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Characteristics of Football Spectators Using Second Screen

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***Abstract*—**The parallel usage of different media channels has increased recently owing to technological advances. Second Screen describes the use of a second device by television viewers to consume further content which is related to the program they are watching. This study analysed the characteristics of football spectators regarding their media consumption in relation to Second Screen usage while watching a football match on TV. The existing literature on Second Screen usage is still very limited, especially in the context of particular broadcasting settings such as sport or even more specific such as football matches. Therefore, the primary research objective was to reveal first insights into the user behaviour of football spectators regarding Second Screen services. The survey, which was conducted among German football supporters in 2015, revealed some characteristics such as the identification and involvement into the sports which are related to an increased use of Second Screen services. One important finding for football supporters was that at the time of a match they have a lower parallel media usage compared to other TV broadcastings. Nevertheless, if supporters used a second device while watching a match on TV, then they were using specific Second Screen services. This means they searched for more content related information. The findings on the habits and characteristics of people who are using Second Screen services are relevant for future developments in that area as well as for marketing decisions.

***Keywords*—**Media consumption, second screen, sport marketing, user behaviour.

I. Introduction and Background to the Study

THE popularity of parallel media usage has increased in Germany within the last years. This development results from the overall technological advances and the increased distribution and use of mobile devices [1]. A study from the Bundesverband Digitale Wirtschaft (BVDW) in cooperation with Google and TNS Infratest revealed that on average people own more than one internet-supported mobile device and that 14% of the participants in their research had a smartphone, a tablet and a PC and used all three devices actively [1]. With the technological changes the scheduling rhythm of the TV program has been interrupted by time-shifting technologies as well as video streaming and parallel media and platform usage [2]. That provides the rationale for a variety of new services which has been developed recently.

In 2014, approximately 57% of those people who can described as web affine were using a second device to be online while watching TV [3]. This was published as a result of an important online survey of the public broadcaster ARD and ZDF in Germany who found that 34% are called Second Screen user, because their online activities are linked directly to the actual television program at that particular moment [3]. Another report which was based in the UK was conducted by Technologia [4]. Their research objective was to understand the current progress of second screen applications in terms of the technologies, use cases, commercial arrangements, potential benefits for consumer as well as possible critics of those developments. The authors defined Second Screen as the *"use of handheld devices such as smartphones and tablets in close connection with TV watching"*; however, they also acknowledged that there is no common definition so far as the research area of Second Screen is very young. This report summarized that the development of Second Screen services and applications is strongly driven by the *"battle for viewers' attention – sometimes called the battle for eyeballs*" [4]. For most of the players within the Second Screen development a crucial motivation behind their specific apps is to maintain and/or to monetise the viewer attention or even to differentiate the own service [4].

The first studies on Second Screen investigated consumer behaviour in the context of interactive TV [5], [6]. In those studies, the key issue was to find out how people are using interactive functions of televisions such as program guides and how they want to receive this additional information. It was found that it was more appreciated by the participants to have another device for related content and that they did not want to have this information on the TV screen. Further research then focused on those mobile devices. For example, studies have been done on tablet users and how they combine multiple media [7]. People who used their tablet while watching TV, did this mainly for information and social networking activities. In the context of sport broadcasting this might be the case if television viewers are using a tablet or smartphone to receive more statistical data of the match or search for additional information regarding the players or the rules of the game. However, the authors must also acknowledge that for their sample the primary television screen remains

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dominantly. Moreover, half of the participants didn't know about the existing Second Screen applications at all.

II. Second Screen in German Football

In the last two years various Second Screen services have been developed in relation to football broadcasting by different organisations such as the professional football clubs or the football association, broadcasters and other service providers. The first step within this study was to analyse this market and to compare the existing services. As there are constantly changes within this emerging technologies this benchmarking needs to be updated quite often. The majority of the clubs in the 1st Bundesliga have sections on their websites or specific apps which offer additional information such as statistics, live ticker and live tables during a match. The broadcasters, for instance the public ones ARD and ZDF, have even more complex services on their platforms. For example, it was possible to choose online from different camera positions during the FIFA Football World Cup 2014 within the World Cup app of ARD or to receive detailed statistical and background information [3]. Even companies such as (sport) information platforms and newspapers are offering Second Screen services to their customers. Those online services are applied to increase the participation of the customers with the platform or service provider by offering interactive functions such as commenting or voting options. These activities are often accompanied by various social media activities (for example on Facebook or Twitter) of the organisations where also interaction with the customer is pursued. In this context of increasing Second Screen services it is of special interest how the media usage and behaviour of football spectators looks like. Football is the most popular sport in Germany and the majority of sport-related Second Screen services is related to this sport. However, despite of some general studies on interactive TV and Second Screen few empirical data could be found on the use of Second Screen services within special areas such as football broadcasting.

III. Research Objectives and Methodology

Wilson [2] argued that a nuanced understanding of people's viewing habits is necessary and that this needs to address especially the audience pleasure or even displeasures of the second screen usage. That provides the rationale for this study on Second Screen in general and the following research objective. The study aims to analyse specifically the extent to which Second Screen services are used by football supporters in Germany. Furthermore, it is of special interest what the group of football spectators, who are using Second Screen quite intensively, have in common. The primary research questions, which are addressed in this paper are therefore: How often will football supporters use a second devise for online activities while watching TV and which demographic or other fan characteristics are related to this use of Second Screen services? Moreover, from the findings and implications potential challenges and possibilities should be identified to which extent Second Screen services can be relevant for future sport marketing decisions.

To answer the research questions, a survey was conducted among supporters of a German football club in 2015 in the region around Frankfurt/Main. 1.400 participants took part in the online version of the survey. Additionally, there was a smaller offline survey with 150 fans at a match day in order to avoid distortions by just asking online users. In the data analysis process next to descriptive analysis the correlations have been calculated on the basis of the Pearson correlation coefficient as shown in the findings later.

IV. Findings and Implications

Participants of the study have been asked about their parallel media usage and Second Screen behaviour while watching TV in general and while watching a football match. As shown in Fig. 1 the study revealed that 73% of the participants are using a second device on a daily or weekly basis while watching TV in general; further 18% do this seldom. On average 42% of those can be described as Second Screen users as they are using the additional devise for online activities which are related to the specific content of the TV program. For broadcasting of football matches the results are slightly different. Only 46% are using other devices in that setting. However, if they do it, the activities on the second device are much more (60%) related to the actual football broadcasting on the TV. In general words, this result states that football supporters have a lower parallel media usage while watching a football match but with a higher correlation between the content on the TV and the second device (both the football match). Therefore, the conclusion could be drawn that football fans are watching a match with more attention as other programs. From that result the assumption could be made that football supporters are (emotional) more involved in football matches and therefore do not want to spend their attention for other content whereas the normal TV program (including different categories such as reality shows, quiz shows and advertising), however, does not require a high level of attention of that particular group [8].

Further consideration was given to the group of high intensive Second Screen users. That means they are parallel media users on a daily or weekly basis while watching football and they use content related online services with that parallel device mostly or often (in this case content which is related to the football broadcasting). In the study this group makes up 31%. They are called Second Screen Heavy Users (SSHUs) in the following and most of the correlation calculations will focus on this particular group as they are the most interesting segment for the future development of the Second Screen services for the sport organisations and broadcasters.

For the SSHUs, no significant differences were found regarding their gender as 31.1% were male and 30.7% were female. Also for the questions whether the SSHUs are season ticket holders or have a membership of the club, whose fans were asked in the survey, no relevant distinctions could be found. These findings are shown in Fig. 2.

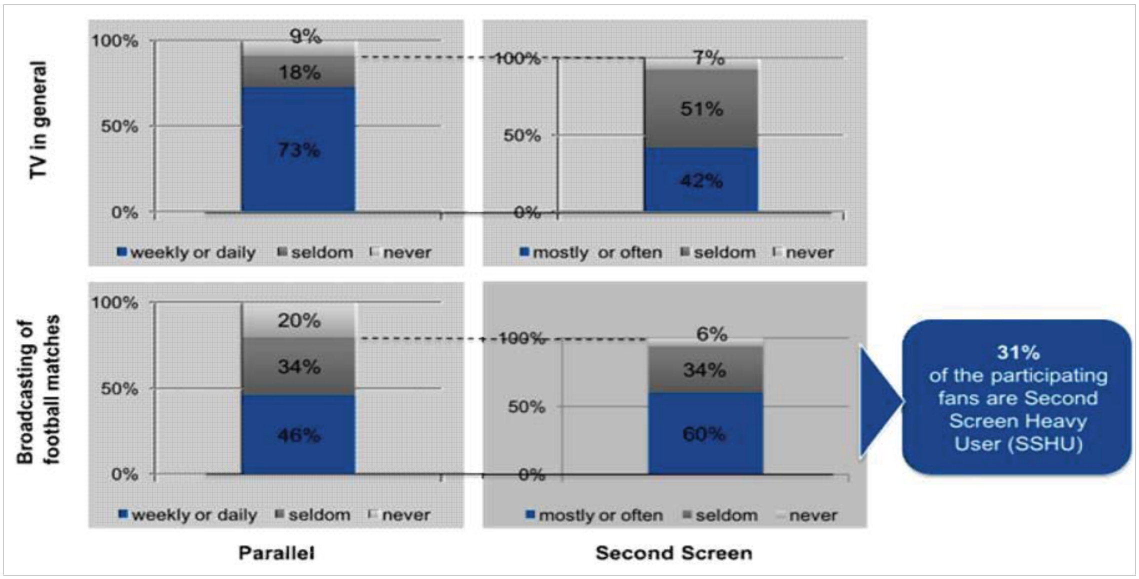

Fig. 1 Comparison of parallel and Second Screen user behavior while watching TV in general or football matches

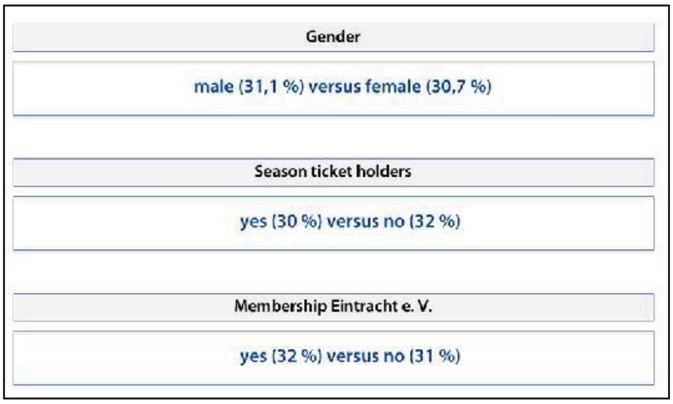

Fig. 2 Differences of SSHUs regarding gender, season ticket holding and membership

Within the study, it was analysed whether the usage of Second Screen is related to particular age groups. Fig. 3 shows that in general people from 14 to 49 years used Second Screen more often than others. Within this very broad age group more than 33 to 35% of the participants are SSHUs, this means they are using the parallel offered services of the football clubs, broadcaster or other organisations quite often. The statistical analysis of the correlation between age and Second Screen Usage revealed a correlation coefficient of r = -0,46; however, this weak negative correlation is not significant. It might imply the assumption that with increasing age the usage of Second Screen services decreases, which could be true generally. However, even in the age group "older than 59" there are 22% of the supporters who are using Second Screen services on a daily or weekly basis while watching football on TV. Compared with the participants under 14 with 23% of supporters being SSHUs, there are no relevant differences in practical terms. This is proved by the missing significance of that correlation. Moreover, this finding is relevant for future marketing decisions, because Second Screen Services seem to be attractive for every supporter regardless of their age. Therefore, special offers could be included in the Second Screen services even for the older people as well as for the younger and middle-age supporters.

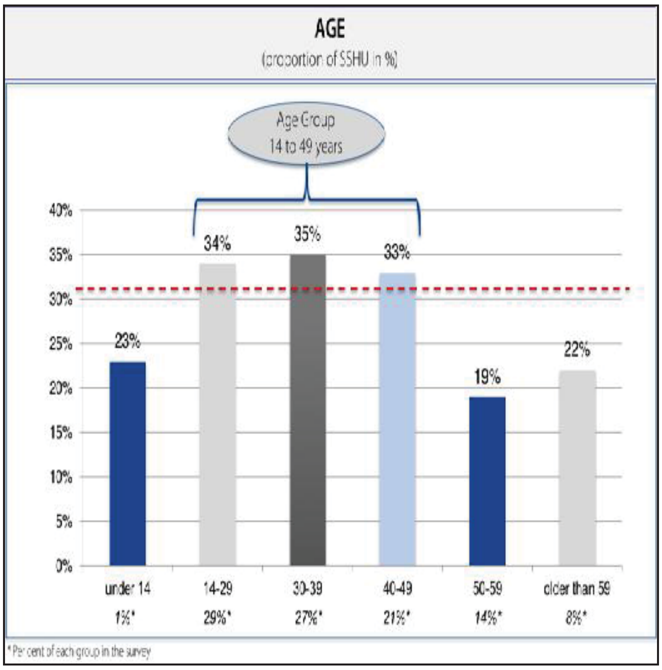

Fig. 3 Second Screen Usage within different age groups

For the SSHUs a correlation coefficient of r = 0,75 was found between the number of football matches watched on TV and the use of Second Screen services. This correlation is statistically significant and states a strong positive relationship between those two variables as shown in Fig. 4. Supporters who are watching more games on TV are using more frequently Second Screen Services. One possible explanation for this correlation might be that people who are watching football on a very regular basis are more involved in this sport and therefore have a greater demand for additional information which is going beyond the content of the TV broadcasting. Especially for fans who are strongly interested in the performance of their club, it is relevant to take a look on the live scores of competitors' matches as well as on the live table (what are standard Second Screen contents) while watching the match of their own club. This question was focused on those fans only who watched the live match on Sky as this pay TV provider has the live broadcasting rights for the 1st Bundesliga in Germany. However, this is not part of the Second Screen research area. In addition to the previous question on the number of matches watched on TV, participants were also asked about the number of home matches which they are attending at the stadium as well as how many away matches of their club they are visiting. As shown in Fig. 5 it was found that people who never visit a home game have a very low Second Screen affinity. This might be caused by the overall lower level of interest for the club's performance at the match or towards the statistics. Additionally, the Second Screen usage is very low for those fans, who support their club at almost every match away. An explanation for this finding could be that those fans have a very high level of emotional involvement as they are live at the stadium almost every weekend. Therefore, they cannot use Second Screen services to such a high extent as people who are only watching some matches live. However, statistically there is no significant correlation between the attendance of home matches and the Second Screen usage (r = 0,25) as well as the relationship between the attendance of away matches and the use of Second Screen services (r = -0,65). At least the previously mentioned negative correlation for the away matches has been proved by the statistical analysis of the correlation coefficients.

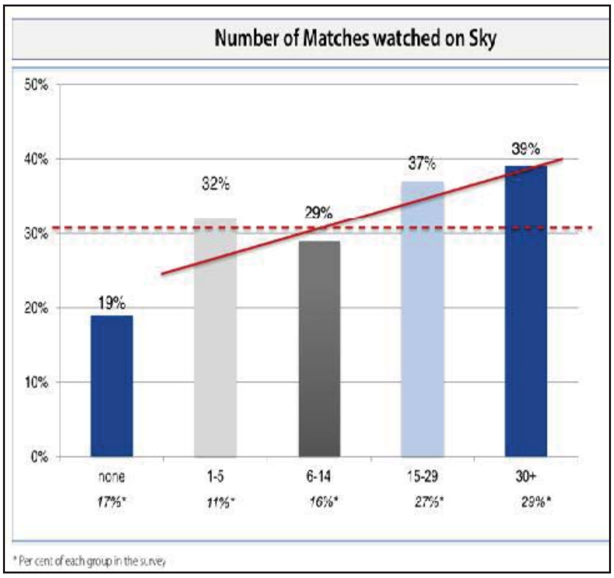

Fig. 4 Correlation between Second Screen usage and number of Bundesliga matches watched on TV

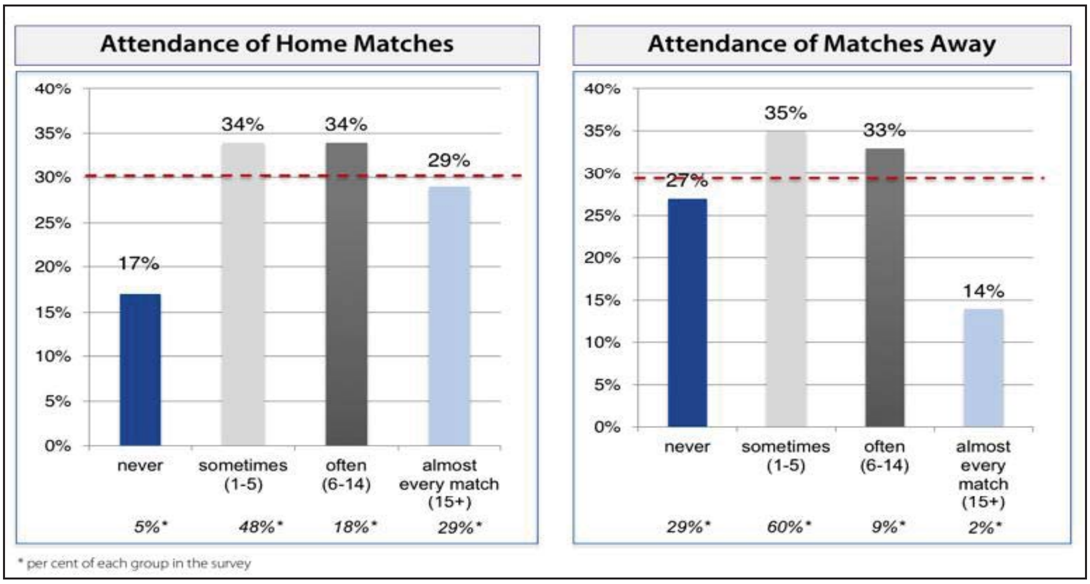

Fig. 5 Correlation between Second Screen usage and number of Bundesliga matches watched live in the stadium

In sport management studies with fan surveys, the identification of a supporter with the particular club is often crucial for the results and implications. Therefore, this was analysed in relation to the Second Screen usage as well within this research project. The participants were asked in the questionnaire to state their identification with the club, whereby 1 was "not strong at all" and 10 indicates "very strong" on this scale. 51% of the participants perceive their identification with the club as very strong (10) and only 5% of the participants rated their identification between 6 and 1. As Fig. 5 shown, those fans who have the highest level of identification, are also those who are using Second Screen services even more. The correlation coefficient for this relationship is r = 0,81 which is significant on the 0.01 level. This finding proves the assumption of a strong positive relationship between the Second Screen Usage in the context of football broadcastings and the identification and involvement with the club.

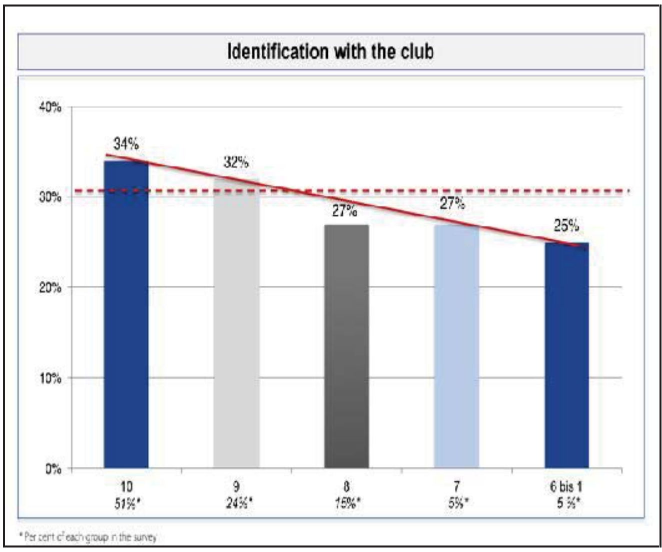

Fig. 6 Correlation between Second Screen usage and identification with the club

The supporters' identification with the club seems to be the strongest influencing variable for the Second Screen usage in this study as it is statistically more significant than age or the number of matches watched on Sky.

V. Conclusion and Future Research

This study revealed first insights into the characteristics and media behaviour habits of football spectators in relation to Second Screen. An important finding of this initial research project was that football supporters have a lower parallel media usage while a football match was broadcasted compared to other TV programs. However, if supporters used a second device while watching football, they did it more often content related to the match on the TV, that means they are using specific Second Screen services. Additionally, the Second Screen usage was significantly higher for those fans, who had a very strong identification with the club. No correlation could be found between the age and the use of new online parallel services.

It is already planned by the authors to enlarge this research to other football clubs in the German Bundesliga to prove the methodological choices of the study and to receive comparable data. The market of Second Screen services is still emerging and a young discipline. Therefore, it is necessary to update the benchmarking, which club provides which Second Screen services and which other providers are taking part on the market, on a regular basis. The sport industry and the participating organisations are developing various new Second Screen ideas and test them on the field currently. Those concepts are based on the prospect to create an increasing demand for Second Screen services by the customers, which then could be used for marketing activities. The findings of this study, which groups of fans would be most interested on the Second Screen offers, can be helpful for future development and marketing decision in the area of Second Screen. To which extent these new opportunities might generate an economic return for example by selling merchandise article via the Second Screen or include sponsor activities within the app is not yet analysed, but will be part of future research to retrieve more specific management implications from this research.

Additionally, it might be worth to investigate whether the behaviour patterns of TV spectators could be transferred to the live participation in the stadium, too. Unfortunately, right now it is often difficult to use smartphones in the stadium properly owing to grid overload and disturbed connections. However, the results of our study suggest that people are also willing to use their smartphone in this setting. Hence, the results are also relevant for organisational questions within sport organisations such as the availability of free Wi-Fi in sport facilities. This area need even more consideration in future research.

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