BEATING A FAKE NORMALITY

The phenomenon of e-athletes with special needs on Twitch.tv

ENRICO GANDOLFI & RICHARD E. FERDIG

INTRODUCTION

Public competitions that are based on digital games—what we know as eSports—are thriving all around the world. According to NewZoo (see https://newzoo.com/resources/ for updated data), the sector has generated almost $700 million in revenues involving 194 million people in 2017. This phenomenon is not only about people playing sports; it also impacts digital entertainment as people watch eSporting events. This typically happens through Twitch.tv, a popular live-streaming portal with social media features counting over 10 million daily viewers (Twitch.tv, 2018). The most popular streamers show their own playing to thousand viewers, *reshaping practices and expectations related to eSports and the sporting mindset*.

Such a claim is particularly relevant for streamers with special needs. Indeed, this media platform has been working as a crossroad where peculiar platform-native practices (e.g., streaming and interacting in real time with a larger audience, absence of post-editing/production, etc.) are affecting the definitions of disability and diversity, from promoting equality and related discussions to normalizing alternative conditions by just showing them. Moreover, several para e-athletes are

streaming their own matches with the support of organizations like The AbleGamers and Twitch.tv itself.

This article addresses a unique participant in the digital sporting mindset—the rise of the eSports player with special needs (e.g., para e-athletes). It addresses the larger question of who might get excluded in some sporting formats and how are they now being included in eSports. The hypothesis driving this study is that eSports and their competitive and entertainment dimension on Twitch.tv can trigger affinity spaces able to overturn stigmas against special needs, which are strongly affected by social representations and metaphors (Edberg, 2012). The authors directed an exploratory ethnography and then an empirical investigation of six twitchers (i.e., streamers on Twitch.tv) with special needs. The latter analysis targeted 24 hours of streaming collecting in-game action, streamers' behavior, and chat discussions with a discourse analysis technique (Gee, 2012). The key concepts leading the inquiry spanned performing style, affinity space, and debating patterns and values. The article is structured as follows: the first section addresses the relationship between sports, digital games, and special needs; the research design is then introduced; the final two sections present the results and discussion of the outcomes. Findings provide an overview of this phenomenon with best practices and reference patterns of interaction and performance. Implications are noteworthy for both practitioners and scholars, from harnessing this practice for more inclusive processes to directing further studies about the sporting mindset of non-traditional participants.

SPECIAL NEEDS, (E)SPORTS, AND MEDIA AUDIENCES

Sports and special needs

Data provides evidence that individuals with special needs (e.g., physical, cognitive and even socio-cultural conditions than

require specific interventions in everyday life routines, learning activities, general accessibility, etc.) tend to benefit from sports. For instance, such participation improves social inclusion and psycho-physical status (Cottingham et al., 2014; Di Palma & Tafuri, 2016). Sports have been found to increase autonomy and self-confidence in students with disabilities (Beyer, Flores & Vargas-Tonsing, 2009), improving the quality of their life (Groff, Lundberg & Zabriskie, 2009) and supporting the development of an athletic identity (Peers, 2012) which can have a significant impact on their ability to deal with real life issues (Smith, Bundon & Best, 2016). The increasing number of disciplines involved and the establishment of Paralympic Games have strongly supported such an intention, which is still growing (Shapiro et al., 2012) and consolidating; indeed, one of the main current challenges is to engage the public at large (Legg & Steadward, 2011).

In the last few decades, academia has dealt with the term *disability* from a multitude of perspectives. However, three main approaches have emerged and proliferated across disciplines and specializations. The first and oldest is the medical/clinical one, in which disability is addressed through a medical lens (Carlson, 2001). Special needs become a disease to cure, fix and keep under control. The second is the social one, which is led by the so-called *social model* (Bickenbacha et al., 1999). According to its supporters, disabilities have a social dimension that must be deepened and eventually changed. If people with disabilities struggle with shared norms and conditions, it is up to institutions to intervene for achieving more inclusive standards. From this attention, Disability Studies originated and spread as a broad disciplinary field (from Law to Humanities and Media Studies) (Lennard, 2006). Finally, a third angle emerged with a more cultural focus (e.g., Raphael, 2008; Shakespeare, 1994). Instead of addressing the organizational issues concerning disability, the spotlight switches to the shared representations and boundaries through which normality and abnormality are

defined. Therefore, cultural models and archetypes become central in understanding how disability and related biases are constructed as factors of segregation. Aside from medical impairments, disability is also a contextual tag that relies on relative and dynamic ideas of normality, well-being and acceptance.

Proposals such as *ableism* and the ones developed within Feminist Media Studies can be listed in this broad perspective, which is characterized by a deconstructive and critical attitude. Ableism is interpreted as a social discrimination toward people lacking specific abilities and, then, characterized by disabilities (Wolbring, 2008). Campbell (2009) suggests the concept of *ableist normativity*, whose rules enforce a counter-position between who is compatible with the accepted norms and who is not. Involving the whole society becomes a crucial step and the popularity of sports represents one key step to support this strategy. However, some special needs are not compatible with traditional sports and there are several disabled groups that cannot be included in this rising phenomenon. Digital entertainment can address this issue with eSports, which provide customized interactions, assistive features, and a remarkable visibility via streaming platforms. The resulting representation of special needs can foster the third lens mentioned above – the cultural one. Media become an essential front to inhabit in order to detect and potentially re-frame bias-relate stereotypes (Mulvey, 1975; Silverman, 1988).

Video games and special needs

Digital entertainment implies multiple considerations involving human computer interaction, technological accessibility, and media engagement, which are fundamental fronts in dealing with disabilities and related requirements. The medium has already been exploited for helping individuals with special needs. For instance, video games were harnessed to increase youth mental

health (Huen et al., 2016), fight depression (Li et al., 2014), and engage individuals with impaired sight (e.g., the games Blind Legend by Dowino and Three Monkeys by Incus Games). Supportive and communicative efforts of foundations like The AbleGamers Charity and Special Effect are increasing all around the world, and Game Studies are starting to develop a specific attention to disabilities as core themes in shedding light on ludic experiences (e.g., Champlin, 2014; Ledder, 2015). Research studies have provided evidence that video games can facilitate learning, well-being, and reflection in individuals with special needs (e.g., Lim & Nardi, 2011, Tzanetakos at al., 2017). Nevertheless, eSports are a still overlooked topic in game research (for some exceptions, see Jenny et al., 2017; Keiper et al., 2017), especially when they may engage *special* populations. These competitions based on video games flourished with the rise of internet in the Nineties. Since then, tournaments and leagues have been thriving, from the Cyberathlete Professional League to the World Cyber Games (Consalvo, Mitgutsch & Stein, 2013; Taylor, 2012).

The increasing importance of Twitch.tv has affected this trend in a peculiar way, making it a public spectacle where millions of viewers can attend and watch their favorite e-athletes. Twitch.tv is the leading live-streaming platform with more than 10 million daily users and over 2 million active streamers (Twitch.tv, 2018). It was launched in 2011 as a section of another streaming portal (Justin.tv), and Amazon purchased it in 2014 for 970 million dollars. Its focus has mainly been on digital entertainment, but other content categories are emerging, from talk shows to creative videos. In essence, twitchers film themselves during the performance they want to show and users can watch, comment and even financially support them. Streamers can have their own channels and be followed by their fans, mimicking Twitter's mechanics. In addition, Twitch.tv has many social features including chat, preferences, and thematic sections.

This portal has recently been the subject of some studies that tried to shed light on its core trends and dynamics. Gandolfi (2016, 2017) found that streamers are the key motivation for someone to watch, and that related online debates are able to deal with serious topics and issues rather than being mere divertissement. Hu, Zhang and Wan (2017) observed that the viewer exchange with the streamer can entail parasocial interaction, actual and ideal self-congruity, and participation. Therefore, engagement, involvement, and socialization are particularly high among viewers (Gros et al., 2017; Sjöblom & Hamari, 2017). Finally, twitchers are becoming celebrities who are increasingly aware of their role (Bingham, 2017). The community of streamers with disabilities is growing as well and also due to the support of Twitch.tv itself, which has strongly promoted it partnering with the The AbleGamers Charity foundation in several events. Channels of disabled players' groups are emerging (e.g., Deaf Gamers TV), and several of them (e.g., theRealHandi, Lo0P, BrolyLegs, mackenseize, NoHandsKen, Stacey Rebecca, Guldbrandsen, HalfCoordinated) have thousands of followers.

This pro-active front is characterized by a more accessible sport practice (and mindset) partially aligned to the tendency among social media celebrities to interact with fans (Marwick & Boyd, 2011). Para e-athletes can show their skills but also interact with their followers and normalize what it is seen as diverse. The chat spaces of their shows can work as positive spaces, where video games are just premises for discussing disability, acceptance, and inclusion. The potential in terms of fairplay, positive sportsmanship and collaboration may be significant in fostering an special need-related sportiveness with an impact on society at large (Kavussanu & Spray, 2006; Weiss, Smith & Stuntz, 2008).

Research Design

Following the aforementioned premises, the correlated research questions leading this article are the following:

RQ1: What are the current trends in para-eSports channels in terms of behavior, performance style, and interactions?

RQ2: How do para-eSports channels on Twitch.tv act as "affinity spaces" (e.g., places where individuals share positive values especially referring to sports and a sporting mindset)?

These research questions originated and were refined during an exploratory investigation (Caliandro, 2018) of Twitch.tv live streaming staged in Winter/Spring 2018 by the authors, who are currently directing multiple studies about the platform (ranging from sportiveness to well-being factors and leadership to coping). This initial phase was inspired by the digital methods approach (Rogers, 2013) that considers media environments as: 1) sources of novel practices; and, 2) crossroads through which viewpoints and frames are reformulated beyond the difference between on and off line with a self-critical attitude (Smith 1999) that reflects researchers' biases and preconceptions.

Discourse analyses of six para e-athletes' Twitch.tv shows (henceforth T1, T2, T3, T4, T5, T6) (n=4 hours each, gathered from the saved videos on their profile) were conducted with the intention of collecting streamer's behaviors, in-game activity, and chat comments (see Table 1 for the protocol adopted). Three *building tasks* (Gee, 2012) were followed: 1) significance – relevant actors, topics; 2) practice – what actions are under the spotlight; and, 3) connection – what relations are occurring between elements (e.g. streamer, game, viewers; Gee, 2012). The unit of analysis for textual data was the *stance* or the *clumps* of tone units that deal with a unitary topic or perspective, and which appear (from various linguistic details) to have been

planned together (e.g., a progressive and correlated exchange of messages on the Twitch.tv chat).

The analysis follows a two-step cycle (Saldana, 2016) with the support of NVivo Software Version 10. First, sentences were labelled in great detail; then, broader reference categories were adopted spanning the game itself, game expertise/ability, streamer's behavior, streamers' prompts, digital entertainment, streamer's opponent, streamer's special need, daily life, and game accessibility. In addition, data were re-framed with a narrative analysis (Bruner, 1991) toward understanding relations and values of such an interplay, which can go beyond the gaming activity itself.

Pursuing this line, two analytic fronts were addressed:

Interaction (user-user and twitcher-user) type – supporting (an aligned and legitimizing mood), debating (a constructive and proactive mood), and criticizing (a conflictual mood, which can also entail banning; inspired by the encoding/decoding model by Hall, 1973).

Interaction (user-user and twitcher-user) values – ludic (escapist and entertaining values), critical (critic and problematizing considerations), practical (pragmatic values, from ad hoc tips to technical commentary), and utopian (existential and ethical values); inspired by Floch (1995).

Twitchers' behavior was also labelled according to the three streaming styles suggested by Gandolfi (2016): the professional, who is mainly focused on the game itself with no or marginal interactions with his/her fans; the hedonist, who relies on his/her personal skills for entertaining followers; and the companion, who uses games as pretext for interacting with viewers.

Sensitizing concepts driving data interpretation were *stigma* and

affinity space. The former refers to a discriminatory metaphor that could be reversed. According to Goffman (1963), stigmas refer to constructed identities through which minorities (also disabled) are labeled and framed by the majority. The stigma entails a discriminatory status, which legitimates oppressions, biases, and inequality. Moreover, it is based on metaphors that associate the targeted person with negative traits and behaviors (e.g., the evil Jew, the promiscuous homosexual), and then motivate the negative attitude toward him/her (Douglas, 1966). The second "is a place or set of places where people affiliate with others based primarily on shared activities, interests, and goals, not shared race, class culture, ethnicity, or gender" (Gee, 2004, 67). It is an environment where individuals learn from each other aside from standardized labels and affiliations; online settings are one possible venue for such a dynamic. As mentioned above, the hypothesis leading this article is that eSports on Twitch.tv can support a more inclusive perspective on special needs and related perceptions.

Performing style and audience were interpreted also through a sportiveness lens, reflecting on if and how ideal sport-related norms were followed and respected. Regarding twitchers, fair play worked as leading key concept; with this term, the reference goes to a playful attitude characterized by respect (e.g., of rules, teammates, opponents, etc.), interpersonal empathy, and proactive and positive behaviors toward others at large (e.g., community, society, etc.) (Păunescu, Gagea, Păunescu, & Piţigoi, 2013; Lumer, 1995). More specifically, steamers were observed in terms of: 1) respect of other players, from allies to enemies; 2) respect of game mechanics and presence of cheating/griefing activities; and, 3) positive behavior toward their audience. Viewers can be bearer of sportiveness as well. Sport participation may entail significant outcomes for spectators, spanning social cohesion, community feelings, and well-being (Zhou & Kaplanidou, 2018; Gibson, Kaplanidou, & Kang, 2012). For this

article, the presence of media toxicity (e.g., disruptive online behaviors) worked as a core parameter for understanding if these streamers' followers showed anti-sportive instances, such as: chat spamming, trolling, racial/minority harassment, and cyberbullying (including negative comments about the streaming) (Murnion Buchanan, Smales & Russell, 2018; Kwak, Blackburn & Han, 2015).

Data were collected and analyzed in the spring of 2018. The sample of streamers was picked according to popularity (over 1000 followers), eSport orientation (presence of games associated with eSports), and different special needs (trying to cover an heterogenous range of conditions) (see Table 2 for a snapshot; all but T5 are males). N:4 hours were observed studying at least 2 different clips for each twitcher. The videos were selected by relevance (number of viewers) and length of the shows (30 minutes or more). Names of users and performers were anonymized for privacy concerns. This study was approved and monitored by the authors' university I.R.B. committee.

Table 2. Overview of the twitchers analyzed.

Twitcher	Special need	N. followers	Main games
1	No limbs	140,600	iRacing/Counterstrike
2	Spinal Muscular Atrophy	1,365	Killer Instinct
3	Type 1 Diabetes/Deaf	2,190	Monster Hunter World/The Division/Rainbow Six Siege
4	No arms	9,136	Street Fighter V
5	Seizure disorder	38,334	Hearthstone
6	Partially blind/deaf	190,251	Fortnite/Counterstrike

Table 1: Observation Protocol.
Table 2: Overview of the twitchers analyzed.

RESULTS

The first exploratory phase started within a broader research initiative addressing game streaming. The lead author has been

involved with online gaming as both player and spectator since 2015, noticing a significant rise of diverse populations of streamers and yet a relevance disruptive and boyhood-related attitudes (Burrill, 2008). Twenty streaming shows of variable length (ranging from 20 minutes to one hour) of twitchers with special needs were observed live in early 2018, following both the performance and the chat activities. The first author kept a partially passive profile examining general trends pointed by the literature (Gandolfi, 2016), with sporadic comments about the matches observed. The preliminary expectation was to find special needs functioning as leading drivers during play and in chat debates, even with conflictual elements considering general trends in competitive gaming (Kwak, Blackburn & Han, 2015). Therefore, a *social model* lens with political implications was employed (e.g., Hall, 1973), anticipating these streaming shows to work as *battlegrounds* between widespread toxicity and a counter-empathy. On the contrary, this initial investigation pointed to a widespread fairness between viewers and streamers and to a marginal presence of disability-related discussions. In other words, the authors' presumption of staging a *proactive* investigation was quickly confuted by an already *alternative* phenomenon, echoing the cultural lens mentioned above. Para e-athletes did not need to be saved – they already did with their followers, also adopting an unusually interactive performing style able to overturn game streaming standards (Gandolfi, 2016).

Addressing the consequent analysis of the six twitchers, almost all of them show themselves (the only exception is T2) – and therefore their condition – during their streaming (using the combination of computer screen and web-camera). They all followed a thinking aloud method (Eccles & Arsal, 2017) where they commented on their performance (e.g., actions, emotions, plans) in real time via voice and/or chat comments (although T1 commented only before and after the match). For instance,

T2 comments "we just learn that in Instinct, when you cancel a shadow eclipse (…) so it is the best option. yes, you see (…) there is a pause. It is good to know" after having learnt a trick; T1 says "wow, that was rather disgusting (…) a terrible turn" nodding his head after losing a race; T5 anticipates that "I am pretty rusty, I am not going to play this game perfectly". Their shows were competitions (T 1, 2, 3, 5, 6), training (T 2, 4, 5), or teaching (T4). The first refers to regular matches against other people; the second to learning instances (e.g., tutorials, trying new characters); the third is about teaching viewers how to play a game. Four videos analyzed were characterized by interactions between streamers and in-game mates (n=2) and streamers and real-life friends present with them (n=2); it can be argued that these exchanges strengthen streaming transparency and familiarity, promoting the performer as a "normal" player. The activity on screen was only focused on games for all the streamers aside from the initial minutes, which worked as a sort of "loading" screen.

Addressing the interaction, Table 3 shows results in terms of stances collected and unique users involved, type and value of the interaction, streamers' style and participation, and highlights in the debating topics with the related number of instances. Although the performing styles were split between professional and companion (this difference can be noticed in the different prevalence of debating topics), the former instances showed a high level of interaction between users and streamer overturning the usual silence from this category of twitchers (Gandolfi, 2016). The performers tended to be part of the online conversations with secondary exceptions due to in-game urgencies (e.g., fighting an enemy just appeared).

Online conversations were supporting and debating, with no criticizing instances (neither spam nor trolling/toxic users). The leading values were ludic (e.g., jokes about playing and real life events discussions) and pragmatic (suggestions and reflections

on in-game best practices and heuristics). Utopian discussions emerged with an emphasis on streamers' virtuous examples and game accessibility (see Table 4 for some examples). No critical discussions emerged. All the twitchers analyzed replied to questions about their in-game activity, daily routines, and conditions in a proactive and accommodating way, and the majority made fun of themselves (the only exception was T2); moreover, they were also curious about their own viewers. For instance:

> User1: [hello emoji]
> T1: hey [user1], what's up man?
> User1: Not too much and you? Waiting on the sister and the niece to come over to take them to a couple museums and the aquarium
> T1: don't you live in (…) I mean, on the West coast?
> User 1: Chicago
> T1: I thought you lived in the West Coast (…) Chicago, ah. I am a Redskin super fan
>
> User2: who makes your emotes? I paid this chick to make some for me but I think she just stole my money LOL
> User1: I need someone reliable
> T2: I sent you the recommendation
>
> User2: yes you did, wasn't sure if thats who did it
> User2: thanks man, I will hit her up
>
> User1: how is your arm? Good?
> T5: it is good dude, it is actually funny [she explained she helped her friend and that she has the carpal tunnel]
> User1: carpal tunnel? that [xx]cks.

Finally, it is interesting that the topic of special needs was present but marginal, fostering the *normality* of these videos (see the presence of daily life instances in Table 3). When present, it was because of appreciation and practical reasons. For instance: "You

may see me stop playing occasionally to chat w/ the viewers in the chat so I won't leave my deaf/hard of hearing friends out of the loop ? #NoVoiceZone" by T3. In addition, it is a proof of the closeness of these streamers' fan-bases, which see them as persons rather than stressing their special conditions. There was often a strong group of followers that kept commenting, sometimes even replying to users' questions for the streamer (e.g., about his/her gaming habits or personal information), underlying a familiarity with him/her.

Addressing sportiveness, all the streamers showed a significant fair play and respect toward teammates, opponents, and game rules, it does not matter the specific genre or competition played. In case of defeat, they sometimes express frustration targeting themselves – e.g., "damn it, I should have [done a specific action]" – and never against others, which were often complimented – e.g., "he did right"; "good job, I never expected that". In collaborative oriented matches (e.g., Monster Hunter: Worlds, Counterstrike: GO), communication and collaboration with teammates were positive and coral, even when negative events (e.g., losing) occurred. As observed above, such an approach was reiterated with the viewers, who did not show any instance of toxicity; even discourse types were either supportive or debating-oriented with no conflictual elements

Table 3. Results.

Twitcher	N. stances(n. unique users)	Type (n.stances)	Value(n.stances)	Style (stances attended by the streamer)	Main highlights (n. stances)
1	42(27)	Supportive(42)	Ludic(38) Pragmatic(3) Utopian(1)	Professional(38)	daily life(21) video games(12) accessibility(2)
2	48(51)	Supportive(44) Debating(4)	Ludic(32) Pragmatic(12) Critical(4)	Professional(44)	gaming expertise(34) daily life(7)
3	72(62)	Supportive(72)	Ludic(56) Pragmatic(16)	Companion(71)	video games(41) daily life(12) special need(5)
4	70(90)	Supportive(54) Debating(16)	Ludic(46) Pragmatic(18) Critical(6)	Professional (64)	gaming expertise(41) daily life(21)
5	84(115)	Supportive(78) Debating(6)	Ludic(74) Pragmatic(10)	Companion 84)	daily life(63) game expertise(12)
6	93(101)	Supportive(82) Debating(11)	Ludic(61) Pragmatic(24) Utopian(8)	Professional(89)	Game expertise(67) Appreciation(23)

Table 3: Results.

Table 4. Exchanges (examples).

Value	Example
Pragmatic	T1: I forgot what the default User2: I think default ARB is 3 on both? seeing as it's the middle ground User2: I always forget to change during a stint"
Pragmatic	T2: I am in game for 20 minutes and I have just learnt a lot of stuff User1: all good User2: I just learned how to lab more efficiently by watching you
Ludic	User1: what do vegan zombies eat? User2: Cabbages?" User3: if you meat a vegan zombie they will tell you what they eat in the 1st 5 minutes. they also probably crossfit T5: [laughs repeating the previous message] User1: it wasnt a joke, it was a legit question" User4: wouldn't vegan zombies be super successful? plants are readily available and the zombies' existence doesn't threaten them with extinction
Utopian	User1: HOLY [censored] So much respect dude T1: what's up [user1]? User1: what are you using to steer? T1: a mouse. Just one second, I will show you (...) this is the dpi button that normally changes your sensibility on the fly User1: I'm amazed how do you take your headphones off User1: I can't even do 1 clean lap & I use a wheel, Look at your damn
Pragmatic	T4: I am doing it for helping [user1]. User2:SFV seems really aggro compared to SF4 User3:why you doing survival again? User4: he's showing someone how it's done User1: [user3] he's showing scrubs like on how to beat it" User1: [user4] like me User5: Well it will be easier than the Starcraft I'm going to make you play User1: bruh ur cpu enemies looks easier than what i get even ttho its the same xD User4: a good player makes it look easy User4: he's actually doing a lot of stuff on reaction User4: it looks like he just hitting buttons from our end User5: See that's what he wants you to think
Utopian	User1: [T6] legend User2: [T6] i think your such an amazing guy and your really an inspiration T6: thank you [user2], it means a lot (...) I got a lot of support User2: your really such a amazing person
Pragmatic	User1: you guys playing a private duo or you're open for subscribers User2: is he getting better with his problems? i can see he is a full time streamer now :) T6: So many people are asking me to do it right now lol User1: lol T6: don't worry [user1], I'll get you soon. User1: oh no no dont worry 'bout me User1: i mean, i do wanna play with you but if you wanna play with your close friends, then feel free User1: i'll play Fortnite with you whenever you want me to.

Table 4: Exchanges (examples).

DISCUSSION

eSports and Twitch.tv represents a novel front for promoting inclusion and self-confidence, helping us reconsider inclusion and exclusion in sports. It can be argued that the group of streamers analyzed provided an example of how game streaming can enrich individuals with special needs and educate larger audiences. Indeed, the prejudice against disabled people, what Perlin has defined *sanism* (2000), is spread in common perception (Hugenberg & Sacco, 2008) and even among new generations

(Hamdy et al., 2011). Self-perception (Corrigan et al., 2003) and families (Green, 2003) are affected as well by the stigma, which often depends on a lack of adequate knowledge; stigmas inform social identities, and then social expectations, criteria and demands to follow and envision (Goffman, 1963). Twitchers with special needs seem to overturn such a situation. They are characterized by an interactive and open-minded approach, dealing with their followers even when they are competing. Moreover, they are available to answer questions about their own situations, which are by the way marginal. Concerning RQ1—and despite the fact that their style may vary—patterns of interaction point to an ongoing listening to viewers by these twitchers, replying to almost each comment and staging transparent shows, where they stream themselves learning, failing, improving. They avoid the typical silence of professional streamers (Gandolfi, 2016), embracing a synergy between expertise and closeness to their audience. They are not self-centered but interactive and social (no hedonistic attitudes emerged) with high chat participation. This highlight is even more interesting considering that the video games streamed were varied, from reaction-based competitions (e.g., fighting games) to more strategic challenges (e.g., carding games). The outcomes of these communication frequency and style by the streamer are a proactive and supporting community, which appreciates and motivates the streamer, and the absence of toxic behaviors and comments. Such an environment sees competitive gaming and video games at large as an equalizing/triggering practice, which is accessible, customizable, and extremely popular, and streaming as an amplifier. In addition, Twitch.tv provides streamers ways to sustain themselves and charity initiatives – an opportunity that the whole sample analyzed is harnessing (especially T3 and T5). Finally, it can be argued that the *normality* (e.g., secondary references to disability, relevant presence of daily life discussions, etc.) characterizing these clips

is an effective instrument against stigmas (Goffman, 1963) because it makes them irrelevant.

Addressing RQ2, Twitch.tv can support affinity spaces, especially if we consider that behind this *trivial discussions* (e.g., jokes, everyday life) there are several examples of peer mentoring (Bowman-Perrott et al., 2014) between users and between streamers and users, where anyone learns from each other (e.g., picking the right card, finding the best setting, offering to play together). Moreover, there was an ongoing fairplay among viewers and performers. Regardless of the result or differences, streamers' opponents and other users are always treated fairly, which is a crucial behavior in sport and physical education in higher education (Keiper et al., 2017) and at large (Kavussanu & Spray, 2006). Such an attitude is essential in feeding a positive *sportspersonship*, which is linked to what we expect from others in general and our empathic capacity toward human beings (Weiss, Smith & Stuntz, 2008). Furthermore, it weakens the increasing toxicity in online environments, where the so-called *online disinhibition effect* is fostering discrimination and prejudice (Phillips, 2015; Suler, 2004). Cyberbulling, trolling practices and hate acts, which are even more frequent when disabled people are involved were not present in the shows analyzed. These hints are aligned with the potential of sports for promoting diversity and mutual understanding against biases and differences (Tonts, 2005; Schulenkorf, Thomson & Schlenker, 2011). This specific outcome has been advanced also involving competitive gaming and esports (Heere, 2018), and this study aims to support such a claim. Findings point to a proactive culture of sports, were inequalities are marginal and counter-balanced by equity and reciprocity good sportsmanship among athletes (Coakley, 1998).

Finally, all the twitchers analyzed do not hide their special needs but rather they describe them in their front page and/or during their streaming.

This work is promising in its ability to support inclusion and awareness toward individuals with different abilities in the game sector and beyond. It has provided evidence of the ability to examine the use of eSports and streaming by those who are often excluded in sports. Future research should address three next steps. First, future data collection should move beyond a snapshot of the whole phenomenon, which is heterogeneous and requires additional insight on different special needs, performers, and games. Second, continued research should focus on deeper and more extended investigations (e.g., surveys, interviews with streamers) including working with streamers beyond eSports (e.g., several streamers with disabilities do not stream competitive gaming). Finally, eSports are a growing phenomenon that is experienced in other venues than Twitch.tv (e.g., YouTube Gaming, mainstream social media, official competitions), which require proper attention to be explored.

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