

#1ReasonWhy: Game Communities and the Invisible Woman

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ABSTRACT

As Cliff Bleszinski [6] states in his blog post the video game community has its own type of religious police charged with enforcing a doctrine regarding gender representation within the gaming community. From the difficulties faced by Anita Skareesian to the resignation of Jennifer Hepler, women who are visible within the industry regularly face threats from the very people who claim to be their entertainment comrades. With the rise of the #1ReasonWhy hashtag on Twitter in 2012, the experiences of women who aren't in gaming community's spotlight were also brought to the forefront. This paper uses a thematic analysis of tweets made between November 26th - 29th in the #1ReasonWhy to examine how the explicit and implicit threats of violence, rape, and harassment have manifested within the working world of game development. Through examination of these tweets the authors will show how these threats both from the general gaming community and inside the office workspace shape the experiences of women and continue the decades long cycle of limited participation by women. The authors point out how the cultural dialogue about the potential good games offer to our society may be outweighed by the hostile community climate which places those who could benefit most at risk.

Categories and Subject Descriptors

K.4.2 [Social Issues]: Employment

Keywords

#1ReasonWhy; Gender; Online Harassment; Game Development;

1. INTRODUCTION

The gaming community faced of gender-fueled debates and harassment many times over: as popular culture perpetuates the image of the gamer as a young, socially inept, white male whose main interactions with women involve treating them as, a la The Big Bang Theory, the broad diversity of gamers goes unacknowledged. Gamer identity has become a battleground, with

outspoken male community leaders reinforcing the politicizing and policing of female bodies in the community [30]. This hostility towards the feminine is embedded in the discourse surrounding games and in the content of games themselves, as players familiar with Lara Croft and other female avatars noted [27]. Incidents where women protest this dominant discourse, such as the criticism of the Penny Arcade "dickwolves" webcomic, are typically faced with a chorus of threats and gendered attacks designed to drown out their voices [1, 6, 39]. Games journalist Leigh Alexander [1] points out how strongly this hostility is tied to geek and gamer identity: "in games, as well as comics and other male-dominated nerd arenas, the business model leverages risk aversion against a habituated, narrow audience. It doesn't favor experimenting to try to give these people newer, smarter things. More importantly, neither do the traditions of geek culture, which is founded in misunderstood people prizing their special escapes from the uninitiated, keeping sacred the spaces that make them feel powerful. For most people, this is their identity, and if you tell them you want to change it in any way they are going to fear losing their power. It's not surprising that issues of privilege get tangled in the morass". Expression of this privilege takes many forms within the gaming community, but particularly tends towards the marginalization of participants seen as outsiders.

#1ReasonWhy is a Twitter hashtag that began trending after by women within the gaming development community responded to the question, "Why are there so few lady game creators?" on November 26th, 2012. The hashtag filled with a flurry of personal stories, viewpoints, and retweets of support as women shared their experiences working within or alongside the game development industry.

The themes within this online dialogue have significance that extends beyond the game industry itself. The instigating question, "Why are there so few lady game creators?", contains echoes of broader commonly heard questions: "Why are there so few women in science and engineering/math and computer science classes?" Such questions focus on the invisibility of women in disciplinary areas traditionally associated with male dominance while implicitly placing the blame on women for their absence. By examining the case study of #1ReasonWhy as part of this larger context, we can reframe this very question: how can women become visible when the very communities of gaming and STEM demand and reinforce their invisibility?

2. BACKGROUND

In STEM fields, women hold less than a quarter of the jobs, with women in STEM jobs earning on average 33% more than non-STEM counterparts [5]. The gaming industry is part of this trend towards underrepresentation: in an industry survey in 2012, women were a minority in most industry disciplines, making up only 3% of programmers, 13% of artists and animators, 11% of designers, 6% of audio developers, and 5% of QA testers [17]. This lack of equity does not extend to the consumers of games: according to the ESA, 42% of game players are women [14]. This disparity in STEM is typically blamed on the “leaky pipeline,” but studies have questioned this traditional interpretation by expressing a need for the examination of women’s representation in STEM organizational culture [32, 41, 48]. While the leaky pipeline theory focuses on the loss of women throughout the educational and career processes that lead to STEM jobs [2], employees who make it to the “end” of the pipeline often face a hostile culture and challenges in the workplace [11].

Just as in STEM fields, women tend to be less visible on certain social media platforms, with Pinterest, Facebook and Instagram particularly associated with female users [13]. Twitter, the site of the #1ReasonWhy event, is still a predominantly male platform as determined by user identification and name-based gender detection, although this trend has been changing [34]. Studies of language use by gender have noted how a user’s expression is impacted by the gender distribution of their personal network [3]. Understanding Twitter discourse as male-dominated is essential to rejecting the utopian view of social media, which has itself been contradicted by case studies of abuse women experience on Twitter [35]. The trolling and violent sexual harassment of feminist bloggers and micro-bloggers in particular has attracted mainstream attention over recent years, as the threats received by such bloggers have been publicized [28].

Jenson and Castell’s [24] case studies of activist women game groups notes that both the content of the video game industry and the dominant culture continually marginalizes, and attacks such efforts. Discourse surrounding games is hostile both to femininity and feminism: Braitwaite’s [7] study of reactions to gendered dialogue in World of Warcraft on the game’s forums documented recurring hostility to feminism as a “threat”. Studies of feminist gamers’ collective action note the similarity of marginalized activist communities in-game to those out-of-game [19]. Even spaces dedicated to women or “girl gamers” face hostility and disruption, as Taylor, Jenson and Castell’s [45] study of the attempted hijacking of a girl gamer club by boys explored. Feminist game development is currently visible outside of mainstream spaces, with participants reclaiming what Emma Westcott [47] calls independent game development as “craft”. Such games are often dismissed as less than or other than games [37], marginalizing developers and players in these female-friendly spaces.

Feminist game criticism has drawn attention to the limited range of representations of femininity, particularly as mediated through the male gaze with an emphasis on “sexiness” [9, 23, 33]. Hypersexualization of female game characters corresponds with higher sales for teen and mature-rated video games, while games with central female characters have lower sales [36], a correspondence that allows the industry to blame market forces. Even casual games fall into this tradition, as Melendez’s [31] study of gender socialization and stereotypes in Rock Band examines – hostility towards femininity is embedded in everything

from loading screens to avatar choices. Many of these games further encourage gamers to view women as objects for sexual use and violence, which can be correlated with increases in rape-supportive attitudes [4] and general increases in hostile expectations and aggression [21]. Work in this area focuses on fighting “the tendency for game marketing strategies, player communities, the male-dominated game industry, and journalistic and academic accounts of gaming to render girl gamers ‘invisible’” [45].

3. METHODS

This paper uses case study methodology to analyze the larger issue of gender-based hostility. Since the data are socially oriented and complex it is difficult to separate the problems experienced by those involved from the context in which they occurred [49]. Through a contextual analysis the unique manifestations of the issues of gender-based hostility within the gaming community can best be understood [49].

The #1ReasonWhy event on Twitter stands out as a highly active discussion among women who have worked in the game industry. This case represents one of the few times a significant body of personal stories dealing with issues of harassment was shared by women in the industry, highlighting the systemic nature of the problem.

The authors collected 7,780 tweets in a spreadsheet using the Twitter Archive Google Spreadsheet (TAGS) template [22]. The data were collected hourly from November 26th through November 30th. This period reflects some of the heaviest use of the twitter hashtag with participation dropping off significantly after the week. Through an analysis of @replies and RTs this paper examines themes that arose throughout the #1ReasonWhy hashtag. Within the archive, 4,450 messages were retweets of others messages and 1,178 messages were exclusively @replies to other Twitter users.

This study used an inductive approach to coding data. The authors performed opening coding on the selected text of the collected tweets which resulted in a set of emergent themes [10]. This approach allows for a comparison between the data-derived codes and theoretically-derived codes identified in other literature. This coding occurs in an iterative process that is meant to capitalize on the ability to compare the data as it is collected [40]. This paper focuses upon the codes that overlap with existing theoretical concepts drawn from feminist literature, including rape, harassment, silencing, and gendered assumptions. These concepts were selected due to their negative impacts upon the retention and recruitment of women within a community.

Of the themes analyzed for this paper, rape and sexual harassment account for 18% of the relevantly coded tweets. Overt sexualization accounts for 21%, harassment for 26%, silencing for 10%, and gendered assumptions for 25%.

The tweets were coded for all matching themes and there is some overlap between thematic codes identified for any particular tweet. In counting a tweet towards the representation of a theme, the researchers identified the one code that was most strongly tied to the message’s text and excluded it from the count in any overlapping categories. Although tweets dealing with trolling or other negative behavior occurring within #1ReasonWhy and are thematically similar to those analyzed for this paper they have been excluded from this sample in order. Analysis of trolling or

harassment of those participating within #1ReasonWhy can be found in [8].

4. CASE

A broader conversation addressing this policing and marginalization of women in the games industry was started in November of 2012 when game designer Luke Crane tweeted the question, “Why are there so few lady game creators?” [12]. That tweet caught the attention of game designer Filamena Young, who replied “You realize that’s more complicated than a tweet can answer, I’m very sure.” [50]. She later started a hashtag to draw together the many dimensions of responses: #1ReasonWhy (there aren’t many women in game creation). The #1ReasonWhy hashtag became a way to acknowledge that the problem was well beyond answering in a single tweet: instead, each tweet became a testimonial, and the hashtag’s contents added up to a portrait of the industry’s systemic discrimination. The women and allies detailed their own experiences with sexism in the field of game development along with other obstacles that prevent women from joining game development as a career. As the media coverage picked up over the next two days, people participating in the hashtag became subject to trolling, backlash, and derailing attempts.

Originally the conversation was kept to short, personal stories but after facing trolling attempts the participants began to push the purpose of participation and created several new tags. These new hashtags included #1ReasonToBe, which addressed reasons why it is great to work in video game development, and #1ReasonMentors, which connected junior and senior women in game development in an attempt to provide mentorship.

5. DATA

Tweets within the #1ReasonWhy data set were coded to developed several themes about the treatment of women working in and around the video game development industry. These themes fell into several main categories: Rape and Sexual Harassment, Overt Sexualization, Harassment, Silencing, and Gendered Assumptions. Tweets used as examples are expressed as being more strongly identified with a particular thematic category.

5.1 Rape and Sexual Harassment

Although explicit threats of rape and stories of experiences with rape were not common there was significant discussion by women where the concept of rape was used as a tool or joke by their co-workers. Several women discussed how ordinary work practices would be recast in a sexual light to include references to rape. As one commenter shared,

#1reasonwhy because a boss interchanged the terms 'configure' and 'rape'. So every morning we met to plan how we would rape the computers

Women addressed how this made for an uncomfortable atmosphere and how they would like to see such discussions ended only to be met with a response about how it was “just a joke”. As another commenter stated,

If I am intimidated and made uncomfortable by threats of rape - even if they're “jokes” - the solution isn't “find a new group.” #1reasonwhy

Many women found the response they received upon speaking up to be inadequate and frustrating. They felt it often offered little in the way of improving the workplace.

Others mentioned how rape as a concept began to fill in for a type of heightened sexuality in the design of female characters.

#1ReasonWhy An Art Lead for a BIG title said in a meeting full of character artists (all men) that “She needs to be fuckable. No, rapeable.”

For many of these women defending the viewpoint that rape should not be included as a design component was seen as being difficult due to the fact that either management was using the term or that there seemed to be little support among their co-workers about the wrongness of using rape in this way.

#1ReasonWhy The meeting held an awkward silence because the guys didn't know how to respond. “Rapeable” was now their art direction.

There were also discussions of how the games’ design would assume players would react in certain ways. For the women involved they often discussed two potential reactions: at best, apathy and at worst, positivity.

#1reasonwhy Game side-quest features mass rape/forced breeding, assumes players not very interested in stopping it.

#1reasonwhy Buy phone version of RTS, discover that my troops are rewarded for victory by getting to rape losers. #ick

The designers assumed that players would see this as a fun and engaging reward for their good work during game play. But when it came to preventing rape, it wasn’t engaging enough to deserve the player’s full attention and was relegated to the same importance level as fetching an item for an NPC.

Many women shared stories of their experiences with sexual harassment or objectification within the workplace. These experiences involved the sexualization of women by their peers and managers. A common theme among the stories was that this was seen as part of the workplace etiquette, if not a benefit for the male employees working there.

#1reasonwhy When I asked a VP to stop making sexual comments to me and the team he answered, “This is our culture. I'm trying to blend in.”

In some cases, this included a mentality that women in the workplace were an item to collect and compare, like Pokémon or achievements.

#1reasonwhy because when greeting a man visiting from another gaming studio he turned to my boss and exclaimed “She's cuter than ours”

For others the frustration arose from the explicit and open nature of this harassment. Women reported that it was not a “behind closed doors” event but occurred in group settings.

#1ReasonWhy Because when a male game developer sexually harasses me, all the men who heard and saw pretend like they didn't notice.

These experiences reinforced the culture that the women were not fully included or respected members of the group. They were left to feel like that had little to no organizational support and could not participate as members of the team.

5.2 Overt Sexualization

Overt sexualization as a theme arose primarily around the discussion of women as characters within the games or the sexualization of gaming itself. The sexualization of characters was seen as being a problem on two main fronts: oversexualizing characters that are children or are made for children and creating female characters with exaggerated and sexualized traits.

For women working in the industry, the sexualization of characters aimed at teens and children was seen as problematic. Many of the commenters shared their frustrations with attempting to help young girls maintain realistic body expectations.

environment where an artist can draw protruding nipples on a game for tweens and the art director thinks nothing of it #1reasonwhy

Booth babes and sexualization in video game marketing was a popular topic for discussion and sharing. Participants in the hashtag pointed out their difficulties operating as professionals where these types of promotional materials were available.

I get frustrated when women who clearly have talent are overshadowed by the half-nude cosplay stereotypes. Make it stop people. #1ReasonWhy

Not-to-be-missed, vital-for-networking after-parties thrown by big names at game dev conferences... that feature strippers. #1reasonwhy

Several commenters had particular issues with this concept when it was expanded to include what promotional items were offered to women who attended the events. As one pointed out,

#1ReasonWhy because your studio never orders any women's t-shirts in swag orders, and certainly not in sizes bigger than XS or S.

Others expressed their frustration with the concept of "sex sells" as a general response to discussions of how women are objectified in marketing.

#1reasonwhy: Because when a female designer questions the scantily-clad female characters in a game, they're told "sex sells. Deal with it".

The concept that women are sexually available across all video games media was seen as a constant and a mistake by many participants in the hashtag. They disliked the images and pressure this put on adult women, let alone minors, who consumed these products and exclusion they felt when they raised how these images affected them.

5.3 Harassment

Women in the hashtag spoke freely about their experiences with harassment. Many mentioned their frustration with dealing with this type of activity and how it created a more exhausting and less pleasant experience.

In particular several women spoke of the outsized complaints and harassment they received when compared to men. As one stated,

Women represent less than 10% of the writers I have published, yet have received more than 90% of the hate mail. #1ReasonWhy

This was a targeting of women within the industry who spoke about video games. The interesting part of this discussion was the fact that the topic the women wrote about didn't necessarily have

to be a social divisive one. Simply appearing as a woman in the recognition line was enough to receive harassment and negative feedback, regardless of the topic.

Even when the topic was directly about the experiences of women within gaming and game development, women who spoke up were faced with threats and harassment. Sharing the experience of harassment became an opening to receive further harassment. As several commenters pointed out,

because people immediately started attacking me on twitter as soon as I began talking about it #1reasonwhy

This created a cycle where women ceased to speak about the issues they faced in gaming to reduce the frequency of these experiences. As a commenter stated,

if you are surprised at #1reasonwhy, ask yourself why women you know who experience this wont tell you about it.

Many of the women explained the frustrating cycle of invisibility and doubt that this type of harassment created. Others expressed their frustration with how any visibility on this topic made them feel like they had a target painted on their backs when trying to work in the industry.

Because every disclosure of harassment feels like risking never being hired again. #1reasonwhy

Several pointed to the fact that even when they weren't dealing with harassment and hate mail they often had to struggle to simply be recognized as knowledgeable in their field of work. Many mentioned that they regularly faced challenges by men working alongside them or from the gaming community who felt that the women didn't have adequate knowledge to speak about gaming.

Because men with a tenth of my experience and expertise feel they can condescend to me. #1reasonwhy

Working within the game community often means playing games as a hobby and the women within the hashtag dealt with personal harassment outside of their workplace as they tried to enjoy their hobby, a hobby that was important to their continued careers.

#1reasonwhy Because I get berated every time I wear a headset.

The harassment that women experienced when trying to participate in the gaming culture was widespread and influenced both their personal and professional lives. This style of harassment was seen as making it difficult for women to advance in their careers, creating more stressful work experiences, and a key factor in the burnout and retention of female employees.

5.4 Silencing

The importance of the #1reasonwhy hashtag as an opportunity to be heard was a common theme that emerged through stories of silencing, often providing a meta-commentary for the hashtag itself. The outpouring of exchanges empowered some participants to share anecdotes from times when they hadn't spoken up or had been threatened into remaining silent.

As one participant noted, a common refrain when concerns of sexism are raised is to dismiss the very need for dialogue. This same type of silencing was brought into the hashtag itself.

#1Reasonwhy Because whenever any writer, female or male, highlights the issue we hear "Can't we get back to just enjoying the games?!"

Because even with all the men supporting #Ireasonwhy, there are still those who come here to remind us "bitches" to get back in the kitchen.

The gendering of silencing was a further common theme, with several participants highlighting the problem of silencing targeted at women, with male voices more likely to be heard and acknowledged. Thus #Ireasonwhy, as a primarily women-identified dialogue, was also likely to be dismissed.

Because of the men who don't believe sexism exists in the industry until another man comes & backs me up. #Ireasonwhy

Many of the tweets drew attention to the consequences of speaking out, as professional and personal consequences often fall on those who try to report or post about their experiences with sexism. Employers are particularly well-positioned to enforce silencing, as participants noted that they could be penalized for speaking up in ways that reflect on the company's culture negatively:

#Ireasonwhy because I got in trouble from a company for posting my experience with sexism on facebook, might give them a bad reputation...!

This trend can be self-reinforcing, as it leads to silence on critical issues that companies and communities can claim are not problems because they've never been reported or acknowledged.

#IReasonWhy women aren't represented in the game industry: sites like @IGN won't even cover this trend on their site.

The consequences of silencing can be felt throughout gaming culture: members of marginalized groups face harassment and prejudice, but do not feel free to speak out about their experiences for fear of being further marginalized or barred from participation.

5.5 Gendered Assumptions

Many participants in #Ireasonwhy drew attention to the gender role, binary stereotypes, and assumptions they face from employers and other members of the gaming community. Although these assumptions are not often as obvious and directed as the harassment and sexualization they do form a type of microaggression, a commonplace slight, insult, or indignity which is meant to firmly place the female identity into the role of the other [44]. The coding of "hardcore" and "casual" games to assumptions of gender identities was repeatedly mentioned by participants, who noted that their presence outside of the assumed market made their status as "gamers" suspect:

Because even when guys know I'm a dev they STILL ask whether I play "real" games. #IReasonWhy

Assumptions of audience surround games, from choices in packaging and marketing to the decisions made by developers in who their games target. Several participants chronicled their feeling that women were assumed to be at best an afterthought as an audience for games.

Women and the elderly are synonymous with the concept of "lowest common denominator". #Ireasonwhy #respectyouraudience

These assumptions are also demonstrated in the dismissal of women by gaming stores, as participants reported feeling discouraged from even purchasing games.

#Ireasonwhy because I'm tired of walking into gaming shops and being treated like "the wife" even though I'm the one more into games.

This same set of assumptions transfers to conventions:

Because I get mistaken for the receptionist or day-hire marketing at trade shows. #Ireasonwhy

Women developers shared how their gender identity had been othered, with their status as gamers assumed to make them separate from so-called "normal" women.

Worked on game with other women, targeting women – but men on team told us we didn't know what the audience really wanted. #Ireasonwhy

Women also shared the challenges they faced when employers assumed that their association with family would make them unable to perform their work—or when the realities of work/life balance were ignored by the company's expectations.

Being a game dev mom is a misnomer since family & game dev work hours are incompatible. Commitment to projects is questioned. #Ireasonwhy

When my wife says to her boss "I have bad news." and he groans and says, "You're pregnant aren't you?" is just #Ireasonwhy

These gendered assumptions create hostility to participants at every stage of participation in the games industry—from trying to purchase a game off the shelf to working for a development company—simply for possessing a gendered body.

6. DISCUSSION

While the #IReasonWhy hashtag and the discourse it spawned was ongoing, Anita Sarkeesian was developing videos funded by her May Kickstarter campaign to explore the depiction of women in games and was targeted for gendered, body-focused attacks familiar from Twitter [16]. Her experience was similar to the abuse drawn by BioWare writer Jennifer Hepler. After statements Hepler made were turned into an Internet meme, she received a constant stream of abuse and threats [18, 43]. Hepler resigned from BioWare, leaving to pursue work outside of the games industry. Both of these cases made their way into the general gaming news media where they received significant, although mixed, attention. Both women were willing to use their public roles to directly address the harassment and threats they received and the culture which helped to create such a toxic response.

The experiences of women working within and adjacent to the game development industry are rife with systemic sexism. This issue makes it difficult for women to fully participate in the industry. It also means that the impact that women make upon the industry is often overlooked or negated through the acts of others. This has helped to lead to the perpetual cycle of women being underrepresented within the development community, poorly represented in the media it produces, and hurt by the community that consumes it.

Within the hashtag there were frequent calls for women to stop complaining on the Internet and actually do something about the problems they mentioned. One of the most frequent solutions suggested was that women should just make their own games and fix all the problems themselves. However, as this data shows, the systemic nature of the problems keeps this from being a viable solution. Women who do attempt to join existing studios and

participate in development are ignored, harassed, threatened and intimidated for simply being women in the field. If they attempt to speak about these issues and create more diverse designs within games, they are targeted by the audience with threats as well as endangering their current jobs and limiting their future job prospects by being seen by development studios as too focused on “women’s issues”. If women attempt to create their own studios or create works independently of the existing game community they face being othered by fans and developers as creating “games for girls” [26].

One point, which the #1ReasonWhy hashtag makes clear, is that traditional solutions to the “leaky pipeline” will continue to fail when it comes to increasing participation of women in the game development industry. These solutions often involve sustaining interest in fields related to video game development such as computer science, technology, and mathematics, for middle school and high school age girls, increasing the number of opportunities and support within college programs for women in STEM disciplines, and offering mentoring and career development for early career women. Each of these solutions addresses a perceived lack or mismatch between young women and video game development as a career. The viewpoint often focuses on fixing the girls and women and making it so they better fit with implied needs of the industry.

However, as one participant in the Twitter discussion stated, “#1reasonwhy there aren't more women making games: women who love games see how women are treated in the material and by male players online.” The data make clear that the issue is not just with a lack of skills or interest on the behalf of women. Throughout their lives as children, teens, and young adults women who are interested in games have negative experiences interacting with the community and industry due to the unaddressed issues of sexism. Women are not avoiding the industry because they are not prepared, but are instead rational actors looking out for their own career and personal best interests by avoiding a community that has repeatedly stated that they do not welcome the input and participation of women.

Solutions such as the #1ReasonMentors, proposed within the hashtag itself, face severe difficulties in their execution due to the limited number of senior women working within the industry. The pressure and systemic sexism prevents women from being promoted, encourages them to avoid addressing the issues facing women, or burns them out more quickly than male developers [38]. Although there may be many junior women seeking promotion within the field, they often struggle to find mentors which can adequately address their needs and the career difficulties they face. As has been shown to occur in the sciences, women who do succeed to higher level positions can often internalize the misogyny of their institutions seeing themselves as different from other women, often called a queen bee mentality [42].

Even members of the game community have acknowledged that the evidence of the game industry’s culture presented in the #1ReasonWhy hashtag might act as discouragement for other women. Tomb Raider writer Rhianna Pratchett launched a spin-off hashtag, #1ReasonToBe, to showcase positive experience of women in the industry: as she explained in an interview in *The Guardian*, “I think it’s important to remind women (and for them to remind themselves) of what can be great about working in games...I wouldn’t want potential female developers of the future

to get completely scared off” [20]. The #1ReasonToBe hashtag inspired a panel at the 2013 Game Developers Conference with women in the industry sharing both frustrations and hopes for a more inclusive culture in the industry. Meanwhile, other women in the industry shifted blame on the lack of women back to the leaky pipeline, with Gabrielle Toledano [46] of Electronic Arts arguing that the problem “isn’t sexism,” but instead a lack of qualified women available to hire. Such arguments move responsibility from the community, suggesting that instead of change on the part of the industry culture, the women who have been marginalized, threatened, and rendered invisible are responsible for “fixing” the pipeline. This ignores the power of the gaming community’s identity police to enforce their own community standards—standards which have room for women only as objects, not participants or developers.

For there to be a significant positive change for the women working in game development, both in terms of experiences and overall representation, the culture of sexism and hostility needs to be addressed directly. Attempts to obliquely alter the makeup of the game development community by widening the pipeline will continue to fail unless there is a change in the attitudes and experiences of women face when they interact with the gaming community. By focusing efforts, as researchers and practitioners, on making sure girls develop skills and interests in technology we aid in the oblique erasure of the larger community issues which need to be addressed. Directing significant resources towards the effort of “fixing” girls to fit the career emphasizes an existing cultural theme that women are really the ones at fault here for not fitting in correctly, instead of examining the construction of the culture within gaming and the social norms it expresses which result in the harassment and exclusion of women from the field. A significant effort needs to be made to create interventions and positive social norms within game development to support and integrate women’s viewpoints and abilities, including frank discussions about gender and women’s experiences with games.

7. CONCLUSION

As the #1ReasonWhy conversation shows there is significant hostility pointed at women across the development community, many of which do not have the position or ability to directly bring their issues into the spotlight. While it is easy to write off the experiences of Helper and Sarkeesian as individual cases the many stories shared through the Twitter discussion are harder to dismiss as simply outliers in an industry that otherwise treats women well. These experiences can also be valuable for understanding the under-representation of other marginalized groups within these spaces, including transgender, genderqueer, and homosexual participants. These groups participated in the #1ReasonWhy discourse, but one limitation of the study as coded is that it does not make that representation easily visible. Unless an identity is explicitly mentioned within the anonymized tweet’s text, that context can also be lost.

The #1ReasonWhy hashtag did not fully answer the original question posed to the community but it did go a long way in showing that the solution to the problem won’t be found in “fixing” women to find game development more appealing but instead will be better addressed through an examination of the social culture that women find within the game development and playing communities. This solution has long-term ramifications for those seeking to improve the numbers of women working in the game industry. It also has impacts upon the broader cultural

movement to increase the participation of women in the sciences, technology, engineering and math fields. As studies have shown, video games may be an important cultural tool in developing and sustaining students' interest in the STEM fields [29]. However, the use of video games as a tool currently acts as a double-edged sword. The cultural messages embedded in the gameplay and communities that surrounds those tools undermines efforts to use games for recruitment. These messages push at women and other marginalized identities within the community from every side—in games, among players, and in development companies—making such participants choose between continual harassment or silence and invisibility.

Taken together, this case study and the broader discourse in the games industry demand a different approach to “fixing” the leaky pipeline. The culture of the games industry self-perpetuates a fixed identity, with the visibility of other identities seen as a threat to that status quo. Projects from the girl-focused initiatives of game programming introductory tool Storytelling Alice [25] to camps like Black Girls Code and the Ada Initiative [15] may raise interest in and preparation for STEM. But these same girls are unlikely to sustain their interest when faced with systemic discrimination, constant microaggressions, and ever-present reminders from industry gatekeepers that this clubhouse still reads “No girls allowed.”

8. REFERENCES

- [1] Alexander, L. 2012. “In the sexism discussion, let’s look at game culture.” Gamasutra. http://www.gamasutra.com/view/news/174145/Opinion_In_the_sexism_discussion_lets_look_at_game_culture.php#.ULTMiYbGA4c
- [2] Alper, J. 1993. The pipeline is leaking women all the way along. *Science*, 260, 5106, 409-411.
- [3] Bamman, D., Eisenstein, J., & Schnoebelen, T. 2012. Gender in twitter: Styles, stances, and social networks. arXiv preprint arXiv:1210.4567. <http://arxiv.org/abs/1210.4567>
- [4] Beck, V. S., Boys, S., Rose, C., & Beck, E. 2012. Violence Against Women in Video Games A Prequel or Sequel to Rape Myth Acceptance? *Journal of interpersonal violence*, 27, 15, 3016-3031. <http://jiv.sagepub.com/content/27/15/3016.short>
- [5] Beede, D., Julian, T., Langdon, D., McKittrick, G., Khan, B., & Doms, M. 2011. Women in STEM: A gender gap to innovation. Economics and Statistics Administration Issue Brief, 04-11. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1964782
- [6] Bleszinski, C. 2013. “Anonymous Internet Boy Taliban Tropes”. Clifford Unchained. Online: <http://dudehugespeaks.tumblr.com/post/45150472512/anonymouse-internet-boy-taliban-tropes> (Dec 2013)
- [7] Braithwaite, Andrea. 2013. “‘Seriously, get out’: Feminists on the forums and the War (craft) on women.” *New Media & Society*. <http://nms.sagepub.com/content/early/2013/06/10/1461444813489503.abstract>
- [8] Blodgett, B., & Salter, A. (2013). Hearing "Lady Game Creators" Tweet: #1ReasonWhy, Women and Online Discourse in the Game Development Community. *Internet Research 14.0: Resistance + Appropriation*. Denver, Colorado. October 23 – 26, 2013.
- [9] Burgess, M. C., Stermer, S. P., & Burgess, S. R. 2007. Sex, lies, and video games: The portrayal of male and female characters on video game covers. *Sex Roles*, 57, 5-6, 419-433. <http://link.springer.com/article/10.1007/s11199-007-9250-0#page-1>
- [10] Charmaz, K. 1996. The search for Meanings – Grounded Theory. In J.A. Smith, R. Harre, & L. Van Langenhove (Eds.), *Rethinking Methods in Psychology* (pp. 27-49). London: Sage Publications.
- [11] Consalvo, M. 2008. Crunched by passion: women game developers and workplace challenges. *Beyond Barbie and Mortal Kombat*. Cambridge, MA: MIT.
- [12] Crane, L. 2012. Why are there so few lady game creators? [Twitter post]. Retrieved from https://twitter.com/Burning_Luke/status/273121518362439680
- [13] Duggan, M., & Brenner, J. 2013. The Demographics of Social Media Users, 2012. Pew Research Center's Internet & American Life Project.
- [14] Entertainment Software Association. 2011. Essential Facts about the Computer and Video Game Industry. http://www.theesa.com/facts/pdfs/ESA_EF_2011.pdf
- [15] Fuqua, J. V. (2013). Visions of Technology, Gender, and Knowledge Production. *WSQ: Women's Studies Quarterly*, 41(3), 280-282.
- [16] Funk, John. 2012. “Flash Game Makes Players Beat Up ‘Tropes vs. Women’ Creator.” *The Escapist*. <http://www.escapistmagazine.com/news/view/118310-Flash-Game-Makes-Players-Beat-Up-Tropes-vs-Women-Creator>
- [17] GameCareerGuide.com Staff. 2012. Game Developer Salary Survey 2012. Gamasutra. Retrieved from http://www.gamecareerguide.com/features/1108/game_developer_salary_survey_2012.php?page=1
- [18] GameCentral. 2013. “BioWare writer received death threats to family.” *Metro*. <http://metro.co.uk/2013/08/16/bioware-writer-quits-after-death-threats-to-family-3925970/>
- [19] Gray, K. 2013. Collective Organizing, Individual Resistance, or Asshole Grievers? An Ethnographic Analysis of Women of Color In Xbox Live. *Ada: A Journal of Gender, New Media, and Technology*, 2. <http://adanewmedia.org/2013/06/issue2-gray/>
- [20] Hamilton, M. 2012. “#1reasonwhy: the hashtag that exposed games industry sexism.” *The Guardian*. <http://www.theguardian.com/technology/gamesblog/2012/nov/28/games-industry-sexism-on-twitter>
- [21] Hasan, Y., Bègue, L., & Bushman, B. J. 2012. Viewing the world through “blood-red tinted glasses”: The hostile expectation bias mediates the link between violent video game exposure and aggression. *Journal of Experimental Social Psychology*, 48, 4, 953-956.
- [22] Hawksey, M. 2013. Twitter Archiving Google Spreadsheet TAGS v5. jisc CETIS MASHe. Retrieved from <http://mashe.hawksey.info/2013/02/twitter-archive-tagsv5/>
- [23] Ivory, J. D. 2006. Still a man's game: Gender representation in online reviews of video games. *Mass Communication &*

- Society, 9, 1, 103-114.
http://www.tandfonline.com/doi/abs/10.1207/s15327825mcs0901_6#.UqnSUvRDs2c
- [24] Jenson, J., & de Castell, S. 2013. Tipping Points: Marginality, Misogyny and Videogames. *Journal of Curriculum Theorizing*, 29, 2.
<http://journal.jctonline.org/index.php/jct/article/view/474>
- [25] Kelleher, C., Pausch, R., & Kiesler, S. (2007, April). Storytelling alicia motivates middle school girls to learn computer programming. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 1455-1464). ACM.
- [26] Kafai, Y. B., Heeter, C., Denner, J., & Sun, J. Y. (2008). Preface: Pink, purple, casual, or mainstream games: Moving beyond the gender divide. *Beyond Barbie & Mortal Kombat. New perspectives on gender and gaming.*
- [27] Kennedy, H. W. 2002. Lara Croft: Feminist icon or cyberbimbo? On the limits of textual analysis. *Game Studies: International Journal of Computer Games Research*, 2, 2.
<http://www.gamestudies.org/0202/kennedy/>
- [28] Lewis, H. 2011. "On Rape Threats and internet trolls: What I've Learned about the sexism directed at female bloggers." *New Statesman*. <http://www.newstatesman.com/blogs/helen-lewis-hasteley/2011/11/rape-threats-abuse-sex-female>
- [29] Mayo, M. 2009. Video Games: A Route to Large-Scale STEM Education?. *Science*, 323, 5910, 79-82 DOI: 10.1126/science.1166900
- [30] McKnight, J. C., Tiidenberg, K., Burnam-Fink, M., & Tekkobe, C. 2013. Navigating Boundaries and Taboos in the Digital Frontier. *Selected Papers of Internet Research*, 3.
<http://spir.aoir.org/index.php/spir/article/view/892>
- [31] Melendez, E. For Those About to Rock: Gender as Instrument in Rock Band. In Wysocki, M. (Ed.) *Ctrl-alt-play: Essays on Control in Video Gaming*. p 169-182. McFarland.
- [32] Metcalf, H. 2010. Stuck in the pipeline: a critical review of STEM workforce literature. *InterActions: UCLA Journal of Education and Information Studies*, 6, 2.
<http://escholarship.org/uc/item/6zf09176#page-4>
- [33] Miller, M. K., & Summers, A. 2007. Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines. *Sex roles*, 57, 9-10, 733-742.
- [34] Mislove, A., Lehmann, S., Ahn, Y. Y., Onnela, J. P., & Rosenquist, J. N. 2011. Understanding the Demographics of Twitter Users. In *ICWSM*.
<http://www.aaai.org/ocs/index.php/ICWSM/ICWSM11/paper/viewFile/2816/3234>
- [35] Nagle, A. 2013. Not Quite Kicking Off Everywhere: Feminist Notes on Digital Liberation. In C. Fowley, C. English, & S. Thouésny (Eds.), *Internet Research, Theory, and Practice: Perspectives from Ireland*, 157-175.
http://research-publishing.net/publication/chapters/978-1-908416-08-7/Nagle_87.pdf
- [36] Near, C. E. 2013. Selling Gender: Associations of Box Art Representation of Female Characters With Sales for Teen- and Mature-rated Video Games. *Sex roles*, 68, 3-4, 252-269.
<http://link.springer.com/article/10.1007/s11199-012-0231-6#page-1>
- [37] Porpentine. 2012. *Creation Under Capitalism and the Twine Revolution. Nightmare Mode*.
<http://nightmaremode.net/2012/11/creation-under-capitalism-23422/>
- [38] Prescott, J., & Bogg, J. (2011). Segregation in a Male-Dominated Industry: Women Working in the Computer Games Industry. *International Journal of Gender, Science & Technology*, 3(1).
- [39] Salter, A., & Blodgett, B. 2012. Hypermasculinity & dickwolves: the invisibility of women in the new gaming public. *Journal of Broadcasting & Electronic Media* 56, 3, 401-416. doi: 10.1080/08838151.2012.705199
- [40] Seidel, J. 1998. "Qualitative Data Analysis. The Ethnograph v5 Manual." Retrieved November 20, 2008, from <http://www.qualisresearch.com>.
- [41] Soe, L., & Yakura, E. K. 2008. What's wrong with the pipeline? Assumptions about gender and culture in IT work. *Women's Studies*, 37, 3, 176-201.
<http://www.tandfonline.com/doi/abs/10.1080/00497870801917028#.UqnQdPRDs2c>
- [42] Staines, G., Tavis, C., & Jayaratne, T. E. 1974. The queen bee syndrome. *Psychology Today*, 7, 8, 55-60.
- [43] Sterling, J. (2012). BioWare writer's vagina versus the Internet. *Destructoid*. <http://www.destructoid.com/bioware-writer-s-vagina-versus-the-internet-222206.phtml>
- [44] Sue, D.W., Capodilupo, C., Torino, G, Bucceri, J., Holder, A., Nadal, K., & Equin, M. (2007). Racial Microaggressions in Everyday Life: Implications for Clinical Practice. *The American Psychologist*, 62 (4) 271-286.
- [45] Taylor, N., Jenson, J., & de Castell, S. 2007. Gender in play: Mapping a girls' gaming club. *Situated play, Proceedings of DiGRA 2007*. 302-308.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.126.3283&rep=rep1&type=pdf>
- [46] Toledano, Gabrielle. 2013. "Women and Video Gaming's Dirty Little Secrets." *Forbes*.
<http://www.forbes.com/sites/forbeswomanfiles/2013/01/18/women-and-video-gamings-dirty-little-secrets/>
- [47] Westcott, Emma. 2012. "Independent Game Development as Craft." *Loading... 7.11*.
<http://journals.sfu.ca/loading/index.php/loading/article/view/Article/124>
- [48] Xu, Y. J. 2008. Gender disparity in STEM disciplines: A study of faculty attrition and turnover intentions. *Research in Higher Education*, 49, 7, 607-624.
<http://link.springer.com/article/10.1007/s11162-008-9097-4>
- [49] Yin, R. K. 2003. *Case Study Research: Design and Methods*. Thousand Oaks, CA, Sage Publications Inc.
- [50] Young, Filamena. 2012. You realize that's more complicated than a tweet can answer, I'm very sure. [Twitter post] Retrieved from:
<https://twitter.com/filamena/status/27312271349992064Duggan>