,000	,483**
		Sig. (2-tailed)	.	,003
		N	28	28
	Do you think interacting with FPS eSports in the next six months will be... - Pleasant	Correlation Coefficient	,483**	1,000
		Sig. (2-tailed)	,003	.
		N	28	28
Spearman's rho	The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing	Correlation Coefficient	1,000	,560**
		Sig. (2-tailed)	.	,002
		N	28	28
	Do you think interacting with FPS eSports in the next six months will be... - Pleasant	Correlation Coefficient	,560**	1,000
		Sig. (2-tailed)	,002	.
		N	28	28

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

Correlations

			Do you think interacting with FPS eSports in the next six months will be... - Good	The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing
Kendall's tau_b	Do you think interacting with FPS eSports in the next six months will be... - Good	Correlation Coefficient	1,000	,403*
		Sig. (2-tailed)	.	,013
		N	28	28
	The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing	Correlation Coefficient	,403*	1,000
		Sig. (2-tailed)	,013	.
		N	28	28
Spearman's rho	Do you think interacting with FPS eSports in the next six months will be... - Good	Correlation Coefficient	1,000	,484**
		Sig. (2-tailed)	.	,009
		N	28	28
	The following describes your relationship with your parents during your upbringing - My parents treat(ed) me with warmth during my upbringing	Correlation Coefficient	,484**	1,000
		Sig. (2-tailed)	,009	.
		N	28	28

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

"Asian participants will have less controlling parents than European participants"

Mann-Whitney showed no significant difference

"Sports families will increase participants' time spent interacting with eSports"

Asia: NEGATIVE for watching + parents have strong affinity towards club organised sports

Europe: no correlations