Exploring online and gaming communities through community psychology

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Biography

Crystal N. Steltenpohl was born in Gießen, Germany. Growing up with her German mother and father in the U.S. Army, she had the pleasure of spending her childhood in Germany, Kentucky, Missouri, Indiana, and the Netherlands, and visiting many more countries. She graduated from AFNORTH International School in Brunssum, the Netherlands, in 2007. Crystal graduated magna cum laude and as a University Honors Scholar with a Bachelor of Arts in psychology and English in 2011 from the University of Southern Indiana. She then earned a Master of Arts in applied psychology from Southern Illinois University Carbondale in 2011. Crystal has accepted a tenure-track position in the psychology department at the University of Southern Indiana in Evansville, Indiana, where she began working in August 2017.

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Abstract

Through three manuscripts, this dissertation explores the potential for understanding online and hybrid gaming communities through a community psychology perspective. The first manuscript reviews literature on online communities in major community psychology journals. Historically, community psychologists have focused on community building and maintenance, community support, communication norms, and advocacy. There are opportunities, however, to explore other topics relevant to community psychologists' interests and collaborate with researchers in other fields. The second manuscript reports the findings of a mixed-methods survey of 496 fighting game community (FGC) members. It explores FGC members' metastereotypes, explanations for why certain portrayals of the community exist, and their effects on the FGC. Generally, FGC members believe inaccurate stereotypes about the FGC specifically and the gaming community more generally exist, due in part to a lack of understanding and/or ulterior motives. Negative portrayals of the community are largely seen as harmful to the community. This study emphasizes understanding how communities believe others see them and how that can affect community dynamics. The final qualitative manuscript examines perspectives of the social identity of people who play games, emphasizing the importance of understanding the "gamer" identity through more than unidimensional measures like gaming habits. The variance in identity centrality, required behaviors, player motivations, and perceptions about the label highlight the complexity of the "gamer" identity label. Taken together, these manuscripts offer a rationale for and exemplars of studying online and hybrid gaming communities through a community psychology perspective. They also argue for an increased attention to opportunities for interdisciplinary work.

Exploring online and gaming communities through community psychology

Humans are living through the largest increase in expressive capability in history (Shirky, 2009). Fully 86% of Americans are online, and 79% of American internet users (68% of all U.S. adults) use Facebook, and 76% of Facebook users log on daily (Greenwood, Perrin, & Duggan, 2016). This increase in social media usage has affected the way we act and speak (McKelvey, 2016; Reed, 2014). In fact, the 2015 Oxford Dictionaries Word of the Year was not a word at all; it was an emoji (specifically,) (Oxford Dictionaries, 2015). Various abbreviations, acronyms, memes (images, videos, etc. that are copied and spread rapidly via the internet), and neologisms have made their way into culture thanks to chatrooms and instant messaging, social media, and texting. Even words that existed previously have changed in meaning (e.g. profile, wall, sock puppet, viral) (Reed, 2014). Emoticons (e.g., \(^\Lightarrow(\U)_\sigma'^-\)) and emojis (see above) have also grown in popularity as legitimate ways to express oneself. Use of these communication strategies varies across demographic identities, geographic regions, social network sites, time, and even technology platforms (McKelvey, 2016). The internet has affected the way we interact with ourselves, our friends, and our communities.

Community Psychology and the Internet

The internet provides opportunities to utilize technology to strengthen communities. In fact, community psychologists created a guide for social media use (Brunson & Valentine, 2010). Others have briefly discussed possible applications (Shull & Berkowitz, 2005). Despite this, community psychologists have been slow to research online communities (Steltenpohl, Reed, & Keys, under review-b). In fact, much of the relevant work in the chapters on technology and virtual communities in the *Handbook of Community Psychology* comes from outside of community psychology (Figueroa Sarriera & González Hilario, 2017).

Thus far, when community psychologists have studied the internet, they have focused on four broad topics: community building and maintenance, community support, communication patterns, and advocacy (Steltenpohl, Reed, & Keys, under review-b). While we do know some things about online communities, there is still much to learn about not only how we *currently* interact with each other via the internet, but also the potential for how we *could* interact with each other online. For example, regarding community support, there might be a difference for those who might be classified as "lurkers"—people who merely read but do not engage in online communities—and those who actively participate (Dyer et al., 2010). As with offline sense of community (Jason, Stevens, & Ram, 2015; McMillan & Chavis, 1986; Nowell & Boyd, 2010), we are unsure of the best way to define or measure online sense of community (Abfalter, Zaglia, & Mueller, 2012; Blanchard, 2007). There are online and hybrid communities, however, that have great potential to provide insights into how these types of communities operate. One such type of community is the gaming community.

Gaming as a Growing Interest-Based Community

Despite the growth of gaming as a hobby and an industry in the past several years, gaming is still a controversial pastime. As will be explored in this dissertation, differences in perception among gamers and non-gamers may have an impact on how gamers view themselves and interact with others. Virtually no gamer surveyed by Dial (2013) believed violence and gaming are associated; however, they were aware others held those beliefs. Four in ten adults believe that people who play video games are more likely to be violent themselves (Duggan, 2015). Parents associate their children playing video games with more conduct and peer problems and less prosocial behavior, but their children do not make these same associations (Lobel, Granic, Stone, & Engels, 2014).

In fact, online gaming may provide opportunities for shy individuals to generate new friendships and strengthen old ones (Kowert, Domahidi, & Quandt, 2014). Those who identify as gamers are more likely to have a positive opinion of gaming than those who do not play video games or do not call themselves gamers (Duggan, 2015). Gamers are more likely than nongamers to think video games help develop problem solving skills (39% vs. 8%), are a better form of entertainment than television (34% vs. 5%), promote teamwork and communication (28% vs. 6%), and are not a waste of time (53% vs. 13%). People can use games to connect with established friends and communities, engage with strangers, and possibly create new communities online. Recent statistics suggest 54% of frequent gamers play multiplayer games; these gamers spend on average 4.6 hours per week playing with others in person and 6.5 hours per week playing with others online (Entertainment Software Association, 2016). In fact, 53% of these gamers feel video games help them connect with friends and 42% feel video games help them spend time with family.

Despite these reported benefits, community psychologists have largely ignored gaming communities. When community psychologists have looked toward video games, they have focused on topics like violent video games (Jason, Danielewicz, & Mesina, 2005) or video game addiction (King & Delfabbro, 2009), rather than positive features of gaming and gaming communities (O'Connor et al., 2015). This focus on negative outcomes may reflect the American Psychological Association's continued assertion video games produce only negative effects (American Psychological Association, 2005, 2013, 2015). Concerns have been raised about how the recent APA task force on gaming may have yielded incomplete and thus biased results. Moreover, it has been suggested the APA stacked the task force with members who were clearly anti-game (e.g. some of the members had filed amicus briefs supporting the regulation of violent

video games) (Ferguson, 2015; Kelly, 2015; Kleinman, 2015). Additionally, the United States Supreme Court could not find evidence violent video games posed a public health risk (*Brown v. EMA*, 2011). These concerns led 230 researchers to voice their concerns over the methods and findings of the APA task group in an open letter (Przybylski, 2013). A recent reanalysis of Anderson et al.'s (2010) meta-analysis of the effects of violent video game exposure on player aggression, empathy, and prosocial behavior suggests effects of playing violent video games on aggression are overstated due to publication bias, small effect sizes, and lack of methodological quality (Hilgard, Engelhardt, & Rouder, 2017).

It is not difficult to find developers trying to make a difference or tell important stories through gaming. There has been a rise in the creation of what are known as "empathy games": games that focus on emotional storytelling to build a connection between the gamer and other people, such as those who have lost a loved one to cancer (e.g. *That Dragon, Cancer*), immigrants (*Papers, Please*), or children of abusive parents (e.g. *Papa & Yo*) (Wells, 2016). We can only imagine how this subgenre will grow as virtual reality becomes more commonplace. Perhaps it is time we as community psychologists took a strengths-based approach to studying gaming communities and studied how they form, grow, operate, handle conflict, and dissolve, just as we might expect to be done with any other group.

Given the increasing popularity of the internet as a means of communication and of gaming as a potential vehicle for creating community, community psychologists might be interested in online and gaming communities. Many gamers talk about video games on the internet. NeoGAF, a message board for "hardcore gamers, enthusiast press, and video game industry developers and publishers," boasts over 170,000 members who have cumulatively made

almost 101 million posts in the past twelve years ("NeoGAF Forums," n.d.). The eight-year-old r/gaming subreddit has nearly 11 million subscribers ("r/Gaming," n.d.).

Gaming communities allow us to explore online and hybrid (i.e., groups that communicate both on- and offline) communities. Like any other community, they have assets and deficiencies. Contrary to the stereotype of gamers as lonely "basement dwellers" (Coldewey, 2014), gaming communities engage players and often feature discussion on game lore, politics, game mechanics, and philosophy on gaming-related websites ("NeoGAF Forums," n.d., "r/Gaming," n.d.). Gaming communities are rich and complex, with their own language, values, and norms. It is worth learning about them, not as a monolithic, faceless body, but by exploring their various, distinctive subgroups. One such subgroup is the fighting game community (FGC), a community of people who play games involving combat, like *Tekken* and *Mortal Kombat*.

The Fighting Game Community

The FGC has a complicated image. Gamers are often stereotyped as violent (Dial, 2013), and fighting games are violent in nature. FGC members are aware of this image and feel misunderstood (Steltenpohl, Reed, & Keys, under review-a). However, the FGC may facilitate social interaction between players and allow for the formation of social capital among players from diverse backgrounds (Kong & Theodore, 2011). Its arcade roots may have created an environment inclusive of people of color (Bowman, 2014), although this is contradicted by games' often stereotypical portrayals of some of their otherwise diverse cast (Demby, 2014).

The image of inclusiveness is also complicated by the FGC's relationship with women. Tournament enrollment data from Kong and Theodore (2011) estimate less than 5% of competitive players are female. Indeed, the stereotype of the hateful gamer hurling insults at female gamers, like many stereotypes, has some roots in reality (Hamilton, 2012; IGN Staff,

2012). However, this problem may not fully come from FGC members themselves. Fisher (2012) found gaming media outlets underrepresent the number of female gamers and often mock and insult them. However, an estimated 41% of gamers overall are women (Entertainment Software Association, 2016), although there are no known statistics available for women in the FGC. Additionally, some research has found no relationship between sexist attitudes and daily video game use or preference for specific genres (Breuer, Kowert, Festl, & Quandt, 2015). Whatever the reasons for women's low involvement in the FGC, the answers are likely as complicated as other aspects of the community.

Members interact with the FGC in many ways—online and offline—but commonly report going to in-person gaming nights, participating in online streams, and posting on social media (Steltenpohl, Reed, & Keys, under review-a). Thus, it is a hybrid community: a community utilizing a mix of online and offline communication methods. The FGC is appropriate to study because members appear unafraid of being honest, have rich history and culture, and relatively diverse demographic characteristics. It also has contradictions and controversies as well, further highlighting the FGC's complicated image.

Community Meaning-Making

Communities are constantly in the process of making meaning, which Prilleltensky (2014) argues is related to mattering and thriving. The FGC is no exception. Members spend time discussing what it means to be a member of the gaming community, or a "gamer" (Steltenpohl, Reed, & Keys, under review-c). The emotional content in many of the responses to the question, "What does being a gamer mean to you?" suggests a desire of members to expressed how their experiences mattered and the impact of these experiences on them. FGC members also work to understand their place in the world, and how others see them (Steltenpohl,

Reed, & Keys, under review-a). There is a sense of (in)justice and (un)fairness, depending on members' specific perceptions of outsiders. Some feel a sense of self-efficacy regarding their community's place in the world, believing that things can change. Others felt that the FGC will always be marginalized in comparison to other gaming groups specifically or interests more generally. FGC members' discussions of their social identity and especially outsiders' views of their community reflect a desire for the community to thrive. Given the relative lack of representation of the FGC in research on video game communities, this dissertation provides an opportunity to understand how FGC members make meaning of their own community.

A Natural Tension

As discussed above, FGC members—and members of the larger gaming community—have many reasons to distrust researchers. Among other reasons, researchers, perhaps particularly in psychology-related fields, have a history of pathologizing people who play games, especially those who play games with violent content (Anderson et al., 2010). Community psychologists place a focus on actively collaborating with community members where possible, respecting all cultures and placing a priority on community members' voices (Society for Community Research and Action, n.d.). The strategies community psychologists use to gain entrée into communities and build collaborative relationships with community members could go a long way toward easing this tension.

Yet publishing research is a central activity for academic researchers, one key to many researchers' social identities (Horn, 2016). Publishing often requires manuscripts to contribute meaningfully to theory, which may contradict community members' own experiences. In addition, there can also be disagreements between community members and funding agencies regarding what issues should be prioritized (Pellicano, Dinsmore, & Charman, 2014). Thus, a

new tension is born, one where the researcher's desire to allow communities to speak for themselves in their own words and contexts is pitted against the researcher's to (more cynically) gain employment and earn promotions and (less cynically) contribute to scientific literature.

This dissertation attempts to navigate this tension by favoring the voices of FGC members where possible. I position myself relative to the community and make explicit my own goals and perspectives, in line with best practices for community-based participatory research (Muhammad, Wallerstein, Sussman, Avila, Belone, & Duran, 2015). While theory is certainly important for scientific progress, I prioritize FGC members' voices to offset some of the negative attention previous researchers have given the community. As Krause and Montenegro's (2017) argue, community psychologists have focused too much on what the *ideal* community looks like and what factors are common across different types of communities. My goal is to show the FGC for what it *is*, according to the perspectives of its own members, as well as what FGC members felt makes their community unique. In this way, this approach is not simply an antidote for previous slights against gaming communities, but a way for me as a researcher to increase the constituent validity (cf. Keys & Frank, 1987) of the research and attempt to enhance the quality and completeness of my analyses.

This Dissertation

Despite the potential for understanding online and gaming communities through a community psychology perspective, little research has been done on online communities (Steltenpohl, Reed, & Keys, under review-b) or on gaming communities (Steltenpohl, Reed, & Keys, under review-a). This dissertation aims to explore online communities its first manuscript: a review of the literature on online communities from community psychology-affiliated journals. This review and call to research categorizes the 21 articles published in major community

psychology journals in the past two decades into four categories: community building and maintenance, social support, communication patterns, and advocacy. I suggest future directions for community psychologists, in terms of potential topics of interest, collaborative opportunities, and research methodologies. This manuscript allows us to critically examine our own understanding of online communities, focusing on what we have prioritized as a field and how we have operationalized the constructs we have studied thus far.

To explore the FGC more specifically, the second and third manuscripts focus on this community. The second manuscript features a mixed-methods analysis exploring FGC members' perceptions of how outsiders see the community, or meta-stereotypes. We ask FGC members how the FGC is (mis)understood by non-FGC-gamers, gaming media, non-gamers, and non-gaming media. We also ask them what portrayals of the FGC exist, why they exist, and what effects these portrayals have, if any, on the FGC. While there has been research in other fields on related topics such as stereotype threat, particularly among female gamers (Kaye & Pennington, 2016), we know of no studies examining gamers' meta-stereotypes regarding their gaming community or any other topic. Understanding how gaming community members see others' understandings of their gaming community can inform us when we are attempting to gain entrée and help us to avoid misunderstandings. In addition, this manuscript allows us to understand how FGC members make meaning regarding their experiences with outside communities through a glimpse at their metastereotypes and the effect of these metastereotypes on their communities.

The third manuscript focuses on FGC members' perceptions of the gamer identity. There is quite a bit of research on what affects how likely someone is to identify as a gamer and how different identities intersect with the gamer identity (Condis, 2015; De Grove, Courtois, & Van Looy, 2015; Kubik, 2010; Shaw, 2012a, 2012b, 2013). However, few, if any, studies examine

perceptions of the label within specific communities, and whether people who play games even want to use the term. This qualitative manuscript explores the "gamer" identity from the perspective of trying to understand whether, when studying members of specific gaming communities, researchers are envisioning them as they envision themselves. The emotional content of many of the responses, along with the variety of experiences and motivations for engaging with the gaming community, allow us to better understand how FGC members make meaning of their own identities and belonging in the gaming community more generally.

These manuscripts are intended to add to discussion about online, hybrid, and gaming communities, both as separate entities and to the extent they overlap with one another. They prioritize the voices of FGC members where possible and provide us with a window of how members make meaning of their experiences—positive and negative—within the community. They present an argument for exploring various concepts of interest to community psychologists. I hope these manuscripts will also stimulate interest in these communities from community psychologists, who are distinctively positioned to explore these communities in a way that gives voice to their members, rather than speaking for them, as so many researchers before us have.

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Paper 1

Steltenpohl, C. N., Reed, J., & Keys, C. B. Toward the future:

A call for research on online communities.

The concept of "community" is multifaceted and has undergone changes as communities have experienced transformation throughout history (Krause & Montenegro, 2017). Thanks to the internet, humans are living through the largest increase in expressive capability in human history (Shirky, 2009). Our understanding of communities—and the concept of community itself—has been transformed, and will continue to change as the use of the internet continues to grow (Castells, 2001; Nip; 2004; Reich, 2010).

The internet is increasingly integrated into people's daily lives. The seventeen largest U.S. cable and telephone service providers acquired over 3.1 million net additional high-speed Internet subscribers in 2015—the most net additions since 2010 (Leichtman Research Group, 2016). As of 2016, 88% of U.S. adults use the internet (Pew Research Center, 2017). The gap is closing between income groups regarding internet usage; 79% of U.S. adults with an income under \$30,000 use the internet (compared with 98% of those with an income over \$75,000) (Pew Research Center, 2017). However, only 53% of those with incomes under \$30,000 have broadband at home, compared to 93% of those with an income over \$75,000 (Pew Research Center, 2017). The internet usage gap between African Americans and Whites is non-existent for those who are young, college-educated, or have higher incomes; the gap is more pronounced among older African Americans and those who have not attended college (Smith, 2014). People in the U.S. use the internet regularly, although usage patterns do vary predictably across income and educational attainment.

We often use the internet to connect with others: 72% of U.S. adult internet users (62% of the entire adult population) use Facebook; 70% of these users log on daily, including 43% who do so multiple times a day (Pew Research Center, 2015). Similarly, 38% of Twitter users are on the site daily. Adults are not the only ones spending their time on the internet: 95% of teens are

online, a percentage that has been consistent since 2006. Young African Americans aged 18-29 use Twitter more often than their White counterparts (40% vs. 28%) (Smith, 2014).

The internet is profoundly changing how we create and interact with knowledge (Wesch, 2009), and possibly how we build and maintain personal relationships and communities. In fact, Madara (1997) argues community is more easily found, chosen, or started online than face-to-face. For example, people with chronic illnesses or disabilities might benefit from online communities because they are often more readily accessible, and online they can be judged more by their contributions and not their status or appearance (Cole & Griffiths, 2007).

Some community psychology research has discussed online environments, like forums, where community members can engage in discussions about upcoming and recent programs (Shull & Berkowitz, 2005) and interact in an online training program (Arcidiacono, Procentese, & Baldi, 2010). We have examined relationships between youths' use of social networking sites to share news and their perceived competence in offline civic discussion, and, in turn, intention to participate in the civic domain (Lenzi et al., 2015). Others have discussed how community psychologists might create mutual-help forums (Pita, 2012) or use social media (Brunson & Valentine, 2010). Most recently, community psychologists have pushed for using social media in order to make community psychology more current and relevant, and to increase the visibility and growth of our field (Jimenez, Sánchez, McMahon, & Viola, 2016; Tebes, 2016).

Still, surprisingly little research has focused specifically on the emergence of online communities—groups of people utilizing the internet to communicate—within a community psychology context, although as *Figure 1* shows, interest is rapidly increasing. In the new *Handbook of Community Psychology* (Bond, Serrano-García, & Keys, 2017), relevant literature cited regarding virtual or online communities comes from outside of community psychology

journals (Figueroa Sarriera & González Hilario, 2017; Krause & Montenegro, 2017). In this article, we examine the current literature, and suggest future directions for community psychologists, in terms of both potential topics of interest and research methodologies.

Method

Integrative literature reviews generate new frameworks and perspectives on an emerging topic by reviewing, critiquing, and synthesizing current knowledge (Torraco, 2005). To collect articles covering our topic of interest, we searched for the terms "online community," "virtual community," "internet community," and "social media" in the following major English language community psychology journals: American Journal of Community Psychology, Australian Community Psychologist, Community Psychology in Global Perspective, Global Journal of Community Psychology Practice, Journal of Community & Applied Social Psychology, Journal of Community Psychology, Journal of Prevention and Intervention in the Community, and Psychosocial Intervention. Any article published before or during 2016 was considered.

To be included in this literature review, articles needed to discuss how people use technology platforms intended for or with potential for online communities, including but not limited to forums, listservs, and social media. We were not interested in papers strictly about online usage (e.g. using the internet to find information). After identifying an article, we scrutinized its references for other articles from community journals.

Results

This literature search returned 21 descriptive or empirical articles in four categories: community building and maintenance (seven articles, 33%), community support (five articles, 24%), communication norms (five articles, 24%), and advocacy (four articles, 19%). For the purposes of this paper, community building and maintenance refer to the creation and upkeep of

communities. Community support is defined as care and assistance—emotional, instrumental, tangible, or financial—given and received by community members. Communication norms are ways members of a community discuss topics and communicate ideas with one another. Finally, advocacy means attempts by a group to garner public support for a cause or policy important to their community. Although these articles were published in community psychology-related journals anytime between 1997 and 2016, 71% (15 articles) were published in 2010 or later.

It is important to note that, theoretically speaking, an article could potentially cross multiple categories. It is easy to imagine, for example, a study about how communication norms vary across advocacy groups, or an intervention that tests how different community building and maintenance strategies affect online community members' perceptions of support. For the purposes of this paper, we assigned papers to the category with which they were most closely aligned in terms of the examined variables and/or outcomes. Thus, a paper that examined communication norms among members of an online support group would be categorized as a publication on communication norms, rather than community support.

Community building and maintenance

The largest category, community building and maintenance, houses seven articles that address the creation and upkeep of communities. Researchers explored online communities of third culture and missionary children (Loomis & Friesen, 2011), children in general (Reich, Black, & Korobkova, 2014), older Chinese migrants (Li, Hodgetts, & Sonn, 2014), social media in general (Niland, Lyons, Goodwin, & Hutton, 2015; Reich, 2010), *World of Warcraft (WoW)* players (O'Connor, Longman, White, & Obst, 2015), and homeless people in Madrid (Vázquez, Panadero, Martín, & del Val Diaz-Pescador, 2015). Most of these studies are descriptive in nature, although one—Reich (2010)—directly tested hypotheses.

In some cases, online communities featured members who likely did not know each other offline. For example, posts from a website aimed at people who grew up in a culture other than their parents' native cultures, adult "third culture kids," were analyzed using McMillan and Chavis' four sense of community dimensions (Loomis & Friesen, 2011). Users from across the globe came together to develop sense of community, influence how the website functioned, take control of online community regulations and norms, and provide support for one another.

Members shared life updates and stories with one another, engaged in efforts to meet with one another offline, assigned ambassadors to recruit new members, and shared information. Loomis and Friesen suggest there is variation in how membership, bidirectional influence, needs fulfillment, and shared emotional connection manifest online, but these components are there.

Reich and colleagues (2014) conducted a three-year longitudinal study examining how users form communities with nine online communities aimed at children (e.g. Club Penguin, Webkinz, Gaia). Their results suggest even when online communities were designed to be restrictive regarding communication, users still found creative ways to share personal information and emotions with one another, show affiliation, and gather in large groups. For example, a user wanting to express that they were thirteen years old might say, "tin add tree," if the site banned the use of numbers. Reich and colleagues arrived at three key components that contribute to sense of virtual community: *membership*, defined as a sense of belonging; *influence*, defined as the sense one affects the community and its members; and *immersion*, defined as a state of flow during community navigation. These studies (Loomis & Friesen, 2011; Reich et al., 2014) highlight the ability to form communities even when members do not know each other offline, and even with restrictive site policies that limit communication, as was the

case in the study on children's websites. These studies support the conceptualization of sharing personal information as an antecedent to sense of community (Blanchard, 2008).

Online technologies can allow users to stay connected with previously established inperson networks while building new networks. Interviews with older Chinese migrants to New Zealand highlight the usefulness of technology in allowing these migrants to maintain ties to China while adapting to their new environment (Li et al., 2014). For instance, having a satellite television allowed them to watch Chinese TV after an earthquake in China. They were able to learn from the news that tens of thousands of people died, and used this information to raise money in New Zealand for those in China. Additionally, utilizing Skype allowed them to talk with family members and friends. Simultaneously, the migrants forged the "Chinese-Kiwi Friendship Programme" to foster greater connection and belonging in their new neighborhoods. Technology allowed overseas Chinese people in New Zealand to maintain ties with their homeland communities while creating relationships in person in their new locales.

Online technologies can supplement communication with current offline networks. Social media has been particularly helpful in building such hybrid (online and offline) communities.

Niland and colleagues' (2015) descriptive study challenged the notion online interactions do not foster friendships. Focus groups with existing friend groups found overlap between online and offline interactions. Participants agreed friendship is about having fun together, which can include using "Facebook stalking" (hyperbolic slang for looking through someone's Facebook without their knowledge) as a form of gossip. Friendship is an investment of time and effort, including checking on friends' pages and sending messages. Friendship requires being open and genuine, accomplished through status updates (although these can also be inauthentic and annoying). Friends prevented social misuse of the internet by preventing others from talking

badly about their friends, preventing people from posting negative comments, and helping with privacy concerns (e.g. helping make a distinction between fun and embarrassing pictures).

Not having access to internet technology can not only make the internet unavailable, but also affect one's ability to navigate various offline and hybrid communities and keep in touch with family and friends (Vázquez et al., 2015). Interviews with homeless individuals in Madrid indicated involvement with communication technologies, but the percentage of those using cell phones (59%) is well below that of the general population of Spain (94%). This makes interacting with government agencies, who increasingly utilize these technologies, more difficult. Homeless individuals also have trouble keeping touch with family who live outside Madrid. However, even homeless individuals who do utilize these technologies experience social exclusion, although it is unclear to what extent they experience social exclusion compared to their counterparts without these technologies. It is also unclear whether social exclusion could be alleviated with an improvement of free public access to these technologies. This work and the Li et al. (2010) study on Chinese migrants in New Zealand highlight the need to understand how technology in general can affect one's ability to navigate various communities, both online and in person, although access to these tools does not necessarily guarantee positive outcomes.

While some studies suggest online technologies allow for community creation, social media can also muddy the waters of online community. Reich (2010) synthesized data from four projects utilizing high schoolers and college students as subjects and found mixed evidence for a sense of online community among these hybrid communities. There was little evidence for membership through boundaries (people were Facebook friends with people they barely knew), emotional safety (due to drama), and identity (no evidence of a "MySpace/Facebook identity"). There was evidence of immersion via personal investment. Reich found mixed evidence for

integration and fulfillment of needs in these hybrid communities, due to little evidence on shared values, although there was agreement on norms and occasionally on shared purpose. The sites themselves do address a need for connection, however, and there was evidence of exchanging of informational resources. There was also mixed evidence for shared emotional connection, as users could experience both connection and isolation while on the sites.

A study of current and past *World of Warcraft (WoW)* players' sense of community, social identity, and social support indicated these qualities can be found among *WoW* players (O'Connor et al., 2015), despite the low likelihood of all the players knowing one another offline. *WoW* was a common ground, and players enjoyed feeling a part of a broader, massively multiplayer online (MMO) game community. More specifically, *World of Warcraft* players identified as gamers, *WoW* players, and guild members (i.e., members of in-game groups who often play together). Through the game, *World of Warcraft* players were able to obtain in-game help, advice about offline concerns, and emotional support, with many players trusting their guild mates. O'Connor and colleagues (2015) propose that the degree to which someone identifies with a community may affect their sense of community.

Since community building has been described as a way to operationalize community psychology's values (Lazarus, Seedat, & Naidoo, 2017), we would expect community building and maintenance to loom large in our literature on online communities. Likewise, the literature in this section reflects the ambiguity in the concept of community building. Community psychologists have utilized various models and measures for a general sense of community (Jason, Stevens, & Ram, 2015; McMillan & Chavis, 1986; Nowell & Boyd, 2010). Many perspectives on sense of community abound in community psychology, thus it makes sense to find parallel concerns surrounding definition and measurement for online sense of community.

Parallel to the offline world, context matters when online. Some social networking sites may focus more on networked individualism, or a form of communication that emphasizes individuals' distinctiveness, rather than positioning them within communities (Reich, 2010). Even sites that emphasize networked individualism serve a need for interpersonal connections. All communities highlighted in these studies reflect a bottom-up or community-based approach in their development and maintenance. Given the existence of mixed evidence for a sense of online community and confusion (not just in community psychology) over how to measure this construct (Abfalter, Zaglia, & Mueller, 2012; Blanchard, 2007), it may be helpful to follow O'Connor and colleagues' lead and spend more time asking online community members what a sense of online or virtual community means to them. We can see a desire for community (Li et al., 2014; Loomis & Friesen, 2011; Reich et al., 2014). However, there seem to be challenges specifying exactly what desire for community means regarding online worlds and how technology can affect our sense of community in general. Perhaps mixed methods can help triangulate a definition of sense of community (Campbell, Shaw, & Gregory, 2017). Reaching a consensus on sense of online community will help us to further explore what factors lend themselves to strong online communities. One avenue to explore is community support.

Community Support

We organized five articles into the category of community support, which discussed the internet's potential to be used to obtain support, often by members of groups who are historically seen as marginalized or otherwise isolated. More specifically, these primarily descriptive articles explored support in online communities composed of people with diabetes (Barrera, Glasgow, McKay, Boles, & Feil, 2002); lesbian, gay, and bisexual individuals in Hong Kong (Chong, Zhang, Mak, & Pang, 2015); single young mothers (Dunham et al., 1998); cardiac patients

(Dyer, Costello, & Martin, 2010); and those with disabilities (Obst & Stafurik, 2010). The study of single young mothers focused on posts made over a six-month period, and the comparative intervention study of people with diabetes measured social support three months apart. The other studies were cross-sectional in nature, utilizing online surveys.

Even across these disparate groups, similar themes emerged. Across studies, online support group participants perceived increased availability of social support (Barrera et al., 2002; Chong et al., 2015; Obst & Stafurik, 2010). Additionally, online communication helped some members to develop a sense of group membership or receive social support, which they may not have been able to accomplish offline (Chong et al., 2015; Obst & Stafurik, 2010). Those who were more socially isolated were more likely to consistently participate (Dunham et al., 1998). Higher access to the online community was associated with various positive outcomes, such as a stronger sense of community, a stronger sense of online social support, and lower stress levels (Dunham et al., 1998; Obst & Stafurik, 2010). A stronger sense of community was also associated with personal growth and better relations with others (Obst & Stafurik, 2010).

These positive results were not found consistently across studies. For example, higher levels of participation in the cardiac support group were not associated with depression, anxiety, stress, perceived interpersonal support, or social network size. They were, however, positively associated with *perceived* benefits of using forums, including but not limited to learning from others, understanding others with similar experiences, and being reminded that one is not alone (Dyer et al., 2010). We should note that the cross-sectional nature of most of these studies (all but Dunham et al., 1998, and Obst & Sarfurik, 2010) may affect how meaningfully we can interpret the predictive relationships (or lack thereof).

Dyer and colleagues do make a distinction between what active participants and "lurkers," or those who do not offer and receive support, may experience; they state that active participants may receive greater satisfaction from the online community. Additionally, they referenced unpublished qualitative doctoral research that suggests a relationship between activity and lower levels of negative affect and fewer symptoms of depression, anxiety, and stress. The authors suggest qualitative methodologies might capture finer details than quantitative measures.

These articles echo previous findings around social support. According to Saegert and Carpiano (2017), social support facilitates well-being and physical and mental health in the face of stress. Our literature suggests online communities may facilitate giving and receiving support to and from those in similar situations. Online communities also provide opportunities to build relationships and create social networks. Taken together, these findings suggest the potential for online communities to foster social support. A next step is to examine which features of online communities produce these results. One feature may revolve around communication norms.

Communication Norms

Five studies examined communication norms in different contexts. One comparative study compared discussions on race among users on YouTube and a news site (August & Liu, 2015) and a descriptive study explored communication among social networking site Bebo users (Whittaker & Gillespie, 2013). Researchers have also descriptively explored communication norms in an online mutual help group for problem drinkers (Klaw, Dearmin Huebsch, & Humphreys, 2000) and an online support group for those with depression (Salem, Bogat, & Reid, 1997). A comparative study examined how bodies are discussed on a pro-anorexia (pro-ana) and an anorexia recovery sites (Riley, Rodham, & Gavin, 2009).

A thematic content analysis of threaded comments on YouTube clips of two race-related incidents (one featuring modern/symbolic racism, one featuring what they old-fashioned racism) involving New Zealand television presenter Paul Henry found users talked about the two videos differently (August & Liu, 2015). In general, the comment threads were not cooperative (most comments did not receive replies, or only elicited one reply which was then not replied to), and users almost never resolved any disagreements. There was greater disagreement and more profanity in response to the old-fashioned racism incident than in comments about the modern racism incident. Additionally, anti-racist sentiment included more obscenity in responding to old-fashioned racism relative to symbolic racism. Pro-racist comments argued the events were justified (e.g. "it was funny" or "freedom of speech") and there was a denial of racist intent. Anti-racists responded it was racist to laugh about another culture or question whether someone should be identified as being a part of a culture. Anti-racists also argued Paul Henry was unprofessional and disrespectful for these comments, and that this was not his first offense.

August and Liu (2015) compared responses to the videos with responses on a news site to a video of their talk about these data. Freedom of speech was still a theme, although there was very little obscenity. The discussants did not dispute the facts of the matter, but rather the reasons for the racist comments and whether their use is a serious issue. They conclude that, despite the asynchronous nature of both websites (commenters do not need to be online at the same time), there were conversational tones to the comments. On YouTube, commenters appeared less inhibited, while on the news site commenters refrained from obscenity.

Studies like the one discussed above highlight the difficulty of defining online communities. The definition of online communities used for this review was intentionally inclusive: (1) more than two users had to be interacting with one another, either synchronously or

asynchronously, and (2) they had to be utilizing online technologies to do so. However, it seems odd to claim a group where members largely leave each other's posts unanswered is a community. The remaining articles, reviewed below, paint a different picture regarding communication norms: users are clearly speaking from shared experiences and values, even if those values may change across contexts.

Sometimes the contextual factor that affects how we discuss topics is the knowledge that our online behavior may be monitored by outsiders. In other words, we may speak differently in contexts where we feel a sense of privacy. A 12-month longitudinal study examining 37 Scottish young people's Bebo profiles utilized a qualitative analysis of how users self-present, evaluate self-presentations, and how they interacted with other users on Bebo in prescribed and non-prescribed ways (Whittaker & Gillespie, 2013). These users had connections to each other offline, although only their online communication norms were examined. The researchers found that users often "guest edited" each other's profiles, which resulted in comments that were closely linked to offline friendships and events. The style of communication was targeted to the in-group and was almost unintelligible to out-group members. Users often brought their Scottish accents to their online "utterances," and abbreviations were often used. Community members created words to show/request a strong relationship between two people.

Message boards and listservs are online spaces that may or may not be monitored, but can provide a sense of privacy, and thus the potential for intimacy and disclosure. A study examining the communication patterns in an online mutual help group for problem drinkers over a one-year period on a listserv identified several processes, namely emotional support, information/advice, self-disclosure, humor, and feedback about the group itself (Klaw, Dearmin Huebsch, & Humphreys, 2000). The content themes identified were references to alcohol, organization's

principles or behavior change plan, online subgroups, chat room meetings, philosophies of treatment, and spam. There was very little disagreement (5%) in posts; in fact, most posts were encouraging and supportive. Over 65% of posts featured self-disclosure, which might be a crucial function for recovery as it alleviates shame and provides opportunities for other people to compare their experiences. These disclosing posts elicited support from other members.

Similarly, results from an analysis of postings in an online mutual help group for people suffering from depression (Salem et al., 1997) found five themes: social support, help seeking and disclosure, affective responses, types of knowledge, and group structure/identification. Half of the posts featured disclosure, about a third covered advice and information, and about a fifth featured emotional support. Professionals posted infrequently, highlighting a difference with face-to-face environments where professionals more typically make inputs that alter group processes with some frequency. Nearly half of the posts contained some kind of social support for someone else. Disclosure on this forum was more common than in face-to-face examples from other studies the authors cited, which could in part be explained by the anonymous nature of online discussions. Overall the findings from these two studies suggest a high level of posts including emotional support and self-disclosure in online mutual support groups.

In addition to the findings above, Salem and colleagues (1997) were surprised to see offers of concrete assistance and private emails. The researchers were also surprised 61% of users whose gender identity they could identify were male. Men and women posted about the same amount and on similar topics, although men were more likely to disclose experiential knowledge, defined as wisdom gained from participation in an event and the insights that follow from that participation. The most active (viz., 14 or more posts in two weeks) users became informal moderators/leaders and were less likely to address their own issues, taking more of a

helping role. They were more likely to address posts to individual users, provided more emotional support and cognitive guidance, and were more likely to show social support.

The previous studies highlight communities in which members share similar experiences. The stated purpose of these communities may have an impact how individuals interact on them. Another study examined differences in body talk on a pro-anorexia (pro-ana) and an anorexia recovery site (Riley, Rodham, & Gavin, 2009). Almost all users on these sites were female. On the pro-ana site, posters often included their weight in their post signatures, but the recovery site forbade including numbers. Users instead used workarounds to indicate size more vaguely. Weight gain was problematic on both sites, but on the recovery site it was better if it was limited or "for health." Users on the recovery site used more medical terminology. There was no discussion of "healthy at every size" on either forum.

Eating was a central issue and constantly monitored: pro-ana posts tended to use self-deprecatory humor, while recovery site posts showed more despair. Both discussed how their bodies felt: on the pro-ana site, these discussions were usually in detail and reframed negative experiences into positive ones. On the recovery site, descriptions were more about difficult and tentative movement away from behaviors/thoughts relating to eating disorders. The authors note both sites engaged in identity management and the right to participate on the sites through proving in-group status through shared values. They also state that the results of this study support embodiment (that users pay attention to and describe their body) on the internet, specifically that internet might not be a "bodiless environment" after all. This is reflected in previous qualitative studies outside the field, including disability studies (e.g, Seymour, 2001).

These articles highlight the predictable and powerful influence of context on how people communicate online, although communication alone does not lead to convincing descriptions of

communities. Where members help one another, there appears to be strong bonds of connection, for example, for those with alcohol issues and for those dealing with depression. On the other hand, while users of the YouTube and news sites did interact with one another, it is difficult to describe them as community members due to the lower levels of interaction between posters. Future research might examine what factors encourage specific communication norms, and if and how these communication norms can lead to a greater sense of community. Eventually, we might also examine whether we can change those patterns, especially if they become ineffective or harmful. These communication norms may be helpful in maximizing the efforts of communities that engage in collective action, particularly regarding advocacy.

Advocacy

Online communities can be used to advocate for causes important to community members. Four articles examined how social media and the internet could be used to organize advocacy efforts. Two of these were descriptive articles that explored advocacy through the lens of specific issues, particularly labor relations (Brady, Young, & McLeod, 2015) and schizophrenia (Menon, 2000). The other empirical articles examined how engagement with the internet may affect how someone engages in the political process (Alberici & Milesi, 2013) and barriers and facilitators to diffusion processes—that is, individuals' knowledge of and decision to adopt new ideas—within a youth-led online network (Kornbluh, Watling Neal, & Ozer, 2016).

Labor organization UNITE HERE networked with social workers, academics, and allies to force the Society for Social Work Research to relocate their conference, in response to low wages for workers at Hyatt Hotels in San Antonio, Texas (Brady et al., 2015). UNITE HERE created a strategy chart and used multiple social media tools to meet short-term goals, like identifying allies, raising awareness, and building community among various social work and

allied communities. Social media was helpful for organizing advocacy efforts, but the authors assert that "liking" or sharing a news item or signing an online petition is not enough. Social media use has to correspond with offline advocacy in order to enact real change. For example, UNITE HERE also included tasks in their strategy chart revolving around holding forums, speaking with the media, and mobilizing protests and rallies.

Similarly, in the schizophrenia discussion group SCHIZOPH, a poster shared a story about a woman with schizophrenia who failed to pay for a cup of coffee (\$0.79) and was arrested as a result (Menon, 2000). Others shared similar stories they had heard or experienced. Eventually, one poster said they would send the diner \$0.79 with a (nice) letter. Other members liked this idea, and together, the group sent letters and contacted the local news station that aired the original story. The presiding judge decided the woman's 17 days in jail was adequate punishment and ordered her release. SCHIZOPH considered this a victory.

Alberici and Milesi (2013) utilized two offline contexts—meetings and an event—to recruit activists to complete questionnaires on various political outcomes. In the surveys of members of these two contexts, online discussions in attendees' own online communities were found to moderate the predictive effect of politicized identity. Collective action intention was significantly predicted by politicized identity only when participants reported a higher frequency of online discussion. Across contexts, when participants reported higher levels of online discussion, anger did not predict collective action intention. Instead, collective efficacy predicted collective action and fostered collective action intention. Morality supported collective action intention. However, for participants who reported lower levels of online discussion, only anger predicted collective action intention. These results suggest that high levels of online interaction can moderate other variables' influence on collective action intention.

One might suggest that organization and communication among online communities and coalitions can improve one's ability to engage in effective advocacy. One study, however, suggests that there are barriers and facilitators to such effectiveness (Kornbluh et al., 2016). In this study, high school students in three classrooms in three different schools practicing youthled social change initiatives participated in a Facebook group. In this group, students shared questions, updates, and the various activities and efforts in which they were involved. They were given class time for this group activity four times a week.

Students told researchers that being in the Facebook group inspired them to take action in their own projects and enabled them to receive ideas from other students. Some students were able to name specific instances where seeing another student's post gave them an idea for what they could do with their own projects. In addition to these facilitators, there were barriers to diffusion, specifically a lack of instructor engagement and in-class discussion about the Facebook group, as well as the fact that the students were all engaging in activism in different topics. From these findings, we may suggest that online communities engaged in advocacy dedicate time to reflection and focus on similar topics to facilitate diffusion of ideas.

The internet allows activists and other engaged political citizens to organize on issues important to them. While we only found four articles on advocacy, all highlight the complexity of advocacy. Most event organizing happened online, while the actions that resulted from these efforts happened primarily offline. It may be our political processes have not yet advanced to a point where we can truly engage in them from our laptops and mobile phones as impactfully as we would like, but it may also be that research has not caught up to the merging of offline and online worlds. For example, the media has extensively covered the impact of Bernie Sanders's use of online fundraising strategies to shatter expectations (Foran, 2016; Vogel, 2016). More

recently, the media covered "rogue" Twitter accounts made by government employees (or people claiming to be government employees), amplifying complaints about President Trump's gag orders (Davis, 2017; Leetaru, 2017). Engaging in these forms of purely online political protest appears to have effects on the offline world, as the White House has been reported to be cracking down on leaks (Derespina, 2017; Karni & Isenstadt, 2017). In addition, websites like 5 Calls (https://5calls.org/) and Jennifer Hofmann's "Weekly Action Checklist for Democrats, Independents, and Republicans of Conscience" (http://jenniferhofmann.com) have provided ways for advocates to remain organized, which likely has contributed to the increased and consistent strain on Congress's outdated phone system in recent months (Pierce, 2017).

We may benefit from a deeper understanding of how engaging in online discourse may help—or hinder—our ability to advocate effectively offline. We have seen a rise in advocacy in the past several years, but we could empirically examine whether or under what conditions the internet can directly affect social change, drawing from other fields who have studied this in detail for much longer. Researchers could compare strictly online advocacy campaigns and those who utilize a mix of offline and online strategies. An argument can be made, however that we should not distinguish between online and offline advocacy, and instead see online tools as just that: tools we can use to advocate for the issues in which we believe. Whether online or offline, it is still advocacy.

Discussion

As *Figure 1* illustrates, community psychologists did not evidence much interest in online communities until around 2011, when this interest increased notably. In the past two decades, however, other fields have amassed a body of research about the nature and possible functions, forms, benefits, and drawbacks of the internet and online communities. Many of the

studies in this review drew parallels or comparisons with offline spaces. For example, some articles explored questions like how online communities may provide social support for those who find it difficult to find offline support, how online advocacy might influence offline advocacy, how online sense of community may map on to or influence offline sense of community, and how communication norms we have seen in offline contexts might be recreated in specific online contexts. Lastly, we have also seen some suggestion of synergy between online and offline worlds, to the extent that it may make more sense to work towards understanding their various combinations rather than attempting to understand them in isolation.

Community psychology could contribute to understanding the complex interplay of these contextual layers. Bronfenbrenner's (1977) ecological systems theory could be used as a framework through which to conduct such an investigation. One unresolved question is how an online community fits within the other systems and settings germane to an individual member. For example, how do online communities impact members' microsystems? How might individuals' online use be impacted by macrosystemic cultural attitudes? Understanding ecological systems theory as it relates to online communities can help us, for example, understand how policy can affect these systems.

We have learned many important lessons about online communities and online technologies in these articles, and will review them here. Then, we will suggest a few possibilities for future study, which are by no means exhaustive. Finally, we will suggest methodologies that may aid us in our search for understanding.

Sense of Community

We have learned that it is possible to create a sense of community via online communities, although there is disagreement about what this might look like. One article

highlighted that some applications of social media are likely to foster networked individualism rather than a true sense of community (Reich, 2010). However, it remains to be seen whether and under what conditions social networks can host true virtual communities, networks of individuals, or some combination of both. When a community assembles for a more unified purpose, sense of community does appear to be possible and even likely, as noted by O'Connor and colleagues (2015). Further, Niland and colleagues (2015) suggest that online connections are just as important as offline connections. There is no doubt that internet is increasingly becoming an important way for us to interact with others in our society (Li et al., 2014; Loomis & Friesen, 2011; O'Connor et al., 2015; Reich et al., 2014). In fact, one article illustrated a case where lack of access to these technologies can have a negative effect on individuals (Vázquez et al., 2015).

An extension of research on sense of community within online entities is the use of such entities to aid in understanding the nature of sense of community itself. Measuring sense of community is largely an unresolved endeavor within community psychology. Some contend that the Sense of Community Index (SCI) and the Brief Sense of Community Scale (BSCS) do not adequately represent the social responsibility element of sense of community (Nowell & Boyd, 2010). Another concern is whether a theory should be descriptive or prescriptive (McMillan, 2011). Finally, there is contention between deriving a sense of community measure using empirical methods compared to theory (Stevens, Jason, & Ferrari, 2011), and more recently a push for sensitivity to ecology (Jason, Stevens, & Ram, 2015). Online and hybrid communities can facilitate or challenge the actualization of sense of community in different ways compared to solely in-person communities from which previous theories and measures have been derived. Therefore, studying online and hybrid communities may identify elements, both essential and superfluous, to sense of community that previous theories have not yet addressed.

It is possible that sense of community is contingent on context, such that a separate framework might apply to virtual and hybrid communities compared to in person communities. Community psychologists have not yet assessed measurement concerns attendant with accessing a community so differently manifest. Outside of community psychology, there have been attempts to create a sense of virtual community framework and scales (Blanchard, 2007; Koh & Kim, 2003). In a study of 97 online-originated and 80 offline-originated online communities expanding on McMillan and Chavis' (1986) sense of community construct, Koh and Kim (2003) found community leaders' enthusiasm and perceived similarity amongst members impacted members' sense of belonging more for online- communities than offline-originated communities. Additionally, frequency of offline activities impacted members' sense of influence over the community more for online- than for offline-originated hybrid communities.

Hybrid communities that originated offline, and online communities that lead to offline interaction have been also compared in communication, marketing, and anthropology literatures (Jones, 1997; Weinberg, 2004). As an example, studies of the use of Meetup.com by Howard Dean in his 2004 campaign and more recent studies on Bernie Sanders's 2016 campaign have demonstrated the considerable potential of hybrid communities (Foran, 2016; Vogel, 2016; Weinberg, 2004). As with face-to-face sense of community, pinning down precisely what aspects of sense of community are captured through these studies, and what the best way to measure such a concept, is ongoing (Abfalter et al., 2012). With the increasing use of online technologies in community formation and development, it may not make sense to separate online and offline sense of community in the first place.

As with many other phenomena, context matters, and we must remember that the internet is a collection of tools in the form of social media and various website types, and that these tools

can themselves be political. Which tools we use, and how we use them, are likely determined by our goals (Shull & Berkowitz, 2005). Evidence of a difference in sense of community between communities assembled based on a shared purpose or interest compared to those which are not support this notion (Petróczi, 2007). However, researchers warn not to consider technological developments or even specific website features to be strict determinants of a certain community outcome. Rather, it is important to note such characteristics are more likely potential prerequisites, not directional causal guarantees of a characteristic or feature of any associated community. Cyber-archaeologists have developed a taxonomy to differentiate between virtual communities—the communities themselves—and virtual settlements—the qualities of the technological platform(s) (Jones, 1997). A study of blogs hosted on disparate, unconnected websites found a single virtual settlement can span across multiple formally-defined, otherwise siloed technical resources (Efimova & Hendrick, 2005). This supports Li et al. (2014)'s findings regarding Chinese immigrants' use of several news and entertainment sources, Skype, and inperson meetings in New Zealand to maintain a sense of community with China. Thus, it may benefit community psychologists to explore the online analog of the physical environment and the role it plays in online community development.

Members of some virtual communities find it essential to their sense of belonging to manage embodied identity through working around blocks to displaying their body weight (Riley, Rodham, & Gavin, 2009) or age (Reich, 2014). Indeed, the importance of being recognized is repeated across sense of virtual community literature (Obst et al., 2002), and is a component of sense of community not explicitly identified in McMillan and Chavis' framework (Blanchard, 2008). It has been postulated that the suspicion and uncertainty brought on by initial anonymity is the reason for this unique need (Blanchard, 2008).

One area where virtual sense of community is more reminiscent of McMillan and Chavis' conception of sense of community is the importance of behavioral norms and social support (Blanchard, 2008). Blanchard found observing and posting supportive messages was related to increased perception of behavioral norms around support, which in turn were related to an increased sense of community. In addition, supportive communication they received or sent through private messages directly increased members' sense of community, but without being related to perception of norms. For these reasons, Blanchard suggests social norms mediate the relationship between members' well-documented need to be identified and sense of community.

More research is needed to hone our understanding, not only of sense of community, but of online communities in general. There are many questions we can still ask. For instance, how does member turnover affect online communities, and what are the patterns of membership? To what extent and in what ways are new members recruited or discouraged? What is done to sustain or discourage participants' interest? How do perceptions of a community affect how community members interact with outsiders? For example, researchers seeking to gain entrée into gaming communities may need to pay special attention to community members' perceptions of how others see them, given much of the research on gaming in the 1990s and 2000s seemed hyper-focused on proving that video games cause violence (Steltenpohl, Reed, & Keys, 2016).

Other questions may be asked. How does involvement with online communities affect one's identity? How do privacy concerns impact users' community involvement, if at all? In addition, we can look at developmental concerns, like how online communities function over time, and what stages of development exist within online community. It would be of interest to investigate the interactions between characteristics of virtual settlements to discover whether some features are more often prerequisites for community building efforts compared to others

(Jones, 1997; Reich et al., 2014). We can perhaps gain significant insight into the translatability of conceptions of offline communities to the many forms of online and hybrid communities by asking members of the latter two directly about what components of the various extant measures hold up when measuring online communities.

Community Support

We know we can use the internet to help members of communities, particularly those that are marginalized, provide support to one another (Barrera et al., 2002; Chong et al., 2015; Dunham et al., 1998; Dyer et al., 2010; Obst & Stafurik, 2010). We also learned how community support may look similar and different across communities, which may be helpful as communities and community psychologists attempt to build support networks for individuals who are socially isolated for a variety of reasons. Examples may include, but are not limited to, being a member of a very specific community (e.g. those who have been diagnosed with orphan diseases), living in a sparsely populated area, or being a member of a stigmatized and targeted community (e.g. identifying as trans in a very conservative area).

Research on online communities can also enhance the social support literature. As we have seen, online mutual help groups have been fairly successful. Interestingly, the online social support literature has been more successful than the online sense of community literature. This may be because social support is a much more concrete concept, with researchers generally agreeing on the definition of social support (Saegert & Carpiano, 2017) compared to the ambivalence surrounding the definition of sense of community (Abfalter et al., 2012; Blanchard, 2008; Koh & Kim, 2003; McMillan, 2011; Nowell & Boyd, 2010; Stevens, Jason, & Ferrari, 2011; Jason, Stevens, & Ram, 2015). In addition, it may be that social support is simply easier to measure, as it is a single concept, versus sense of community, which has many facets. Any one

facet of sense of community may be easier to measure than sense of community generally. The social support literature is especially encouraging, however, as it shows that face-to-face support, even among strangers, is possible.

We may ask how we can design interventions that turn strangers into supporters.

Additionally, how much of an effect can we reasonably expect online communities to have?

Barrera et al. (2002) suggest social integration may not be affected by online mutual help groups, but may alter perceptions of support. How long does it take for positive outcomes of online communities to manifest, if ever? How might we integrate online support groups into already existing interventions? How might the impact of online communities change as the internet becomes more central to our lives?

Advocacy and Communication Norms

We learned about how advocacy efforts can be developed and implemented online (Brady et al., 2015; Menon, 2000), and how online advocacy behaviors might affect offline efforts (Alberici & Milesi, 2013). While online communities can become echo chambers, estimates of online ideological segregation may be overestimated (Barberá, Jost, Nagler, Tucker, & Bonneau, 2015). This research shows that, if utilized well, internet contact could foster action intention, although there are potential barriers to the acceptance of new ideas and strategies (Alberici & Milesi, 2013). More research is needed to fully explore best practices and the unique ways community groups might focus their efforts using social media like Twitter and Facebook, as well as project management websites/software like Basecamp and Slack. Beyond capturing online community members' advocacy efforts, it would be instructive to investigate the degree to which these communities do or do not facilitate empowerment for their members.

According to the Keys model of empowerment (Bothne & Keys, 2016; Keys, 1993), empowerment develops in progressive stages, contingent on a supportive external response from the environment with which a community interacts. From the studies discussed above, there is reason to believe that online settings provide supportive responses, such as opportunities to participate (the first stage in Keys' model), resulting in *power within* (Keys, 1993). Testimony from many participants in the online sense of community studies reviewed here endorses community engagement and supports the idea that members are willing to take risks in sharing their experiences with others. This willingness to take risks is essential to the second phase, voice own reality and experience, resulting in power to. However, mentions of themes germane to the subsequent three stages in the Keys model (viz., affirmation/power with, increased choice and impact/power over, dignity efficacy and self-respect) are less commonly encountered in extant community psychology research, and are only briefly touched on outside of this literature. These parallels suggest the examination of empowerment in online communities could be a promising area of investigation. Evidence for the impact of online communities on advocacy efforts suggest that evidence for their positive impact on empowerment may soon be uncovered.

We can also study how the internet is used to organize advocacy efforts and mobilize communities to take offline action. We have previously seen the power of online organization in popular media, from the Arab Spring (NPR Staff, 2011) and Black Lives Matter movements (Cullors, Tometi, & Garza, n.d.), to Bernie Sanders' presidential campaign (Foran, 2016; Vogel, 2016), as well as their inevitable countermovements. We have witnessed members of social media call for boycotts of companies and even entire states for various reasons (Brydum, 2015; Hawkins, 2012; Majaski, 2015; O'Brien, 2015), and have seen responses to these calls to action range from supportive to questioning to harassment. Future research may focus on when digital

efforts are helpful or harmful to advocacy efforts, and what is needed to have a successful digital advocacy campaign. Importantly, we can also ask how we can moderate online advocacy campaigns. For example, the participants in the 79 Cent Campaign influenced each other's letters by highlighting the value of being courteous during the discussion on the listsery (Menon, 2000).

It would behoove community psychologists to look beyond our field to understand how advocacy and communication norms may be affected by online technologies. Regarding advocacy, fan communities have used online technologies to advocate for their interests for years (Bennett, 2012; Dimitrov, 2008; Earl & Kimport, 2009). Regarding communication patterns, researchers have explored specific communities, such as "Black Twitter" (Brock, 2012; Florini, 2014; Sharma, 2013) and "Academic Twitter" (Letierce, Passant, Breslin, & Decker, 2010; Stewart, 2015; Stewart, 2016) to explore how specific groups of people communicate and how these strategies may change over time.

Additional Topics for Consideration

In addition to the above, there are various topics worth exploring. For example, despite its benefits, the internet is a place where conflict can happen. Community psychologists are well positioned to explore emerging issues like conflict resolution, justice, and restorative justice practices in online settings (Goodman, 2006; Katsh, 2007; Powell, 2015). Community psychologists are also important resources in the push against group polarization and extremism, as we recommend people discuss ideas among diverse groups (Yardi & Boyd, 2010). Online strategies may map onto strategies we use for offline conflict resolution, or we may be able to find unique ways to lessen conflict using technologies as they develop, such as using virtual reality to build empathy (Robertson, 2016). Additionally, we might explore members' views of their identity in light of their online communities, or how others see their community.

Lastly, most of these studies focus on younger adults. We know older adults often differ from younger adults on dimensions like processing capacity, judgment, knowledge, emotion regulation, attention to emotion, affective perspective taking, and the interpretation of ambiguous scenarios (Carstensen & Mikels, 2005). We might reasonably think there are differences in how older adults use the internet and when they may find the internet relevant or irrelevant to their social goals. Some research suggests older adults who use social media have a strong preference for connecting with family (Swayne, 2016). There may be differences in usage of and feelings toward the internet between individuals who grew up with the internet and those for whom the internet came to existence in later life. For example, are younger people more likely to build a sense of community with a group of strangers online than older people?

Future Methodologies

As we can see, there are many promising areas for community psychologists to explore. To examine these potential topics of interest, a variety of methodologies must be utilized. So far, an overwhelming majority of community psychology studies on online communities have been descriptive in nature, which is arguably appropriate for a relatively new topic area. This is an emerging body of literature, and as mentioned above, we should try to describe and thereby understand a phenomenon before trying to experiment with it (Granberg & Sarup, 1992). We found very few methodological issues within these articles, and those that we did find were addressed by the authors themselves. For instance, Dyer and colleagues (2010) mention that quantitative methods alone might not fully capture participants' experiences online.

As we proceed, we should move beyond simply describing the phenomenon, with the exception perhaps of when we are exploring an entirely novel community. By comparison, there is a large swath of research on online communities outside of community psychology, the

majority of which are inferential rather than exploratory (e.g. Barberá, Jost, Nagler, Tucker, & Bonneau, 2015; Cobb, Graham, & Abrams, 2010; Finholt & Olson, 1997; Hara & Hew, 2007; Hwang et al., 2012; Joe & Lin, 2008; Pfeil & Zaphiris, 2009). These articles utilize a variety of designs and statistical methods, including case studies and online observations, surveys, social network analysis, logistic regression models, and latent space models. It is not helpful to toil independently of, and thus possibly duplicate, these efforts, excepting methodological or ethical concerns relating to a particular study or approach. We can and should look outside of community psychology at other research on online communities, and when possible foster interdisciplinary collaborations to better understand this broadly relevant phenomenon using appropriate measures, regardless of whether they were developed in our field.

Whether our studies are descriptive, comparative, intervention, and/or experimental in nature, we can use multiple data collection methods. Which methods are appropriate will depend on research questions and the community in question. Some research suggests online surveys as a way to obtain information (Wood, Griffiths, & Eatough, 2004), while stigma surrounding certain issues, like pro-ana attitudes, might suggest observational methods (Riley et al., 2009).

Many articles in this review are qualitative, focusing on interviews, focus groups, and textual analysis of pre-existing forum posts. This work provides rich descriptions of online community members' experiences, attitudes, and values. Given the nature of online communities, we have resources to engage in encouraged activities like member checking, thus improving the confidence we can have in our findings. Textual analysis can be useful for message boards, Twitter, Reddit, and Facebook, where posts are generally left alone after being posted, although there is a risk of users deleting posts—especially on controversial topics—if one does not collect data at regular intervals. One can also extract chat logs (Orthmann, 2000).

For data that disappears after a given amount of time—for example, on Snapchat or sites like 4chan—researchers can use creative methods like archival sites or home-built analytics tools.

For streaming sites like Twitch and Livestream, one can use software to record their own screen.

Creative researchers can find a method that matches the means of communication.

We also recommend researchers consider utilizing a mixed-methods approach in which both quantitative and qualitative data are gathered in a meaningful, coordinated manner (viz., more focused than simply attaching a question that asks if "there is anything else you would like the researchers to know"). Purely quantitative methods—especially in an emerging literature such as this—may produce surprising and uncertain findings (Dyer et al., 2010). Mixed methods approaches address biases that qualitative and quantitative methods have when used independently. They can bring out a more nuanced understanding of phenomena, allow researchers to find contradictions in the data, and push boundaries on a study's breadth and depth (Campbell et al., 2017). Mixed methods can also be used to test whether existing measures are contextually meaningful, which is important considering how difficult it has been to study sense of online community. The challenge with mixed methods to date is finding journal reviewers who can effectively and knowledgably review the diverse methods and their complementarity.

Given that the internet is an increasingly important part of people's lives and is not likely to have less influence as time goes on, we have a responsibility as community psychologists to explore the types of online communities and activities with which people can engage. Online communities have much to offer community psychology in terms of theory, research, and action. By continuing to explore online and hybrid communities, drawing on interdisciplinary work as we build the literature within our field, we can move toward understanding this increasingly important aspect of the future.

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Figure 1. Number of articles on online communities published in community psychology journals

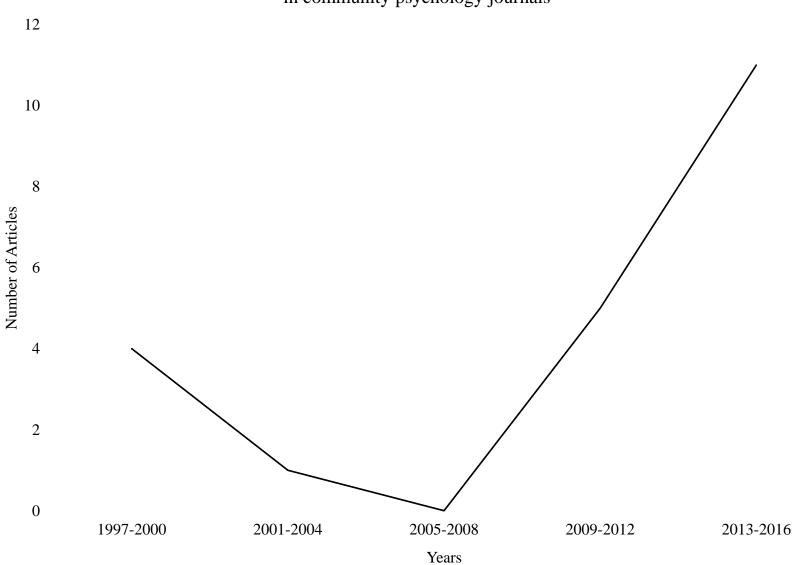


Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
1997	Salem, Bogat, & Reid	Mutual help goes on-line	Journal of Community Psychology	People with depression	Coding of 1,863 posts on an online mutual help group	Similar to face-to-face groups: high levels of support, acceptance, positive feelings Unique to online posts: more emotional support, more disclosure
1998	Dunham et al	Computer- mediated social support: Single young mothers as a model system	American Journal of Community Psychology	Single young mothers	Descriptive analyses of posts on an online support intervention	Individual differences in participation were associated with social isolation. 98% of replies provided positive social support. Most replies provided emotional support, followed by informational and tangible support. There was evidence for the development of close personal relationships and sense of community. Mothers who participated regularly reported less stress.
2000	Klaw, Dearmin Huebsch, & Humphreys	Communication patterns in an on- line mutual help group for problem drinkers	Journal of Community Psychology	Problem drinkers	Textual analysis of 376 randomly selected messages on online mutual help group	Consistent with face-to-face groups: infrequent conflict, supportive/warm communication Most posts were by women, but no differences in communication patterns
2000	Menon	The 79-Cent Campaign	Journal of Community Practice	Mental health advocates	Description of listserv activity	Listserv was useful tool in mobilizing an effective campaign
2002	Barrera, Glasgow, McKay, Boles, & Feil	Do internet- based support interventions change perceptions of	American Journal of Community Psychology	People with diabetes	Randomized trial: (a) diabetes information only, (b) personal	Increases in perceived support in two support conditions (c and d), largest effects in social support only intervention

Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
		social support?: An experimental trial of approaches for supporting diabetes selfmanagement			self-management coach, (c) social support, (d) coach and support	
2009	Riley, Rodham, & Gavin	Doing weight: Pro-ana and recovery identities in cyberspace	Journal of Community & Applied Social Psychology	People suffering or recovering from anorexia	Discourse analysis of posts on a pro-ana (105 posts) and a recovery website (107 posts)	Three forms of body descriptions: doing something with body, of body itself, and bodily experiences. On both sites, thin ideal was reinforced and valid claims of group membership were demonstrated. Proana group reframed health/appearance concerns as markers of success
2010	Dyer, Costello, & Martin	Social support online: Benefits and barriers to participation in an internet support group for heart patients	The Australian Community Psychologist	Cardiac patients	Survey of 120 online community members	Participation not associated with depression, anxiety, stress, perceived interpersonal support, or social network size. Participation related to perceived benefits of using forum. Participants who offer and receive support may experience greater satisfaction
2010	Obst & Starfurik	Online we are all able bodied: Online psychological sense of community and social support	Journal of Community & Applied Social Psychology	People with disabilities	Online survey administered to users of disability-specific online communities	Participants received moral support and personal advice Online social support and feeling a sense of community positively associated with well-being in areas of personal relations and personal growth

Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
		found through membership of disability- specific websites promotes well- being for people living with a physical				
2010	Reich	disability Adolescents' sense of community on Myspace and Facebook: A mixed-methods approach	Journal of Community Psychology	Young adults	Focus group and surveys of high school and college students	Use of these social networking sites represent networked individualism rather than online communities
2011	Loomis & Friesen	Where in the world is my community? It is online and around the world according to missionary kids	Journal of Community Psychology	Third culture individuals	Qualitative analysis of posts on online community	Participants developed a sense of community and provided social support for one another. They also influenced the website's function, regulations, and norms.
2013	Alberici & Milesi	The influence of the internet on the psychosocial predictors of collective action	Journal of Community & Applied Social Psychology	Young adults	Survey of participants of political events	When online discussion frequency was high, politicized identity predicted collective action intention, and collective efficacy and morality supported collective action intention. When online discussion frequency was low, anger predicted collective action intention.

Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
2013	Whittaker & Gillespie	Social networking sites: Mediating the self and its	Journal of Community & Applied Social	Young adults	Analysis of 37 Scottish adolescents' Bebo profiles	Users challenged single authorship norms of profiles and used creative language to obscure meaning from outsiders.
2014	Li, Hodgetts, & Sonn	communities Multiple senses of community among older Chinese migrants to New Zealand	Psychology Journal of Community & Applied Social Psychology	Older Chinese immigrants to New Zealand	Interviews with 32 older Chinese migrants	Sense of community can be constructed through neighboring and supportive interactions in local contexts and through new media to engage with one's home country
2014	Reich, Black, & Korobkova	Connections and communities in virtual worlds designed for children	Journal of Community Psychology	Children	Three years of participant observation and content analysis of users of nine online communities for children	Users find creative ways to bypass security features to share personal information, create group membership, and build connections
2015	August & Liu	The medium shapes the message: McLuhan and Grice revisited in race talk online	Journal of Prevention & Intervention in the Community	People who comment on videos	Thematic content analysis, thematic analysis, and discourse analysis of comments on two YouTube videos and a news website	YouTube context shaped but did not determine the message. News site comments offered different response to same subject, with little to no obscenity.
2015	Brady, Young, & McLeod	Utilizing digital advocacy in community organizing: Lessons learned	Journal of Community Practice	Community organizers	Description of advocacy effort	Different social media tools are useful for different practice applications, and each have their benefits and drawbacks. While beneficial, social media is not

Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
		from organizing in virtual spaces to promote worker rights and economic justice				enough; use must be paired with boots-on-the-ground work.
2015	Chong, Zhang, Mak, & Pang	Social media as social capital of LGB individuals in Hong Kong: Its relations with group membership, stigma, and mental wellbeing	American Journal of Community Psychology	LGB individuals	Survey of 233 Chinese LGB individuals in Hong Kong	Community surveillance, identity expression, and emotional support on social media instills sense of group membership and reduces stigma. Social media may boost resilience amongst LGB individuals.
2015	Niland, Lyons, Goodwin, & Hutton	Friendship work on Facebook: Young adults' understandings and practices of friendship	Journal of Community & Applied Social Psychology	Young adults	Social constructionist thematic analysis of 12 focus groups with friend groups who use Facebook	Social networking sites are primarily used for enjoying and investing in friendships. Friendship protection was used to maintain friends' privacy. Friends on Facebook showed self-authenticity through self-displays and preferred friendship activities. Facebook broadens audience of friendship actions and provides constant access to friends.
2015	O'Connor, Longman, White, & Obst	Sense of community, social identity and social support among players of	Journal of Community & Applied Social Psychology	World of Warcraft players	Thematic analysis of 22 semi- structured interviews with 22 Australian <i>WoW</i> players	Participants reported having sense of community and different social identities. They also receive social support from relationships with other players.

Table 1. Articles Included in Review

Year	Author(s)	Title	Journal	Community	Methods	Findings
		Massively Multiplayer Online Games (MMOGs): A qualitative analysis				
2015	Vázquez, Panadero, Martín, & del Val Diaz- Pescador	Access to new information and communication technologies among homeless people in Madrid (Spain)	Journal of Community Psychology	Homeless people in Madrid	Analysis of 188 structured interviews	New information and communication technologies are used by homeless people, but at much lower rates. Differences exist across age groups, education levels, and nationality, negatively affecting the elderly, those with lower education levels, and those of Spanish origin.
2016	Kornbluh, Watling Neal, & Ozer	Scaling-up youth-led social justice efforts through an online school-based social network	American Journal of Community Psychology	High school students engaged in youth-led participatory action research projects	social network analysis and interviews	Who students were connected with was more important than the proportion of communication partners students had with other students in the network. Facilitators included receiving motivation and ideas from other students. Barriers included a disconnect with class activities and divergences of projects across classrooms.

Paper 2

Steltenpohl, C. N., Reed, J., & Keys, C. B. Do others understand us?

Fighting Game Community member perceptions of others' views of the FGC.

Community psychology has struggled over the years to define community (Krause & Montenegro, 2017). There has been less attention to how community members see outsiders and believe outsiders see them. Interactions with outsiders may influence the ways we think about and identify with our own communities (Haslam, Oakes, Reynolds, & Turner, 1999; Torres & Charles, 2004). If community members feel misunderstood by outsiders, it may be due to members' beliefs about others holding negative stereotypes of them. Community metastereotypes are views held by community members about outsiders' views of that community. Meta-stereotypes can have a profound effect on individual in-group members and interactions between groups (Klein & Azzi, 2001).

In-group members can accurately identify meta-stereotypes (Lichtenberger, 2004; Saroglou, Yzerbyt, & Kaschten, 2011; Torres & Charles, 2004), but can also exaggerate or minimize others' perceptions of them (Saroglou, Yzerbyt, & Kaschten, 2011). Either scenario—exaggeration or minimization—can have implications for group relations. Meta-stereotypes play a significant role in the identity development of in-group members and can negatively affect self-perceptions (Haslam, Oakes, Reynolds, & Turner, 1999; Torres & Charles, 2004). Negative meta-stereotypes are associated with anxiety and a decrease in self-esteem for in-group members, as well as intergroup anxiety (Finchilescu, 2010; Vorauer, Main, & O'Connell, 1998).

How others see us is particularly relevant if the views of more dominant groups are affecting those from marginal communities. Those in the margins are more likely to be influenced by those in power than the other way around (Lammers, Gordijn, & Otten, 2008; Vorauer & Sakamoto, 2008) and are less likely to have their perspectives shared and known by others (Dello Stritto, Loomis, & Allen, 2012). One of community psychology's enduring values is to help those be heard who often are not (Bond, Serrano-Garcia and Keys, 2017; Society for

Community Research and Action, n.d.). Therefore, it would behoove us to understand the metastereotypes held by marginal communities with which we work.

One community that has much experience in dealing with meta-stereotypes regarding larger outside communities is the fighting game community (FGC), a sub-group of the larger gaming community where people play games involving combat, such as *Tekken*, *Mortal Kombat*, *Persona 4 Arena*, and *Super Smash Bros*. The FGC is a niche within the gaming community; games in this genre comprised only 6.7% of games sold in America in 2015, compared to the largest group, shooters, which comprised of 24.5% (Entertainment Software Association, 2016). FGC members may find the perceptions of groups dominant relative to them—groups like non-FGC gamers or other, non-gaming individuals—relevant, and may be easily able to identify stereotypes that these outsiders have about FGC members.

Generally, a salient and prevalent stereotype held by outsiders is that gamers are violent. Virtually no gamer surveyed by Dial (2013) believed violence and gaming are associated; however, they were aware others held those beliefs. Parents tend to associate their children playing video games with more conduct and peer problems and less prosocial behavior, but their children do not make these same associations (Lobel, Granic, Stone, & Engels, 2014). Being aware of these negative beliefs or stereotypes about gaming may affect players' willingness to be associated with gaming communities.

Despite popular belief, online gaming may provide opportunities for shy individuals to generate new friendships and strengthen old ones (Kowert, Domahidi, & Quandt, 2014). More specifically, the FGC may facilitate social interaction between players and allow for the formation of social capital among players from diverse backgrounds (Kong & Theodore, 2011). Its roots in arcades may have created an environment inclusive of people of color (Bowman,

2014). This inclusiveness is contradicted by games' often stereotypical or racist portrayals of some of the otherwise diverse cast of characters (Demby, 2014).

Moreover, tournament enrollment data estimate less than 5% of competitive FGC players are female (Kong & Theodore, 2011). A few well-known players have received attention for engaging in domestic abuse (Schreier, 2013) or commenting that sexual harassment is inherent to the FGC (Hamilton, 2012), which may serve to reinforce these negative stereotypes held by outsiders. Some FGC members insist these players do not reflect FGC values and denounce them, while others argue such behavior is inherent to the FGC and is why the community is not more diverse. Regardless how accurate or inaccurate the FGC's complicated image is, this image may have a stifling effect on the community. For example, some women may feel less comfortable engaging with the FGC. Then, some outsiders may view the FGC as inherently unwelcoming toward women. In turn, more women may become more uncomfortable with the FGC, and the cycle continues, fulfills itself and strengthens.

Communities may hold different meta-stereotypes for different outgroups. For example, a non-believer may distinguish between the stereotypes Catholics or Muslims may have of them, if there is reason to believe those stereotypes would differ in content or severity. Whether FGC members would distinguish between the stereotype(s) those in the wider (i.e., non-FGC) gaming community and non-gamers hold is unclear. However, an intuitive anticipation of experiences congruent with intergroup contact theory (Pettigrew, 1998) suggests other gamers who do not play fighting games may be perceived as more understanding of the FGC than non-gamers.

Would FGC members differentiate between stereotypes they believe individuals hold and those held by the media? We may be able to infer their feelings from previous research. For example, in interviews with FGC members, Harper (2010) noted a "community perception of the

press as insincere and lacking in genuine interest" (p. 65). These perceptions may come in part from an availability heuristic, in that media statements are more likely to be seen by a larger number of people than any individual's comments.

Some exasperation with games media may come from the gaming community's frustration over the role and expectations of games journalists. Some games journalists see themselves as traditional journalists, while others describe themselves as commentators or bloggers, who have a very different set of responsibilities to their audience (Fisher, 2012). Journalists tend to be held to higher standards accuracy and allowing all sides of an issue to be appropriately reported. In contrast, bloggers and commentators may have more leeway to be opinionated. To slightly modify a quote from *The Big Lebowski*, gaming-related bloggers and commentators are in a "better" position to respond to gamers' critiques about fairness and completeness with, "Yeah, well, that's just like, my opinion, man" (Coen & Coen, 2009).

Gaming-related media may be considered ultimately more understanding towards people who play games than mainstream media. Williams (2003) found *Time, Newsweek, US World News & Report*, and the *New York Times* have all historically characterized video games as a social threat (McKernan, 2013). On the other hand, *Kotaku* (a popular gaming outlet) treated gaming as a valuable form of artistic expression and explored a broad range of gaming-related topics. For example, it presented critiques of the negative views about the gaming community held by influential public figures and institutions including politicians, academia, mainstream media outlets, and even other video game media outlets. It may be worth noting that *Kotaku* makes money off of their games coverage, which potentially biases them.

FGC members may not trust non-gaming media due to the "games cause violence" narrative seen throughout media coverage of psychological research since the 1990s. The media

often forms tenuous connections between video games and what sometimes feels like anyone who has committed a notable violent crime. For example, mainstream news outlets suggested that Adam Lanza, the gunman involved in the Sandy Hook massacre, may have been influenced by video games (Orr & Milton, 2013; Twenge, 2012); others include Red Lake shooter Jeff Weise (De, 2005), Aurora shooter James Holmes (Stevens, 2012), and Rep. Gabrielle Gifford's shooter, Jared Lee Loughner (Berzon, Emshwiller, & Guth, 2011). Gaming news sites largely discount articles linking violent criminals to video games, and, unlike many mainstream media outlets, publish about studies with null or contradictory findings (Karmali, 2013; Schreier, 2015).

Taking all of this together, FGC members may feel more understood by individuals rather than the media. Outsiders closer to the FGC (e.g. people who play non-fighting games) may be perceived as more understanding than those who do not play games at all. We hypothesize the following for our quantitative data:

- (1) FGC members do not feel understood by outsiders, and
- (2) FGC members perceive varying levels of understanding from outsiders, such that:
 - a. those with gaming affiliation are perceived as *more* understanding than those without gaming affiliation, and that
 - b. individuals will be perceived as *more* understanding of the FGC than those with media affiliation.

For our qualitative data, our exploratory research questions are:

- (1) What stereotypes do FGC members think exist for their community?
- (2) In the views of FGC members, do the stereotypes held by gaming group and by media group differ? Put another way, for example, will the stereotypes about FGC members held by non-gamers be the same as those held by the non-gaming media?

- (3) What reasons do FGC members give to explain why these stereotypes exist?
- (4) How do FGC members react to these stereotypes?

Because our qualitative research questions complement our quantitative hypotheses, we report the qualitative and quantitative results in tandem. Based on our experiences with the FGC, we anticipate FGC members largely agree the stereotypes others have about their community tend to be negative, but that these perceived stereotypes may be different for different groups. FGC members may believe gamers have fewer or less severe negative stereotypes of the FGC than non-gamers. Moreover, we anticipate FGC members think individuals are less negative in their stereotypes than the media. We also anticipate FGC members have a variety of explanations for why these stereotypes exist, but that negative motivations will likely be attached more readily to the general or non-gaming media. Lastly, we anticipate FGC members will vary on the perceived effects of these stereotypes on the community, but that they will largely be negative.

Method

We spent time trying to understand various responses to previous research on the fighting game community by Harper (2010) to find the best ways to build trust between us and the various fighting game communities. The responses we located to this research were mixed. Complaints included the cost of Harper's book (\$125 at the time) creating access issues for FGC members, and a presentation title ("Everything You Always Wanted to Know About Fighting Games (But Were Afraid to Ask)") not consistent with how FGC members perceived his and his co-presenter's actual knowledge and understanding of the community (Miller, 2013; Newsman, 2013). In addition, some FGC members took issues with perceived confirmation bias, and the way with which the presenters positioned themselves (as simultaneously experts and non-experts) relative to the community (a curiosity rather than a "community to be loved" (Miller,

2013)). They also disliked statements Harper had made that some members perceived as him downplaying the significance his research (and by extension, the FGC) has to academia.

While there were some positive reactions from community members (FGCRequiem, 2014), the negative reactions motivated us to ensure we were open with the community about our intentions, understood the FGC's culture and history, and remained as non-judgmental as possible. We are not members of the FGC, and we have sought to have an open and engaged stance toward the community. Some FGC members have perceived our efforts to highlight how the FGC is a unique and meaningful community to be in good faith (dpu_fgc_study, 2017).

Respondents

We obtained 496 FGC member responses to an online survey. Of these, 360 FGC members provided complete responses on quantitative questions about mis/understanding of the FGC, while 338 and 328 members responded to qualitative questions about what portrayals of the FGC are and what they think of these portrayals, respectively.

Respondents were on average 24.4 years old (SD = 5.15, range 18-41) and reported varying levels of time spent on video games in general as well as fighting games more specifically. On average, respondents have been playing video games for 18.89 years (SD = 5.32, range 0-37) and fighting games for 11.21 years (SD = 7.38, range 0-28). Respondents were quite diverse on many demographic characteristics (See *Table 2*).

Respondents interacted with their top community in many ways, including in-person gaming nights, streaming, and social media, each of which roughly three quarters of respondents used to interact with their communities. While our respondents came from a variety of specific game communities, the most popular responses were communities relating to fighting games like *Street Fighter, Super Smash Bros.*, *Guilty Gear*, and *Mortal Kombat*.

Materials

The first and third authors worked with FGC members to create an original online survey. In line with Cresswell's (2013) description of concurrent embedded strategies, we utilized quantitative data to explore outcomes (e.g. perceived mis/understanding) and qualitative data to explore processes (e.g. perceived origins of mis/understanding, effects on community members). Survey respondents were asked how well they thought fighting games and their communities are understood by four groups: other (non-FGC) gamers, non-gamers, games media (e.g. *Kotaku*, *Polygon*, *IGN*), and other non-gaming media (e.g. *CNN*, *Fox News*, *BBC*). Responses were provided on a six-point bipolar scale from "completely misunderstood (1)" to "completely understood (6)." Respondents were then asked open-ended questions about what the portrayals of the community are and what they thought of these portrayals. The full survey can be accessed on the Open Science Framework (Steltenpohl & Keys, 2017).

Procedure

After obtaining IRB approval and support from FGC leaders, we invited people with experiences with the FGC to participate in the study via postings on social media (e.g. Facebook, Twitter, various FGC-related subreddits) and on gaming sites. Respondents who identified their "top community" as anything other than a fighting game (e.g. *League of Legends*) or who were under 18 were excluded from the sample, as we were primarily interested in the experiences of adult FGC members. Adult members are likely to be able to make a larger comparative time commitment to the community (when considering available leisure time), and are thereby likely to have relatively stable views and remain in the community in the long term.

Analysis

For the quantitative analysis, we computed descriptive statistics (average, SD) for all four groups combined to examine whether FGC members felt understood. A within-subjects 2x2 ANOVA was conducted to test the second hypothesis by comparing the effect of gaming affiliation (gamer, non-gamer) and media affiliation (individual, media) on FGC players' perceptions of the group's understanding of the FGC community.

In line with consensual qualitative research approaches the first author created a codebook using open coding and data reduction. The second author independently examined the data and checked his own understanding of the responses against the codebook (Hill, Thompson, & Williams, 1997; Williams & Morrow, 2009). The first and second authors met to discuss codes until consensus was reached, with the third author acting as an outside auditor. The full codebook is accessible on the Open Science Framework (Steltenpohl, Reed, & Keys, 2017). Further, to ensure the accuracy and credibility of the analysis, FGC members were invited to participate in member checks three times. When designing the survey, we asked several FGC members for feedback on question wording and relevance to community needs. We also shared initial results of the coding process with members to ensure the quality of the analysis. Finally, we obtained feedback on our manuscript draft from several community members.

Researcher Positionality

The three authors have varying levels of engagement with different gaming communities. The first author has been playing video games since she was four years old, has been involved with gaming-related forums since 2003, and has written for a few gaming websites; the second author plays a variety of video games and has been active on several gaming-related subreddits; and the final author has had experience gaming with family members. While none of the authors

identify as FGC members, the first two authors attended an anime fighting game tournament and the first author has personal and professional contacts within the community. All three authors believe communities should be able to speak for themselves, and have made concerted efforts not to overinterpret qualitative responses. This comes with a cost, in that we recognize our research may not be as grounded in theory as one would otherwise expect.

Results

Based on the distribution and mean of the data, FGC members rated others' understanding of the FGC overall as somewhat misunderstood (M = 2.63, SD = 1.34) in support of the first hypothesis. Indeed, in line with research question 1 about what stereotypes exist of the FGC, our thematic analysis indicated far more attention was paid to negative rather than positive portrayals of the community. The following subthemes emerged under negative portrayals: aggressively competitive, antisocial/jerks, childish, elitist/arrogant, isms (any comments relating to homophobia, sexism, racism, etc.), having no skill (the games do not require skill or the players do not have skill), and creating barriers to entry. Other negative portrayal subthemes were: reduced legitimacy compared to other communities, stereotypes (both general gamer and FGC-specific), players take the game too seriously for the games to be fun, players are violent/dangerous, fighting games are a waste of time, and general negative responses. A few other comments mentioned perceptions that the community is not diverse. Responses usually mentioned at least one of these negative themes. Another group of FGC members mentioned being completely invisible to one or more outside groups.

In contrast, only a few responses indicated positive outside portrayals; subthemes were friendly/tight-knit (a possible alternative interpretation of perceptions around entrée), passionate (a possible alternative interpretation of tryhards), and general positive responses. Like the

frequency of positive responding, there were also few mentions of neutral or mixed portrayals. These portrayals focused on comparisons to esports and other activities or statements that indicated the FGC was just seen as another group like any other.

Gaming Affiliation

A significant main effect of gaming affiliation accounted for a notable amount of variance in perceptions of understanding, $\lambda = 0.36$, F(1,359) = 635.43, p < 0.001, $\eta^2 = 0.639$. FGC players perceived greater understanding from gaming-affiliated sources than non-gaming-affiliated sources. FGC members rated the level of understanding shown by non-FGC gamers (M = 3.47, SD = 1.19, 95% CI [3.36, 3.60]) and gaming media (M = 3.23, SD = 1.37, 95% CI [3.11, 3.39]) between somewhat understood and somewhat misunderstood. They felt non-gamers mostly misunderstood them (M = 2.17, SD = 1.01, 95% CI [2.02, 2.27]) and that other media misunderstood them the most (M = 1.68, SD = 0.87, 95% CI [1.60, 1.78]).

In line with research question 2 about differences in perceptions of various outsider groups, qualitative statements mirror the game affiliation effect above in direction and intensity. Many respondents made distinctions between gamers and non-gamers, indicating those further from the FGC (the general media and non-gamers in this case) are less likely to understand the community. For example, one FGC member stated, "Non-gamers usually share the [negative opinion] of the mainstream media. Lack of knowledge coupled with ancient stereotypes." FGC members mentioned common meta-stereotypes including non-gamer and general media descriptions of players as being virgins, parents' basement dwellers, low-lifes, and nerds.

In contrast, gaming media (e.g. *Kotaku, IGN*) were seen in a mixed light. Some comments painted a grim portrait, citing a history of misrepresentation of the community. For example, one respondent noted, "It's a real shame what the gaming media has done to set back

gaming generally. Colin Cowherd [a former ESPN commentator who was known for making distasteful and controversial comments about esports and esports players] is a person who thinks of gamers as basement dwellers who never get out in the sun."

In contrast, others said things were mixed but improving, with more accurate coverage from various sources. One FGC member stated:

"Aside from the articles about EVO [major tournament] that come around every summer, a majority of coverage the FC gets in gaming media is either about *Smash* [a popular fighting game], or it's criticism regarding some gender based social justice issue, either accusing the community of being sexist, or accusing developers of putting sexist characters/outfits in their games. On the bright side Redbull [an energy drink company that has taken a recent interest in esports] has been writing really good FGC-related articles [on their website, *Red Bull eSports*] ..."

Few comments about non-gamers and non-gaming media were positive, reflecting FGC members' perceptions of being misunderstood by these groups. Most respondents referenced use of outdated and inaccurate stereotypes of the gaming community or a lack of coverage:

"Among non-gaming media it's portrayed just like any other e-sport, as nerds with too much time that don't get out much, but in fact the fighting game community is at best a reason to get out and be social with others at tournaments and events."

The consensus was that those with no gaming affiliation do not know or care about the FGC, although a few mentioned this reliance on negative stereotypes seems to be declining with time.

Media Affiliation

As hypothesized, there was a significant main effect of media that accounted for a moderate amount of variance in ratings of understanding, $\lambda = 0.87$, F(1,359) = 52.29, p < 0.001, $\eta^2 = 0.127$. In line with research question 2 about differences in perceptions of various outsider groups, FGC players perceived greater understanding from individuals than the media. Some respondents highlighted the difference between "actual people" and the media:

"Actual people are a little more reasonable [than the media]. At heart, eve[r]yone understands competition. It's in our nature to compete; fighting games, like chess, basketball, drinking games, allow us to express our competitive side in a more civilized way than simply screaming at one another and beating each other to death with sticks and rocks. "

Gaming Affiliation x Media Affiliation

There was a significant interaction effect between the gaming and media factors that accounted for a modest portion of the variance in ratings of understanding, $\lambda = 0.98$, F(1,359) = 8.65, p = .003, $\eta^2 = 0.024$ (Figure 1). Other individual gamers were trusted the most, while nongaming media was trusted the least by a large margin. As noted above, the most negative comments were directed toward non-gaming media, with players describing them as being behind the times, associating the FGC with "violent nerds," and positioning FGC members as wasting their time. One FGC member noted:

"Other Media always reports these games as a horrible thing to be introduced to people because of its violent nature. Fighting games are usually depicted as extremely violent games because it's two people fighting each other, sometimes to death other times not.

Many will instantly believe, for those who have a poor perception of these games, that if

one plays them they'll instantly become extremely violent and show off being very aggressive towards their family and peers."

FGC members noted a general invisibility in the media, especially non-gaming media. As one FGC member put it, "Other media... Do they even know that fighting games exist?"

FGC Members' Beliefs about why Portrayals Exist

An exploration of research question 3 regarding why these portrayals emerged yielded four explanations: the FGC is different from other communities, lack of knowledge/understanding (almost universally applied to negative portrayals), shared understanding/values (almost universally applied to positive portrayals), and ulterior motives (specifically: agendas and favoritism). The explanations that the FGC is different from other communities and that these portrayals come from a shared understanding/values were infrequently given, and were applied with some consistency across all target groups. The most popular explanation given was lack of understanding/knowledge, and it was also applied fairly evenly across all groups, regardless of how negative respondents felt any particular group was toward the FGC.

Most interesting, however, was the claim of ulterior motives, which was far more likely to be applied to the media than to individuals. While individuals were often described as being ignorant or unaware of the community, the media was accused of being interested only in sensationalism and clickbait (articles that contain little actual substance but have catchy titles intended to catch readers' attention), with one FGC member going so far as to say, "It's mostly fed by clickbait. F[***] games media. *Kotaku* especially." Another FGC member posited that "in the case of fighting game communities, acts of sexism [are] easy to sensationalize."

Regarding bias and favoritism, FGC members noted a difference in the amount of coverage fighting games received in comparison to other (larger) gaming communities, for example RTS (real-time strategy games; e.g. *StarCraft*), FPS (first person shooters, e.g. *Halo*), or MOBA (multiplayer online battle arenas; e.g. *League of Legends*). Others noted the quality of reporting of negative events within these communities is also more lenient than reporting on similar events in the FGC. For example, one FGC member asserted that,

"When someone in the FGC makes a dumb mistake or says something repugnant, it is immediately looked at as a blemish on the community as a whole. We're held to the words that came out of Aris's [a prominent FGC member who made sexist remarks] mouth some 4 years ago, meanwhile, professional *CS:GO* [Counter-Strike: Global Offensive, a FPS] players use homophobic speech almost constantly with no repercussions. There are no thinkpieces in major eSports publications about how the *CS:GO* competitive community needs to clean up its act, despite the callout for every hiding space being "gay spot" and players frequently calling each other "faggots." [...] It's clear that the big money involved in *CS:GO* allows it a level of legitimacy in the public eye that is not afforded to the FGC."

FGC Members' Responses to Portrayals

Regarding research question 4, respondents had a variety of responses to these metastereotypic portrayals. There are those who had negative responses; subthemes here included frustration, a feeling that things will not change, being sad or upset, and general negativity. As one participant put it, "[These portrayals] are often infuriating because neither [the portrayals from those who play games nor those who do not] give a positive view of the situation. They assume we are cheaters or play bad games when they don't even know what they're talking about."

Many respondents indicated these portrayals hurt the FGC, namely by hurting the scene (e.g. making fighting games look boring, events not receiving enough coverage) or driving away potential and current members. One respondent shared, "The only one that really pisses me off is the media's portrayal, because I believe it's done maliciously, and I believe it has the potential to be harmful to both the gaming community and the gaming industry."

Others expressed more neutral or mixed reactions. Emergent themes here involved resignation ("I understand"), a desire for change, requests for outsiders to give the community a chance, minimization of the portrayals' effects on the community, and statements assuming responsibility (either through stating it is the community's fault these portrayals exist or by saying it is the FGC's responsibility to make the community a fun place to be). The most popular responses—statements involving resignation and statements involving minimization—were almost antithetical to one another. Few of these responses indicated a sense of responsibility for the perceptions. As one respondent put it,

"I feel like other communities only look at the face value of the community. They don't understand the core idea behind the games that they see. They only see a bunch of people yelling or getting excited over some stuff on a screen. Which is completely understandable, don't get me wrong. I think that the community needs to make the information that makes these games exciting for the better players, made available in SOME way. Whether it's books, or some online articles. I feel the current media sites do a horrible job at letting outsiders know of the information that actually could be available.

Again, the information that IS available only gives a face value to the games being played or shown. This actually does NOT represent what really goes on in a game or a match being played."

Understandably, FGC members had positive responses to positive portrayals. Positive responses fell under three main subthemes—the portrayals help the community (by attracting new players or changing perceptions about the community), the portrayals are improving, or general positive responses—with improvement being by and large the most common response among positive reactions. One FGC member said,

"As a young gamer, these portrayals used to bother me a lot. Today, not so much. I think the negative portrayal of the fighting game community from non-gamers and other media will, in time, dissipate. As technology grows, and the generation of people who grew up playing these games become the leaders of today's, general demographic and community, mainstream media will see an acceptance of the fighting game community. That's already happening today."

Beyond these reactions, FGC members commented on the accuracy of the portrayals. As might be expected, far more respondents felt the negative portrayals were inaccurate, although a few did comment that they were accurate. For example, one respondent noted about perceived sexism and homophobia within the community, "I think its shockingly accurate and we as gamers need to step it up and help become guides to getting involved, instead of gatekeepers against women/lgbtq+/etc." One participant who self-identified as a transgender lesbian woman shared a specific example where she was watching a stream of a tournament where a woman was doing very well. The stream chat during this time was filled with memes about women, comments about "trannies," and suggestions for the men not to bother because "her twitter says

she's a lesbian feminist." The respondent stopped watching the stream, noting it was "discouraging and downright scary and having people also say 'OH SHES ACTUALLY GOOD' hurts because there's this huge 'boys club' mentality and you won't be able to fit in unless you got something to show." She closes her statement noting this forces people to stay away from the community, which is not something she wants to happen.

For those that found these negative portrayals to be inaccurate, about a third noted that while there were "bad apples"—that is, people who fit these portrayals—they were not representative of the entire community. These assertions were often followed by comments that these people ruin the fun for everyone. One respondent noted, "Some think of the fighting game community as very toxic, douchey, or sexist. This is based off of a few occurrences that grow into blanket generalizations about our community. We are not hateful and we like to embrace everyone." In contrast to the woman's experience above, another woman noted,

"I think they are blown completely out of proportion. I am a woman, and the stereotypes of sexism in the community are generally exaggerated and only expressed by those who are not actually part of the community. Like any community, most times the only things outsiders hear about are the negative experiences, and then they [are] blown out of proportion and repeated by people who don't know anything about the community themselves."

Even among respondents who felt these bad apples did not represent the community at large, a few did note the FGC "needs better PR" or does "little to prevent the negative way in which [FGC members] are portrayed."

Discussion

Our quantitative hypotheses were confirmed in that: (1) FGC members generally consider their community to be misunderstood by outsiders, (2a) those with gaming affiliation were seen as more understanding than those without gaming affiliation, and (2b) individuals were perceived as *more* understanding of the FGC than those with media affiliation. We asked (1) what stereotypes FGC members think exist for their community, (2) whether these stereotypes differ by the group they were describing, and (3) what reasons FGC members give to explain why these stereotypes exist. We found FGC members' opinions on gaming-related entities appear to be more positive in part due the perception of shared knowledge or values. FGC members report thinking gamers and gaming media were more likely than their non-gaming counterparts to understand competition and social norms like trash-talking. However, gamers and gaming media were still seen as only between "somewhat understanding" and "somewhat misunderstanding" of the FGC. FGC members saw the media as misunderstanding them more than individuals. Non-gaming media were perceived as the least understanding group, and both gaming and non-gaming media were perceived as motivated by popularity and monetary agendas to portray the FGC in a negative light. Lastly, we asked (4) how FGC members react to these meta-stereotypes. While FGC members reacted in a variety of ways, many felt the FGC is hurt by negative portrayals, which they saw as largely inaccurate.

Given the niche status of fighting games compared to the larger gaming market (Entertainment Software Association, 2016), popular beliefs about gamers more generally (Dial, 2013), and media coverage (and lack thereof) of the FGC specifically (Hamilton, 2012; Schreier, 2013) it is not surprising FGC members feel generally misunderstood. More interestingly, the

strength of the negative meta-stereotypes and reasons FGC members gave for the existence of primarily negative portrayals differed across out-groups.

Those with gaming affiliation were seen as more understanding of the FGC than those without gaming affiliation. This gaming affiliation effect is, in part, due to the belief some FGC members have regarding shared experiences and values. This belief is in line with the intergroup contact theory (Pettigrew, 1998), but not with research done by Sigelman & Tuch (1997) suggesting the more contact the in-group had with the out-group, the worse the in-group's metastereotypes were. It is possible to reconcile these discrepancies if the FGC, being a subgroup of the gaming community, is perceived as more similar to—and having more similar experiences with—the general gaming community than other groups, like non-gaming media. For example, white and black university students may see themselves and their experiences as fundamentally different from one another, despite their shared status as university students. Since the FGC is a subgroup of the larger gaming community and the two share the experience of being stereotyped by outsiders, among other experiences, the larger gaming community may not be as much of an out-group as people who do not play video games. Future research may test such a hypothesis.

Individuals may be perceived as more understanding because respondents felt a sense of control over changing those misperceptions, a sense they did not express with those affiliated with the media. In addition, media outlets reach more people and given their negative portrayals of the FGC, are likely to disseminate more negative information about the FGC than individuals. On the other hand, it is not difficult to imagine a scenario where a FGC member explains fighting games to another person, possibly increasing the interest and understanding of the other party. However, it seems less likely FGC members believe a media conglomerate representative would be reachable for and swayed in such a scenario.

We also asked what reasons FGC members gave to explain why these stereotypes exist, as well as how they react to these stereotypes. The most popular reason given for why these stereotypes exist was ignorance, often due to a lack of interest or willingness to put forth effort into understanding the community and fighting games. As we have seen in previous research, many gamers believe media outlets may be motivated by money, misinformation, or popularity to misrepresent the community (Walker, 2013). In short, there are three possible explanations for the media affiliation effect, namely, the greater availability and thus greater impact of media perspectives than those of individuals, the perceptions of a relative lack of power and the perceptions of the media's business motivations.

Study Strengths

To our knowledge, this is the first study to examine community meta-stereotypes in community psychology. Given the centrality of the concept of community in community psychology, it is helpful to examine how members of communities, especially marginalized communities, believe they are being viewed by others. Moreover, since the number of people who play games continues to grow, it is important for community psychologists to become more knowledgeable about this new ecology and the communities within it. This study is also to the best we can determine, the first community psychological study of this rapidly growing gaming ecology and one of the first studies of any sort with constituent validity (cf. Keys & Frank, 1987) concerning the FGC. It also offers the first quantitative demonstrations of the gaming affiliation effect, the media affiliation effect and their related interaction effect on understanding in meta-stereotypes held by people who play games.

Our study's strengths draw upon our efforts to understand the FGC before designing our study. We spent time watching videos and streams of competitions, scouring news sites for news

and thinkpieces about the community (and its responses to such pieces), reading blogs and popular forums like Shoryuken, and talking to FGC members. This allowed to us to design a study that focused on issues the community found important (cf. constituent validity, Keys & Frank, 1987), speak in a language we both would understand, and ultimately gain trust and make our entrée into the community easier.

As noted above, we also engaged in member checks at varying points in our research process by reaching out to FGC members about our coding scheme and initial results across our various projects, which appears to have been well-received by members of the community (dpu_fgc_study, 2017). These member checks were also instrumental in the creation of a follow-up study where we interviewed FGC members at an anime fighting game tournament (Steltenpohl, 2017). We believe that these efforts, along with the use of mixed methods to triangulate FGC members' perceptions, improved the reliability of our results.

These findings support both empirical research (e.g. Dial, 2013; Fisher, 2012; Harper, 2010) and our lived experiences within the gaming community at large. This study also contributes to the research done thus far on meta-stereotypes, much of which appears to have primarily focused on a specific community's meta-stereotypes regarding another, specific outside group (Finchilescu, 2010; Saroglou, Yzerbyt, & Kaschten, 2011; Torres & Charles, 2004). Our results also suggest community psychologists pay attention to the influence of the media in shaping communities and their perspectives.

Study Limitations

Of the 496 respondents who completed the survey, 135 (roughly 27%) chose not to provide responses for the quantitative questions, while 157 (roughly 32%) and 167 (roughly 34%) did not provide responses for the two qualitative questions. It is difficult to ascertain why

respondents would not complete these questions. It is possible they only responded to questions they were interested in answering, as suggested by Armstrong & Overton (1977). Given the proportion of missing responses, caution is suggested in generalizing from these data.

It had likely not gone unnoticed that we were not visible members of the FGC. Prominent members of some FGC groups, as well as some gaming-related publications and businesses, did promote the survey, which likely modulated this perception, but it is possible that some FGC members may have opted out of completing the survey, given the conflictual history between researchers and the community. Given the blunt nature of many of the responses, we think any perceptions surrounding our intentions were likely no more than modest inhibitors.

Implications and Future Research

Future research may examine whether FGC members who are more aware of or apply negative stereotypes to the FGC identify as strongly as FGC members as those who are not as aware or apply the negative stereotypes less often (Owuamalam & Zagefka, 2011). FGC members understand many outside the community perceive the community as being sexist and homophobic. This awareness of outsiders' negative stereotypes may affect how some FGC members—particularly those who identify with or are perceived to be a member of groups affected by sexism and homophobia—interact with the community.

Some FGC members seem to think negative stereotypes prevent people from joining the community, but negative stereotypes may also keep members in the community from fully participating. If being perceived as more inclusive is important to FGC members, they may have to make some changes based on conversations they have within their communities about what may lead the FGC to be considered more accessible. For example, one community "soft banned" certain sexy costumes for offline tournaments in the *Dead or Alive* community, viz., it was up to

the discretion of the tournament organizer. This community voiced a desire for people to focus more on the gameplay aspect of the games and wanted to avoid pushing people away from trying the game (Fahey, 2015). As expected, there were a variety of responses to this change. Previous research has suggested that community members will respond more positively to internal changes when they can see the value in them (Vakola, Armenakis, & Oreg, 2013). If community members value making spaces more inclusive and agree with the way in which these changes are made, they may respond positively. Community psychologists interested in membership and community development may be interested in how community values and changing such values can affect participation and feelings of inclusion.

Community researchers working with gaming communities may anticipate a sense of misunderstanding. They may need not only to invest time in understanding the community, but also to make explicit where they and the community share values and interests. Researchers who have written on their experiences gaining entrée into communities have described the importance of aligning their own goals with the goals of the community, understanding the history of the community, and understanding community members' regard for the research community (Quandt, McDonald, Bell, & Acury, 1999). Researchers can facilitate community members' comfort and willingness to participate in research through discussing project expectations and outcomes with community members, entering the community without preconceived notions, and expressing understanding and compassion without forcing it (Matthew, 2017).

Like other groups, some FGC members also minimized negative stereotypes and the effects these stereotypes may have on their community. Future research might explore how much a community's sense of misunderstanding is influenced by how much control they feel they have over changing those misperceptions. This research could be particularly useful for those wishing

for better relations with amorphous entities such as the gaming and non-gaming media, which may be more difficult to access and persuade than individuals. FGC members—and members of other communities—may discount negative stereotypes held by those in the media because the media is seen as difficult to influence. On the other hand, FGC members may feel a greater impact from close friends or people they feel should understand them (e.g. other gamers) because of the possibility of changing their minds. This sense of efficacy could either change outsiders' stereotypes of the FGC or minimize the negative effects of members' meta-stereotypes.

Community psychologists focus on a wide range of psychological phenomena, as our social world is incredibly complex, and recognize our own positions of power relative to the communities with which we work (Dzidic, Breen, & Bishop, 2013). More specifically, it is important for community psychologists to understand the intricacies of community members' meta-stereotypes, as it is likely perceptions apply to researchers. For example, people who play games are aware others believe violence and gaming are associated (Dial, 2013) and researchers have continuously asserted video games produce only negative results (American Psychological Association, 2005, 2013, 2015). Given our commitment to participatory community research and empowerment (Bond, Serrano-García, & Keys, 2017; Keys et al., 2017), community psychologists are in a good position to explore effects of meta-stereotypes on building relationships with those perceived as outsiders, and help communities design and implement strategies to change outsiders' perceptions of their group, if that is what they desire.

This study provides evidence meta-stereotypes exist within and affect the FGC. It also expands upon the literature by suggesting meta-stereotypes may differ depending on the outgroup being discussed, and encourages researchers to develop theory to include community meta-stereotypes. Understanding meta-stereotypes from a community perspective allows us to

anticipate challenges and opportunities with working with communities, particularly if they are marginalized or otherwise inhabit a niche. To the extent we can understand community metastereotypes and how they affect relationships with outsiders and within the community, we can also take them into consideration when working with and within communities to foster change.

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Table 2. Demographic Information on FGC Members

Table 2. Demographic Information on FGC Members	77 (24)
Characteristic	N (%)
Race/Ethnicity	
White/Caucasian	188 (37.9)
Black/African (American)	21 (4.23)
Asian	31 (6.25)
Middle Eastern	3 (0.60)
Latinx/Hispanic	37 (7.46)
Multiracial/ethnic	43 (8.67)
Decline to answer	173 (34.88)
Gender Identity	
Male	309 (62.30)
Female	15 (3.02)
Trans/Non-Binary ¹	3 (0.60)
Decline to answer	169 (34.07)
Sexual Orientation	
Heterosexual	262 (52.82)
Lesbian/Gay	12 (2.42)
Bi-/Pansexual	39 (7.86)
Asexual	3 (0.60)
Sexually fluid/Queer	1 (0.20)
Decline to answer ²	179 (36.09)
Disability Status	
Yes^3	34 (6.85)
No	292 (58.87)
Decline to answer	170 (34.27)
Education status	
No schooling completed	1 (0.20)
Kindergarten/nursery school to 8th grade	1 (0.20)
Some high school, no diploma	12 (2.42)
High school graduate, diploma or equivalent	52 (10.48)
Some college credit, no degree	109 (21.98)
Trade/technical/vocational training	12 (2.42)
Associate degree	27 (5.44)
Bachelor's degree	92 (18.55)
Master's degree	17 (3.43)
Professional degree	3 (0.60)
Doctorate degree	2 (0.40)
Declined to answer	168 (33.88)
Location	
United States	270 (54.44)
Canada	21 (4.23)
Mexico	3 (0.60)
South America	1 (0.20)
Asia	3 (0.60)
Africa	1 (0.20)
	,

Europe ⁴	27 (5.44)
Australia/New Zealand	4 (0.81)
Declined to answer	166 (33.47)

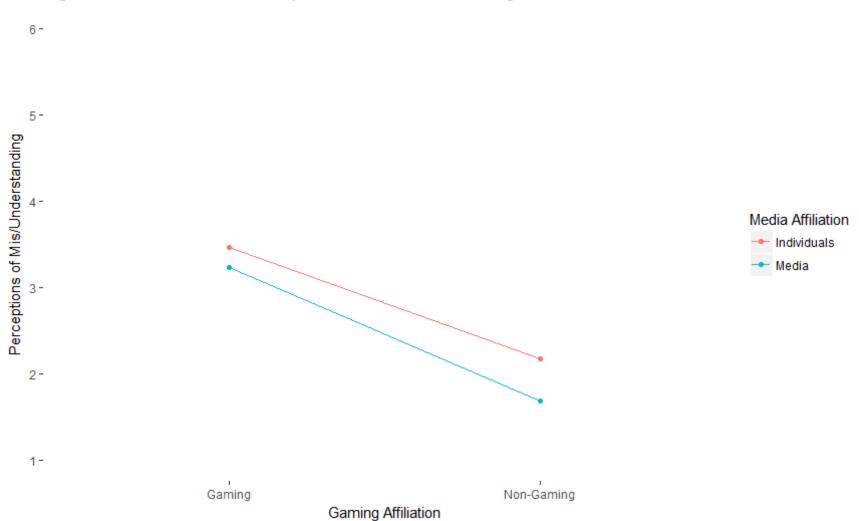
¹Numbers on trans identity may be underrepresented; we did not specifically ask respondents if they identify as trans.

²If a respondent answered in a manner where it was not possible to determine their sexuality (e.g. "male" may be interpreted as "I am interested in males" or "I identify as male"), we placed them in the Decline to answer category.

³Of those who provided information on their disability status, the most common responses were ADD/ADHD, anxiety, depression, and Asperger's, while the most common physical disabilities were deafness and visual impairment.

⁴We included Russia as a European country.

Figure 1. FGC Members' Perceptions of Mis/Understanding of the FGC



Paper 3

Steltenpohl, C. N., Reed, J., & Keys, C. B. Beyond individual behaviors:

Toward a multidimensional, ecological view of gamer identity.

Identities are social labels both placed upon us by society and constructed by us. There is a growing movement to understand identity as a reflexive understanding of oneself beyond a series of traits assigned to a person (Rutter & Bryce, 2006). Identity can be imagined as a conscious sense of self (which some social psychologists define as personal identity) as well as a solidarity with a group's ideals and perspectives (which some define as social identity) (Zucker, 2004). Social identity theory examines how belonging to social groups defines self-identity (Trepte, 2006). Social identity, then, is "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63). It provides individuals a definition of who they are through understanding the defining characteristics of their identified categories (Hogg, Terry, & White, 1995).

The gamer identity has historically been conceptualized using a self-identity framework, focusing on players' video game consumption and playing habits (De Grove et al., 2015; Rutter & Bryce, 2006). There is increasing evidence this traditional definition does not tell the whole story, however, as gamers often interact with one another, both online and offline (Entertainment Software Association, 2016; Steltenpohl, Reed, & Keys, under review). Previous research suggests having people with which to share one's identity is important (De Grove et al., 2015; Rutter & Bryce, 2006; Shaw, 2012b).

Identity may also be understood as it fits within the ecological framework of understanding one's development within the context of their environment (Bronfenbrenner, 1979) or sense of community more generally (McMillan & Chavis, 1986). Indeed, individual identity appears to be inextricably connected to one's social context. People may create identities via shared interests (De Grove et al., 2015) and shared contexts and experiences (Philpin,

Merrell, Warring, Hobby, & Gregory, 2014). They can even form identities based on rejection (Schmitt, Spears, & Branscombe, 2003) and hate for the same things (Harman & Jones, 2013). In contrast, people may show indifference to group identities (Fenton, 2007) or reject them outright (Finlay, 2005). Conflicts between one's own experiences and prevailing definitions of identity arise if one does not conform to expectations (Condis, 2015; Finlay, 2005; Ford, Harris, Webb, & Jones, 1994) or attempts to enter a new environment (Badea, Jetten, Iyer, & Er-rafiy, 2011).

Consistent with Bronfenbrenner (1979), Grooten and Kowert (2015) argue for an understanding of the gamer identity including gaming habits or preferences, as well as group identities emerging from physical/out-of-game and/or virtual/in-game worlds. These ecologies interact to influence one's identity as a gamer. In Grooten & Kowert's (2015) model, how gamers inhabit their virtual and physical realities influences how they identify. For example, gamers aware of stereotypes about gamers may "[identify themselves] or a group in contrast to these [stereotypes] or [attribute] the stereotypes to others rather than to oneself" (p. 82). The term gamer has historically been associated with white, straight, able-bodied, teenage males who play video games (Shaw, 2010). However, this stereotype has been challenged in recent years, giving rise to several controversies (Dockterman, 2014; Richard, 2015; Shaw, 2012a; Shaw, 2012b). Some gaming media outlets have argued the traditional gamer identity may be dying (or dead) (Alexander, 2014; Golding, 2014; Plunkett, 2014). For example, Dan Golding (2014) argued the criteria for a "real" gamer were too limited to match the demography of people who play games.

Even ignoring these recent discussions, there is no reason to assume any group would uniformly accept a label. For comparison, what it means to be a feminist has undergone change and division depending on historical, cultural, political, and social contexts. Whether individuals consider themselves feminists is conditional on conception(s) they hold of feminism, as well as

their individual values and societal norms. Someone may identify as a second or third wave feminist or intentionally weave intersectionality or transnationalism into what it means to be a feminist for them. Others may espouse common values considered feminist but self-identify as a different label, such as egalitarian (Zucker, 2004), or perhaps reject the use of a label at all.

Within the gaming community, one might make a distinction between casual and hardcore game players. Some genres, such as hidden object games, may more easily be placed into the casual subcategory, which are more often associated with female players (Chess, 2013; Chess, Evans, & Baines, 2016). Gaming communities may also be segmented into more specific groups, such as communities of players who enjoy specific genres (e.g. shooters, roleplaying games) or franchises (e.g. *Mass Effect*, *Pokémon*). For example, O'Connor and colleagues (2015) showed *World of Warcraft* (*WoW*) players expressed social identity and sense of community at multiple levels: as gamers, as *WoW* players, and as guild (in-game groups) members.

The fighting game community (FGC) is one such subgroup of the larger gaming community. FGC members play fighting games (e.g. close combat games like *Mortal Kombat*, *Persona 4 Arena*) and interact with other players in many ways, including attending in-person gaming nights, participating in online streams, and posting on social media. This gaming community is well-known for its members' varied backgrounds, possibly due to its origins in arcade culture (Bowman, 2014; Kong & Theodore, 2011).

Given negative stereotypes against gamers and of FGC members more specifically (see Steltenpohl, Reed, & Keys, under review), it is important to note meta-stereotypes (i.e., the stereotypes in-group members believe out-group members have of in-group members) can negatively affect self-perceptions (Haslam, Oakes, Reynolds, & Turner, 1999; Torres & Charles, 2004). Many FGC meta-stereotypes overlap with those about the general gaming community

(Steltenpohl, Reed, & Keys, under review). Given this overlap, it is entirely possible some FGC members reject the gamer identity label to avoid some of these stereotypes. In other words, there are a variety of ways FGC members may react to the usage of the gamer identity label, and these reactions may be affected by personal and social contexts. As such, our focal research question is: how do members of a gaming community (here, the FGC) envision the gamer identity label and their relation to the term?

Method

Respondents

A total of 496 respondents completed an online survey. Of these, 434 respondents answered the question, "What does being a gamer mean to you?" These 434 respondents averaged 24.50 years old (SD = 5.15, range 18-41) and reported varying levels of time spent on video games in general as well as fighting games specifically. Respondents averaged playing video games for 18.93 years (SD = 5.32, range 0-37) and fighting games for 11.27 years (SD = 7.37, range 0-28). Respondents were quite diverse on many demographic characteristics (See *Table 3*).

Respondents interacted with their top community in a variety of ways, including inperson gaming nights, streaming, and social media, each of which roughly three quarters of
respondents used to interact with their communities. Respondents came from a variety of specific
game communities; the most popular responses were communities relating to fighting games like

Street Fighter, Super Smash Bros., Guilty Gear, and Mortal Kombat.

Materials

The first and third authors worked with FGC members to create an original online survey, which can be accessed on the Open Science Framework (Steltenpohl & Keys, 2017). The question analyzed for this study is "What does being a gamer mean to you?"

Procedure

After obtaining IRB approval and support from FGC leaders, we invited people with experiences with the FGC to participate in the study via postings on social media (e.g. Facebook, Twitter, various FGC-related subreddits) and on gaming sites. Respondents who identified their "top community" as anything other than a fighting game (e.g. *League of Legends*) or who were under 18 were excluded from the sample, as we were interested in the experiences of adult FGC members. Adult members are likely to be able to make a larger comparative time commitment to the community (when considering available leisure time), and possibly have relatively stable views and remain in the community in the long term.

Analysis

The first author created a codebook using open coding and data reduction, paired with iterative practices as themes emerged that aligned with previous research (Srivastava & Hopwood, 2009). In line with consensual qualitative research approaches, the second author independently examined the data and checked his own understanding against the codebook (Hill, Thompson, & Williams, 1997; Williams & Morrow, 2009). The first and second authors met to discuss codes until consensus was reached, with the third author acting as an outside auditor. The full codebook is accessible on the Open Science Framework (Steltenpohl, Reed, & Keys, 2017). Further, to enhance the accuracy and credibility of the analysis, FGC members were invited to participate in member checks three times throughout the process. When designing the survey, we asked several FGC members to provide feedback on question wording and relevance to

community needs. We also sought members' comments on initial results of the coding process. Finally, we shared a manuscript draft with a few FGC members for their reactions.

Researcher Positionality

The three authors have varying levels of engagement with different gaming communities. The first author has been playing video games since she was four years old, has been involved with gaming-related forums since 2003, and has written for a few gaming websites; the second author plays a variety of video games and has been active on several gaming-related subreddits; and the final author has had experience gaming with family members. While none of the authors identify as FGC members, the first two authors attended an anime fighting game tournament and the first author has personal and professional contacts within the community. All three authors believe communities should be able to speak for themselves, and have made concerted efforts not to overinterpret qualitative responses. This comes with a cost, in that we recognize our research may not be as grounded in theory as one would otherwise expect.

Results

Four major themes emerged from our data: (1) centrality, or how important the gamer label was to them; (2) behaviors, defined as activities relating to being a gamer; (3) player motivations, adapted from Yee's (2006) motivations for play in online games; and (4) negative perceptions, focusing on stereotypes about gamers. Affective statements were found across these themes, suggesting emotional reactions—positive and negative—to the "gamer" identity label.

Centrality

The centrality of the gamer identity varied across respondents. Most did not reference how important the identity label was to them, but of those that did, there was a roughly equal split between respondents who embraced the gamer identity label and those that did not.

Central. Some respondents described the gamer identity label and gaming itself as one of the most important aspects of their lives, with gaming taking priority over other activities. For these respondents, gaming was their primary form of entertainment and/or being a gamer was among their primary labels. One respondent shared, "It means video games are not only my most used form of entertainment, but the one that has the most impact on me emotionally and socially." Another said something similar:

"It means games take up a large[r] focus of my life then [sic] other hobbies. Just like an artist will spend most of his time making art, a musician making music or a writer writing, a gamer will spend most of his time playing games."

Important but not central. Slightly more respondents suggested being a gamer is an important identity, but did not specifically reference it as one of the most important..

Respondents who reported this second level of centrality noted gaming was a major or influential part of their lives, or they have been gaming for a significant portion of their lives. One respondent stated, "Gamer means that video games are an important and influential part of my life and perspective." Some, however, specifically asserted being a gamer is no more important than any other identity category, for example, "It is an outlet [and a] lifestyle. [...] Same as music, reading, and writing."

Not important. About half of respondents who did reference the centrality of the gamer identity label did not like the term and/or did not use it to describe themselves. One pattern of responses indicated playing only fighting games made the broad term less relevant. One respondent said, "I don't consider myself a gamer as I rarely play games when they release except for fighting games." Others referenced the growth of gaming as a hobby as a reason for ignoring the label, e.g. "It doesn't mean anything considering the huge amount of people that

play video games in some manner." A few respondents did suggest alternative labels, namely distinguishing between casual and competitive players or identifying as FGC members.

Behaviors

At the heart of the gamer identity label is a specific activity: gaming. Therefore, it is unsurprising, as previous researchers (De Grove et al., 2015; Rutter & Bryce, 2006) have suggested, a large portion of descriptions of the gamer identity label focused on two behaviors: playing the games themselves, and consuming and creating games and game-related products (e.g. art, streams, etc.).

Playing games. Respondents expressed a variety of opinions about which types of games "counted" toward being identified as a gamer. Most respondents either expressly stated it did not matter which games someone played, or did not mention playing specific games or genres as antecedents to claiming the identity. One respondent went as far to say, "It means I play video games the f[***] you mean?" Others did not respond as strongly, although shared a similar sentiment: "Someone who plays games. Period. Like many gamers, I feel the instinct to consider mobile gaming less 'valid' than PC and console games, but ultimately it's a True Scotsman argument to claim anyone who plays games 'doesn't count'." While this respondent resisted their instinct to consider mobile gaming as less valid than other games, a couple respondents made the distinction. One respondent noted, "A gamer IS NOT someone who plays Clash of Clans [a popular mobile game] on the toilet or while waiting for something else to happen."

In addition to anti-mobile gaming sentiment, a few other distinctions emerged in respondents' reactions, although to a much lesser extent than those who felt it did not matter what genres or games were played. A few respondents insisted gamers were also required to have an appreciation for multiple genres or games, i.e., positive affect as well as gaming

behavior, although it did not appear to matter *which* genres or games. One respondent stated a gamer is "someone who enjoys and actively plays (or at least tries to depending on time availability) a variety of video games," while another suggested gamers should "just enjoy playing games and give every genre a chance."

Lastly, a few respondents made the distinction between casual and competitive, hardcore, and/or fighting gamers. One respondent described gamers as simply "playing more than just 'casual' games," while another expanded upon this idea, stating,

"To me there is a huge difference between gamers and 'competitive gamer.' Video games are fun, but for me, the challenge of playing against another conscious human being, in which you both want to win, and are forced to try to find a way to beat the other person while at the same time adapting to different situations is much more rewarding than say, trying to defeat a boss so that you can get to the next level. The satisfaction I get from playing at a high level against another person and having a long, thought provoking match, is something that I've yet to find in any other game that's not a fighter."

Consumption and creation. Many respondents discussed the consumption and creation of game-related products through buying games and creating and watching art, streams, and games. A few respondents specifically listed buying games or investing money as an aspect of being a gamer, although not all respondents were happy with this. Some identified gaming identity as a consumerist/capitalist label, with one respondent warning people against using games as an identity. A few other respondents mentioned creating or consuming gaming-related products like art, news, streams, and videos, whether in addition to or instead of playing the games themselves. As one respondent put it, "I work in game development and I'm a competitive gamer."

Player motivations

As we coded the responses, clear themes echoing Yee's (2006) three motivations of online play emerged: social, achievement, and immersive motivations.

Social. Those who referenced social aspects of the gamer label focused on three types of social interactions: community, culture, and mentorship. Those who focused on community—most of these respondents—expressed a desire to bond with other players and share their love for their favorite games or genres. As one player put it, aside from playing video games, being a gamer means "being engaged with the people that play the best games in the world."

A few respondents who discussed social aspects of being a gamer referenced having familiarity with gaming culture, whether that involves knowledge of the history, inside jokes, memes of the community or understanding game design and techniques. As one respondent explained, "Being a gamer means understanding the culture, design sensibilities, and appeal of games while being able to discuss them at some level."

A few respondents also listed mentorship as an important part of being a gamer. For example, one respondent said,

"Being a gamer is about the experiences you get when playing games by yourself and with others. Teaching and learning from others is such a rewarding experience that you can't get everywhere. Video games are so commonplace and universal that almost anyone can play and enjoy."

Achievement. Roughly the same number of respondents who mentioned the social aspects of being a gamer mentioned aspects of being a gamer relating to achievement, namely competition, improvement, knowledge, and skill. Respondents largely focused on competition and improvement, which should be unsurprising for a gaming community revolving around

competing in tournaments. One respondent playfully said being a gamer "means expressing [one's] inner smugness in the form of beating others." Competition was often—but not always—intertwined with improving oneself. As one respondent put it, "I love to improve and compete." Those who mentioned improvement focused on challenging oneself to get better at the game(s) they enjoyed. As one respondent put it, it is important for gamers to "[rise] to a challenge and [continue] to work on it and improve oneself until the challenge is surmounted."

To a much lesser extent, respondents mentioned having attained knowledge or skill, without references to the process of improving either. Regarding knowledge, respondents mentioned understanding game strategy and how games are made. As one respondent shared with us, being a gamer means "discuss[ing] the finer points of individual games [...] from an experienced and veteran perspective." Regarding skill, respondents mentioned earning achievements or trophies (an expression and consequence of skill). As one respondent put it, "You are a gamer when gaming becomes almost second nature."

Immersion. Perhaps unsurprisingly, most respondents who discussed immersion as an aspect of being a gamer referenced games being fun, with a few others mentioning immersion within the games or escape from real life responsibilities. Those discussing fun highlighted the importance of enjoying oneself while playing games or enjoying gaming-related products, whether by oneself or with others. Those mentioning immersion discussed a desire to get lost in storylines, explore the game world, or experience the game itself. Finally, many of those who mentioned escape referenced having stressful lives and expressed a desire to relax and/or distract oneself from their responsibilities. As one respondent rather dramatically put it, "to escape the damning reality of crushing defeat is always more fun if you can't ever completely die."

Negative perceptions

A few respondents shared negative perceptions of the gamer identity. These negative perceptions consisted almost entirely of popular stereotypes of gamers being toxic, exclusionary individuals who take their hobby too seriously. As one respondent said,

"The term 'gamer' has a lot of negative connotations - selfish, socially oblivious, self-important, and introverted to a point where there can be a disconnect with the 'real' world. I don't use the term 'gamer' to describe myself. I'm somebody who plays videogames very seriously, but I also read books and watch films very seriously. I don't feel the need to shout that out to the world."

Most of the respondents who focused on these negative perceptions also stated they distanced themselves from the gamer identity label, though the overlap was not perfect. About two thirds of respondents who distanced themselves from the gamer identity level also mentioned negative stereotypes about gamers.

Discussion

We were interested in how members of the FGC envision the gamer identity label and their relation to the term. Our findings focused on four themes: (1) centrality, (2) behaviors, (3) player motivations, and (4) negative perceptions. Respondents differed on how central the term "gamer" was to their identity. Most respondents did not mention centrality specifically, but those who did were roughly split between those who embraced the label and those who did not. Many respondents described gaming as a primary activity, but others also mentioned consuming and creating games and game-related products like art and streams. Respondents also focused on motivations to play, such as being a part of community and interacting with other players, achievement (e.g. competition, improvement, knowledge, and skill), and immersing oneself in

the gaming experience. Finally, a few respondents shared negative perceptions of the gamer identity label, associating the label with stereotypes about gamers more generally.

The response pattern for the centrality and behaviors themes mirror Huxley and colleagues' (2014) research on lesbians' perceptions of norms surrounding the "lesbian look." In this study, participants suggested appearance norms were becoming less strict—although there was still some policing—in part because of the mainstreaming of lesbianism and bisexuality. Similarly, some respondents in our own study did note "everyone games," and suggested the norms for who gets to be a gamer might be loosening. That said, there were still respondents who felt gamers should, for example, not play primarily mobile games, or should be well-versed in a variety of games and genres. Still others made a distinction between causal and competitive gaming, unsurprising for a group centered on competition. These results are also congruent with Grooten and Kowert's (2015) discussions of gamers as people who *self*-identify with the gaming community based on perceived shared characteristics with the group. Yet there is still disagreement within the larger gaming community about who is a gamer.

Interestingly, our results regarding player motivations were congruent with Yee's (2006) three motivations of online play: social, achievement, and immersive motivations. Respondents who emphasized social aspects of gaming discussed community, culture, and mentorship as important parts of their experiences as gamers. This ecological perspective also aligns with Grooten & Kowert's (2015) discussion of gamers as a community identity. In their model, games provide a common ground by which people can connect with one another, creating a culture and shared identity. This shared ecology can happen within the game world, through intermediate forms of communication like social media and streaming, and through in-person communities.

Respondents who focused on achievement mentioned competition, improvement, knowledge, and skill. Respondents who drew attention to immersion discussed the importance of fun, with a few desiring immersion within games themselves and escaping from reality. Overall the motivation-related responses were additionally characterized by their affective nature, which suggests emotional attachments and responses are important to consider while trying to understand how someone identifies.

While these motivations may not fit a traditional idea of social identity, they do highlight gamers inhabit multiple worlds: out-of-game worlds where players interact with others in cooperative and competitive ways, and in-game worlds where players can test their abilities, improve themselves, and lose themselves in the game. These worlds interact with one another to influence one's identity, much as would be expected by Bronfenbrenner's (1979) ecological framework. It would suggest players are affected not only by their own individual thoughts and behaviors, but also their relationships with other people, communities, and culture at large.

The interactions of one's ecology and social contexts can be positive or negative, as shown by respondents' acknowledgement of positive (e.g. "fun") and negative (e.g. stereotypes of gamers) aspects of being a gamer. As suggested by Grooten and Kowert (2015)'s model, gamer identity may better be described from a discursive perspective, with the understanding social identity is socially constructed and intended to lend meaning to experience (Colombo & Senatore, 2005). Gamers themselves collectively define who a gamer is; their identities are not simply reflections of consumption habits.

Even as the "face" of a gamer changes (Entertainment Software Association, 2016), negative stereotypes remain (Dockterman, 2014; Grooten & Kowert, 2015; Richard, 2015; Shaw, 2012a; Shaw, 2012b; Steltenpohl, Reed, & Keys, under review). Respondents who found

negative stereotypes salient distanced themselves from the label, despite all indications they fit the basic description of a gamer (that is, they play games), choosing instead to talk about other gamers. This distancing illustrates Grooten and Kowert's (2015) discussion of gamers' differentiation of themselves from stereotypes about gamers.

research suggesting gamers may more readily identify with specific gaming communities. There is research suggesting gamers may more readily identify with specific gaming communities over the general gaming community. For example, some *WoW* players felt a greater sense of community and social identity with other *WoW* players and specific in-game communities, such as guilds, than the general gaming community (O'Connor, Longman, White, & Obst, 2015). One can imagine different communities might have different modalities for communication thus different influences on community members' identities. For instance, the FGC has grown largely from arcade culture (Bowman, 2014), while an MMO like *World of Warcraft* is an entirely online game. However, in addition to interacting with each other in person, FGC members also talk to each other over the internet and through in-game voice chat, and *World of Warcraft* players often interact with each other outside of the game environment in online and offline contexts (O'Connor, Longman, White, & Obst, 2015).

Implications and Future Research

As researchers, we seek to be mindful of the labels we use. A proposed best practice for researchers may be to include a question asking how someone may refer to their social identity. To draw a parallel with Zucker's (2004) study of feminist identity, someone may prefer the label egalitarian rather than feminist, or may identify as feminist but want to specifically outline they are a third-wave or an intersectional feminist. Understanding the labels people use regarding

their social identity is one way of articulating the complexities of membership and may be useful in gaining entrée into gaming and other communities (Quandt, McDonald, Bell, & Acury, 1999).

The ecological findings of this study are in line with Grooten and Kowert's (2015) conceptualization of gamer identity, which integrates individual gaming habits and preferences with group identities emerging from physical and virtual worlds. They reflect Yee's (2006) previous research on gaming motivations and makes more explicit specific ways gamer identity is influenced by social and often affective factors. Moreover, like Grooten and Kowert (2015), they extend research conceptualizing social identity as related not only to one-dimensional understandings of identity via overall categories or groups or specific behaviors, but potentially by the interactions of one's various social circles (in this case, the fighting game and general gaming communities). Much like Bronfenbrenner's (1979) ecological framework, these results provide a multi-faceted understanding of gamer identity through various circles of influence. These factors provide a basic ecology for understanding identity, one involving individual- and community-level variables and their interactions, as well as affective and motivational responses to identity labels. Taken together, these factors call for a more nuanced and complex view of gamer identity beyond simply describing one's gaming behavior.

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Table 3. Demographic Information on FGC Members

Tuble 5. Demographic information on FGC Members	
Characteristic	N (%)
Race/Ethnicity	
White/Caucasian	187 (43.09)
Black/African (American)	21 (4.84)
Asian	31 (7.14)
Middle Eastern	3 (0.69)
Latinx/Hispanic	37 (8.53)
Multiracial/ethnic	42 (9.68)
Decline to answer	113 (26.04)
Gender Identity	
Male	308 (70.97)
Female	14 (3.23)
Trans/Non-Binary ¹	3 (0.69)
Decline to answer	109 (25.12)
Sexual Orientation	
Heterosexual	261 (60.14)
Lesbian/Gay	12 (2.76)
Bi-/Pansexual	38 (8.76)
Asexual	3 (0.69)
Sexually fluid/Queer	1 (0.23)
Decline to answer ²	119 (27.42)
Disability Status	,
Yes ³	33 (7.60)
No	291 (67.05)
Decline to answer	110 (25.35)
Education status	,
No schooling completed	1 (0.23)
Kindergarten/nursery school to 8th grade	1 (0.23)
Some high school, no diploma	12 (2.76)
High school graduate, diploma or equivalent	51 (11.75)
Some college credit, no degree	109 (25.12)
Trade/technical/vocational training	12 (2.76)
Associate degree	27 (6.22)
Bachelor's degree	91 (20.97)
Master's degree	17 (3.92)
Professional degree	3 (0.69)
Doctorate degree	2 (0.46)
Declined to answer	108 (24.88)
Location	100 (2 1100)
United States	269 (61.98)
Canada	21 (4.84)
Mexico	3 (0.69)
South America	1 (0.23)
Asia	3 (0.69)
Africa	1 (0.23)
ranica	1 (0.23)

Europe ⁴	25 (5.76)
Australia/New Zealand	5 (1.15)
Declined to answer	106 (24.42)

¹Numbers on trans identity may be underrepresented; we did not specifically ask respondents if they identify as trans.

²If a respondent answered in a manner where it was not possible to determine their sexuality (e.g. "male" may be interpreted as "I am interested in males" or "I identify as male"), we placed them in the Decline to answer category.

³Of those who provided information on their disability status, the most common responses were ADD/ADHD, anxiety, depression, and Asperger's, while the most common physical disabilities were hearing and visual impairments.

⁴We included Russia as a European country.

Discussion

"We are all now connected by the Internet, like neurons in a giant brain."

— Stephen Hawking, to USA Today

The internet is increasingly a part of our daily lives, with more of our time dedicated to interacting with one another online (Pew Research Center, 2017). Community psychology has paid some attention to uses of online technologies within communities (Brunson & Valentine, 2010; Shull & Berkowitz, 2005), but more could be done. Online and hybrid (involving online and in-person communication) communities are understudied within community psychology. We do not draw enough on other fields of study that have done extensive research about these communities (Kloos & Johnson, 2017; Perkins & Schensul, 2017). In this dissertation, I integrated social psychological concepts such as meta-stereotypes and social identity into community theory and contexts, focusing largely on the fighting game community (FGC).

Gaming has been associated—often without much empirical evidence—with various pathologies and negative outcomes, including but not limited to aggression, delinquency, violent crime, reduced cognitive development, reduced physical and mental health, and sexism and misogyny (American Psychological Association, 2005, 2013, 2015; Kowert, 2016). Despite stereotypes of people who play games as reclusive shut-ins or violent individuals (Dial, 2013), many people who play games have vibrant social lives, using games to connect with others inperson and online (Entertainment Software Association, 2016). Games are increasingly used as tools to increase empathy for (Bachen, Hernández-Ramos, & Raphael, 2012; Greitemeyer, Osswald, & Brauer, 2010; Wells, 2016) and interest in learning about others (Bachen, Hernández-Ramos, & Raphael, 2012). Playing prosocial games may decrease *schadenfreude* (i.e. taking delight in someone else's misfortune; Greitemeyer, Osswald, & Brauer, 2010). Given

these facts, gaming communities may provide insight into new ways of communicating with others, both online and offline, and offer a distinctive perspective on what makes community.

The purpose of this dissertation was to explore online communities more generally, as well as the fighting game community (FGC) more specifically. The first paper, a review of online communities in community psychology journals and call to increase research in this area in community psychology, contributes to our understanding of how community psychology views, utilizes, and understands online communities. The second and third papers go in-depth with a hybrid community, the FGC, which revolves around specific technology use, in this case fighting games. They apply theories from social psychology—meta-stereotypes and social identity, respectively—to a community psychology context.

The review and call to research demonstrates the internet's increasing importance in daily life and examines the literature from the past two decades, highlighting literature on community support, community building and maintenance, advocacy, and communication norms. The manuscript provides recommendations for future research, including in areas such as conflict resolution, justice, restorative justice, group polarization and extremism, and age differences. This paper highlights various methodologies that can be used to research online communities, including online surveys, interviews, focus groups, textual analysis, and stream capture. The paper closes by considering the increasing importance of the internet in daily life and encourages community psychologists to become more involved with online and hybrid communities.

The mixed-methods study on meta-stereotypes within the FGC explores how FGC members think about outsiders' perceptions of the FGC. It found FGC members feel largely misunderstood by outsiders. Those with gaming affiliation were perceived as more understanding of the community than those without gaming affiliation, partially because those

with gaming affiliation were seen as understanding competition and social norms like trashtalking. Individuals were perceived as more understanding than the media. This perception might be partially due to a sense of efficacy when it comes to changing individuals' perspectives. FGC members may also think that unlike individuals, the media has ulterior motives (e.g. advertising revenue) to present the FGC in a negative light. Although FGC members reacted to negative portrayals in a variety of ways, most felt the portrayals were uninformed and inaccurate.

The qualitative study on social identity within the FGC examines how FGC members conceptualize and interact with the "gamer" identity label. Respondents differed in how central the term was to their own identity, such that some ignored the term, while others found it essential to their being. Many respondents listed gaming as a primary activity belonging to the label, but others mentioned consuming and creating games and game-related products, like fanart or videos. Findings suggested a variety of motivations to play games, including achievement, interacting with others, and immersing oneself in gameplay. Some respondents did share negative perceptions about the term "gamer;" these respondents largely did not apply the label to themselves. This paper highlights variability within communities regarding identity label usage. It also supports an ecological understanding of the importance of social identity that includes not only individual characteristics, but also one's interactions with others in a variety of contexts.

As Krause and Montenegro (2017) described in the *APA Handbook on Community Psychology*, the concept of community is multifaceted, and its definition has changed throughout history. Community psychologists have struggled to capture the complexity of communities while also creating a definition useful for researchers and practitioners. Krause and Montenegro (2017) also discuss the overemphasis of an *ideal vision* of community rather than what communities actually *are*, and an overemphasis on "common" aspects of communities. The

overemphasis on the ideal and the common affects our ability to create useful theories and methods of studying communities. Many—if not most—communities fail to meet an ideal standard. In addition, communities change and grow, and community members do not all feel the same way about their community. As technology becomes a larger part of what makes and affects communities, we will potentially see different *types* of change within communities.

My research avoids the trap of creating an ideal standard by which to judge the FGC. First and foremost, instead of casting judgment myself, I allowed community members to describe their conceptualization of the FGC. My research team and I spent time reading blog posts, watching videos, reading previous research, and even attending a small but growing anime fighting game tournament to do follow-up interviews. For me, it was important to meet the community where it is, instead of coming in with ideas about how the FGC should operate. I was—and am—not in a position to tell the FGC what their best practices are or should be. I am also not remotely interested in being in that position in the first place. I have been fascinated by this community for quite some time, despite not being a member, and I wanted to do it justice by learning about its intricacies, from people who inhabit those spaces.

Further, I asked about both positive and negative perceptions of the community, which I feel leads to a more nuanced and thorough understanding of the FGC. We talked to people happy with their experiences within the FGC and with people with complaints about the community. On one instance, I was specifically asked on Twitter if people who had had negative experiences were invited to speak about the community, to which I responded, "Of course." Above all else, I wanted to highlight the complexities of the FGC, both as a grassroots community focused on meritocracy and the idea anyone can "make it," and a space where some people felt unwelcome

or even unsafe. These are issues with which the FGC grapples daily, as it becomes more mainstream but attempts to hold onto the grassroots origins many members hold so dearly.

Finally, I challenged the use of the broad term gamer, finding some members define the term differently than many researchers, who have typically focused on a single, often behavioral or consumerist definition. Others still outright rejected the label, often in part due to the stereotypes surrounding the term. As someone who has been playing video games since she was four years old, starting with the Atari and Nintendo Entertainment System, I have struggled with the use of the term "gamer" to describe myself. It always felt too simple and too broad to mean anything to me. It seems to some extent, people within the FGC agree with me. To be a gamer means you play games. It may also have personal meaning to people, based on their experiences with and expectations of games and the gaming community. Others made distinctions I do not, based on genres people play (or do not), or on one's competitive status within a community. Highlighting these differences of opinions and the different levels from which people's identities can be influenced may bring more nuance to researchers unfamiliar with the gaming community's understanding of gaming identity.

As we can see from above, this dissertation additionally highlights the importance of positioning ourselves relative to our communities of interest. My coauthors and I wrote a statement of positionality for the second and third papers to contextualize our findings. In our statement, we described our engagement with different gaming communities and the FGC specifically. In this discussion, I also attempt to position myself in a broader sense to the overall dissertation. Contextualizing our results by outlining our own experiences enables us to be transparent in our efforts to understand the FGC, increase our trustworthiness, and explore potential biases (Greene, 2014). While I unavoidably entered this line of study with an idea of

what the FGC was like, I did my best not to allow my perceptions of what a community should or should not be interfere with members' lived experiences. It is possible my status as someone who plays and writes about games influenced the way I interpreted FGC members' experiences; after all, FGC members did generally perceive other gamers as more understanding (and less negative) of their community than non-gamers. Thankfully, my research team is comprised of people with varying levels—and kinds—of involvement with the gaming community. I believe this allowed us to have reflective and challenging discussions about the topics raised by our respondents and thereby reduced the likelihood that my initial views simply held sway.

Further, this process is in line with the Society of Community Research and Action's (2017) second defining principle, which states that "human competencies and problems are best understood by viewing people within their social, cultural, economic, geographic, and historical contexts." As mentioned above, we made every effort to understand the FGC before and during our interactions with members in the community by learning from sources with a variety of perspectives about the community. We also checked in with each other weekly to understand and reflect upon our own reactions to events happening in the community and responses from members in the survey and during feedback.

"You'd better post the results when you're done. We get a lot of these around here but no one ever tells us how it turns out. EVER. Don't be that guy. No one likes that guy." —Response to our recruitment post on Reddit

Continued feedback from the community with which we are doing research is important. In our studies, we have done this both publicly (dpu_fgc_study, 2017) and privately, soliciting feedback from a variety of sources within the FGC. Member checking was an integral part of our process. We solicited feedback during survey creation, to ensure the language we used was appropriate and the topics inherently interesting to the community. During data analysis, we

shared codebooks and preliminary analyses, to try to ensure they were not subject to overinterpretation. Finally, before submitting manuscripts to journals, we offered FGC members the opportunity to give feedback. I hope these efforts enabled us to represent the FGC in a more accurate light than some believed had previously been shone on the community. In this way, this dissertation aligns with the third defining principle of SCRA, which states,

Community research and action is an active collaboration among researchers, practitioners, and community members that uses multiple methodologies. Such research and action must be undertaken to serve those community members directly concerned, and should be guided by their needs and preferences, as well as by their active participation (Society for Community Research and Action, n.d.).

In this way, I have done my best to engage in truly participatory practices and embody the spirit of community psychology.

Future research on online and hybrid communities and gaming communities can continue to come from the communities themselves. We made it a priority to study phenomena FGC members would find intrinsically interesting and important. Because of this constituent validity, we experienced a warm welcome into the community, with both games media (Futter, 2016) and community at large (Steltenpohl et al., 2016) showing interest in the overall study. Several FGC members on Reddit commended us on our survey questions and requested we share the results of our study (e.g. dpu_fgc_study, 2016).

I hope these three papers will encourage researchers to continue expanding their perspectives on online and hybrid communities and gaming communities. Online communication technologies are tools, ones that can be used for prosocial or antisocial means. Community

psychologists are in a unique position to utilize and understand how these technologies can be used for community development, strengths building, and positive social change.

A basic tenet of science is to describe and understand a phenomenon before experimenting with it (Granbery & Sarup, 1992). The biggest strength of these papers, taken together, is that they represent an effort to go back to basics regarding community psychology research. Instead of jumping straight to change or intervention, we focused first on understanding how community psychologists view online communities. We then focused on understanding a community from members' own perspectives, integrating members' positive and negative experiences with and perceptions of their communities. Further, this dissertation exemplifies the intrinsic usefulness of borrowing theories from other fields and integrating them into our own field (Kloos & Johnson, 2017; Perkins & Schensul, 2017). Community psychologists are able to do more interdisciplinary work regarding online communities, as there are useful theories in fields like social psychology, communications, sociology, and cyber-archaeology.

Once we feel we understand our communities at a basic level, we can begin to ask more complicated questions. How are communities affected by other individuals and other communities? How do communities affect the identities of members? How do meta-stereotypes influence within- and between-group interactions, especially for relatively small or marginalized communities? How do meta-stereotypes affect things like sense of community or empowerment for community members? How do members make meaning of their current or former community membership? How might these theories differ for online or hybrid communities in comparison to offline communities? How are gaming communities, particularly those based around competition, similar to or different from other interest-based groups? These ideas and others not yet considered by community psychologists are only a few of the directions future research can

go. To use a (possibly tired) gaming metaphor, this is only level one. We still have a long way to go toward understanding online and hybrid communities, such as gaming communities, from a community psychology perspective, and I am excited to see what we find along the way.

"The only true voyage of discovery, the only fountain of Eternal Youth, would be not to visit strange lands but to possess other eyes, to behold the universe through the eyes of another, of a hundred others, to behold the hundred universes that each of them beholds, that each of them is."

—Marcel Proust, Remembrance of Things Past, Vol. 5

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Appendix A
Online Survey Conducted in January 2016

Which fighting games do you play the most, and on which console do you play them? It would be helpful to list them in a manner similar to this: Game (Console), for example "Persona 4 Arena (PS3)"

Of the games you listed above, which game-specific community do you identify with most? (Note: Some questions further in the survey will ask you about the community you identify with most. Please think of this community when you answer them.)

What about it makes it your top community?

How do you interact with this community? Please select all that apply and provide any follow-up information requested.

O	In-person game nights - please list where you play (e.g. friend's house, local gaming
	store, etc.)
o	In-person tournaments - please list which tournaments
o	Streaming sites (e.g. Twitch) - please list which channels you watch most
o	Social Media (e.g. Facebook, Twitter, etc.) - please list which sites
o	Message boards and forums - please list which sites
o	Reddit - please list which subreddits
o	Chat services (e.g. Skype, Google Hangouts, etc.) - please list which services
o	Other - please specify

What does being a gamer mean to you?

What are the most important things to understand about the fighting game community?

How well do you think fighting games and their communities are understood by:

	Completely	Mostly	Somewhat	Somewhat	Mostly	Completely
	misunderstood	misunderstood	misunderstood	understood	understood	understood
Other gamers (not in the FGC)						
Non-gamers						
Games media (e.g. Kotaku, Polygon, IGN)						
Other media (e.g. CNN, Fox News, BBC)						

Please tell us more about your thoughts of others' understanding of the FGC. What are these other portrayals of the FGC?

What do you think of these portrayals?

How do portrayals of the FGC as a whole affect your identity as a gamer?

How do portrayals of the FGC you identify with most affect your identity as a gamer?

Thinking of the game-specific community you listed as identifying with most, please indicate

your level of agreement or disagreement with the following:

	Strongly	Disagree	Slightly	Slightly	Agree	Strongly
	Disagree		Disagree	Agree		Agree
I think this community is a good community.						
I am not planning on leaving this community.						
For me, this community is a good fit.						
Members of this community can depend on						
each other in this community.						
Members of this community can get help from						
other members if they need it.						
Members of this community are secure in						
sharing opinions or asking for advice.						
This community is important to me.						
I have friends in this community.						
I feel good helping this community and its						
members.						

Which fighting game communities do you feel are more welcoming than others? What about them makes them more welcoming?

What do you like about the fighting game community as a whole?

What do you dislike about the fighting game community as a whole?

Are there any people in the fighting game community as a whole that you look up to? What makes them good people to look up to? (Note that you may mention specific names if you wish, but these will not be included in data analysis.)

Are there any people in the fighting game community as a whole that you avoid? What makes them people you want to avoid? (Note that you may mention specific names if you wish, but these will not be included in data analysis.)

What makes someone a good player in the FGC?

On the other hand, what makes someone a bad player in the FGC?

What else would you like to tell us about your experiences within the FGC?

How old are you?

How long have you been playing fighting games (in years)?

How long have you been playing video games (in years)?

What is your gender identity?

What is your sexual orientation?

What is your race/ethnicity?

What is the highest degree or level of school you have completed? If currently enrolled, please select the highest degree you have received so far.

- o No schooling completed
- o Kindergarten/nursery school to 8th grade
- o Some high school, no diploma
- o High school graduate, diploma or the equivalent (for example: GED)
- o Some college credit, no degree
- o Trade/technical/vocational training
- o Associate degree
- o Bachelor's degree
- o Master's degree
- o Professional degree
- o Doctorate degree

Do you identify as having a disability?

- o Yes please specify what type of disability _____
- o No

In what city and state do you live? (If your country does not have states, please just list the city.)

In what country do you live? [dropdown menu]

How many hours you spend a week playing video games (in general)?

- o 0-5 hours
- o 6-10 hours
- o 11-15 hours
- o 16-20 hours
- o 21-25 hours
- o 26-30 hours
- o 31-35 hours
- o 36-40 hours
- o Over 40 hours

How many hours you spend a week playing fighting games?

- o 0-5 hours
- o 6-10 hours
- o 11-15 hours

- o 16-20 hours
- o 21-25 hours
- o 26-30 hours
- o 31-35 hours
- o 36-40 hours
- o Over 40 hours