Dual Viewing Behavior: Gender Issues and Fandom Culture

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ABSTRACT

   Our everyday lives are dominated by media, from television, music platforms, advertisements, and social media platforms. This constant intake of information impacts and shapes our world views on everything from social issues, politics, and world news. Dual Screen Viewing is when a viewer actively watches a program on one screen, such as a television, and uses a second screen, such as a cellphone, to engage with and react to the content they are viewing on the first screen. The research uses a descriptive approach to understand "How is Twitter being used to discuss issues of gender inequality as it appears on the television show DC's Legends of Tomorrow?" Superheroes were specifically selected due to the rise in popularity of superhero media, like movies, television, and comics. Twitter was selected as a platform due to its use for real time reactions as viewers watch television. Tweets were collected for a 24-hour time-period using the tool Hashtagify, during the air date of the season two finale of Legends of Tomorrow. My research uses a qualitative exploratory research design combined with qualitative data analysis to analyze tweets featuring The CW Network selected #Legends of Tomorrow hashtag. Qualitative content analysis was used to analyze the data, and understand *how* viewers are using Twitter, if they are at all, to discuss or contribute to the issue of gender inequality. Four key observations were found: 1) issues of gender inequality are not always directly discussed by viewers, but are found in the mass amount of recurring themes found in the tweets, 2) viewers contributed to issues around verbal or mental abuse, often encouraging toxic relationships between females 3) when paired with a man, a woman's significance is reduced to her contribution to their relationship, 4) issues around gender inequality cannot be discussed without acknowledging other social issues, such as racism. These

findings will provide insight into how our rapidly changing technology impacts the way we discuss and interpret social issues as they appear in the media we consume, and if social media provides a platform to address these issues or contribute to them. Suggest further research would be to compare data with future seasons to find if issues were addressed by writers, or to shift the focus of gender inequality to also include a focus on potential racism.

INTRODUCTION

TV viewing habits have changed with the advancement of technology and development of social media.   In recent years, dual screen viewing has become a more common behaviour. Dual Viewing (a term which has other variations, including Second Screen, and Social TV), is explained by Cameron & Geidner (2014) as "Television consumption, an activity once characterized by a single, standard format medium, is now defined by multimedia engagement and production. Increasingly, television viewers are using a second screen (e.g., tablet, computer, mobile phone) to connect to Web-based media." Dual viewing provides an opportunity for viewers to publicly comment and discuss issues or thoughts that occur to them about the shows they are viewing. Audience engagement on gender issues is an important area of study as gender inequality continues to be a problem in our media. Media has the ability to impact viewers, the influence expanding to the point that viewers often try to copy their favourite characters viewed on television (Kurane & Shetty, p. 136, 2012), and according to a report by the Geena Davis Institute on Gender in Media in 2014, there was one women visible on television for every 2.24 men, with only 23% of global films surveyed having a female lead. Growing in popularity is the genre of superheroes. Marvel and DC films have been dominating the box office and small screens, and the number of females reading comic books is on the rise (Dockterman, 2015). Because of the growing popularity of the superhero genre, and the issue of gender inequality, it is important to see how evolving technology is being used to address this problem.

Television shows are a form of communication that can be used to communicate ideas, thoughts and establish norms through the shows, commercials and programs

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that viewers are exposed to. The way we consume and interact with media continues to evolve as technology develops. With the creation of social media, viewers now have the ability to react in real time to the content they are viewing. This allows companies to receive feedback and examine opinions from consumers. When viewers use social media to react to television shows they are watching, it is called Dual Screen Viewing. With technology changing, so does our options for taking on issues and problems with the media we consume, and how viewers can let companies know what they think of the material that is airing.

With the issue of gender inequality continuing to be prominent in our media, does social media provide a platform for viewers to discuss the problem, or contribute to it? The following research will explore the answer to the question: How is Twitter being used to discuss issues of gender inequality as it appears on the television show DC's Legends of Tomorrow?

The study around gender inequality is not a new field and has been growing and expanding over many years. The study of dual screen viewing is newer in practice and combining the two in order to understand how gender inequality is being discussed by consumers of media, specifically viewers of DC's Legends of Tomorrow, is a different approach to the topic. With superheroes dominating the big and small screen, a quartet of shows, Arrow, The Flash, Legends of Tomorrow and Supergirl currently offer a unique setting in that each show focuses on different teams of Superheroes, but each team knows each other, and crossover episodes happen frequently, with characters able to jump from one show to the next. Legends of Tomorrow is even more unique in the sense that it is the only show with a team lead by a female character. This study will

examine how viewers are contributing to the topic of gender inequality through dual screen viewing, or if they are aware and actively speaking (tweeting) against it. The study will contribute to the interest around dual screen viewing and understanding of how social media can be used alongside media consumed on television.

The motivation for this research came from recent issues occurring in the media, from the lack of merchandise available pertaining to female superheroes (O'Connell, 2016), which is major area regarding gender inequality. Yearly reports from the Geena Davis Institute on Gender Media provide recent statistics on female representation in the film industry, with a study in 2016 revealing that only 10% of films released globally showed gender parity, and studies in Canada and the USA show that these two countries have television content that has been associated with the increase of stereotypical attitudes towards gender norms (Smith et. al., 2016). A study conducted by Gutierrez-Martin & Torrego-Gonazlez (2016) on the educational potential of *The Hunger Games* and the discussion of viewers on Twitter that occurred during the viewing inspired the setting for the research. This research will contribute to the emerging field of Dual Screen viewing in combination with the issues of gender inequality as they pertain to media today.

This study is limited to one television show in a pool of many. Tweets collected were limited to a twenty-four timeframe, and only included those that contained the specific hashtag. Issues around gender inequality can change from episode to episode of a show, so the following research focused entirely on what was discussed by viewers from Legends of Tomorrow season finale. Other social issues apart from gender inequality, such as racism or mistreatment of LGBTQA+ (Lesbian, Gay, Bisexual,

Transgender, Queer/Questioning, Asexual) were not discussed in this paper, though these issues were visible in the research, for the purpose of restricting scope and a limited time frame.

In addressing the question of audience engagement and gender issues through dual screen viewing, this study looks at a body of literature that includes research on gender inequality in media, including the representation of female superheroes in media, and on how Twitter can be utilized by viewers to contribute to discussions and create change.

The portrayal of women in media continues to be biased, and despite this issue reaching back decades, with some research for this project dating back to 1977 on how media can impact the careers of women (Fox & Renas, 1977), it does not seem like people are listening. From how women are portrayed in media, to the amount of screen time females received compared to men, from almost every angle there is a misrepresentation between genders (Smith et. al., 2016). Research also discusses the amount of times men are more likely to be mentioned in media as opposed to women (Lukin, 2016), how female athletes are more likely to have their personal lives, including hobbies and families discussed than men (Carte, 2015), and how there is a negative opinion of female sportscasters compared to men (Ater, 2015).

Females are more likely to be hyper sexualized and overlooked, and this also extends to female superheroes, despite the fact that these characters are meant to represent heroics that women are capable of. Hunting (2014) discusses the overwhelming success of female lead shows that prove that women do not need to be sexualized in order to become popular, such as Buffy the Vampire Slayer, or Charmed.

Yet these types of characters are not the normal for what viewers will find on television or movies. Having well rounded, accurate portrayals of empowered women on TV also provides a powerful and important example to children who grow up watching television or reading comics, as discussed by Hager (2008), and how having female writers working on these characters can have a positive impact with widespread success (Stefansky, 2016).

Cameron & Geidner (2014) state that the majority of viewers have or do participate in dual screen viewing while watching television. Women consuming superhero culture is on the rise (Dockterman, 2015), and how female characters are portrayed will impact not only how women view themselves, but how men view women (Fox & Renas, 1977). Social media offers a platform for viewers to voice opinions as they view and consume media and provides a direct line of communication to the minds behind television shows. It can be expected that social media will offer a new way to address social issues and create a community that allows viewers to have a collective voice on what they consider to be important as they participate in dual screen viewing.

This research uses a qualitative design that examines content gathered from a database of tweets. Using Qualitative Content Analysis, tweets were gathered through the use of a program called Hashtagify, then filtered using inductive coding. This allows for an exploratory approach to the research to find what themes or information emerges from the data, rather than pre-conceived expectations. This process also allows for the discussion of *how* viewers are using dual viewing to discuss gender issues.

Summary

In summary, this study aims to address a set of research questions related to audience engagement and dual viewing with social media: (1) How is Twitter being utilized in dual screen viewing to discuss gender inequality as it appears on the CW television show DC's Legends of Tomorrow? (2) In what ways and to what extent is social media a platform that provides places for viewers to discuss this social issue, or even contribute to the issue?

The following report will examine literature published discussing the issues of gender inequality, dual screen viewing, women in the media, and fan culture. The chapter following the literature review will describe the data collection and research methodology driving the project, followed by the findings chapter that will discuss the discoveries made from the collected data. Being informed of what data is currently available on issues of gender inequality, dual screen viewing, and social media will help to understand the purpose of the study and set a basis for the following research.

LITERATURE REVIEW

In the literature review for this study I focus on two main areas. The first is (1) women in media, how they are portrayed and covered, (2) female writers, (3) female superheroes, and (4) the impact of superheroes on children. These topics explore the difference between male and female representation in media, and the importance of gender equality in media.   The second area will focus on (1) Twitter and dual screen viewing, (2) sexism and social media, (3) the power behind fan culture and social media, including how technology is changing to allow viewers to have an impact on the

media they view. These topics come together to discuss the idea of how dual screen viewing can be used to discuss the issue of gender inequality in media.

Media is a reflection of our society, and what we view in media portrays what we as a society value. Gender inequality is an issue that has been further perpetuated by Hollywood, and in the 21st century, viewers are turning to social media to make their opinions about this issue heard. Social media has the potential ability to change the conversation by allowing television viewers to contact writers and networks directly, connect with other viewers who share similar views, and counter viewers who share opposing views. As society which values an industry that continuously misrepresents and mistreats women, what does that say about us?

How is fandom utilizing Twitter to raise awareness of gender inequality on the CW Networks DC's Legends of Tomorrow, through the use of dual screen viewing?

Current research in the areas of dual screen viewing, fandom, and women in media were reviewed to help answer this question. The databases most commonly used in this review include Communication and Mass Media Complete, Sage Journals, ABI Inform Complete and Academia.edu. The majority of the studies were research reports, articles and book chapters completed by students and professors. Other sources include essays, newspaper articles, and interviews. Publication dates for these sources range as early as 2016, dating back to 1977 on the impact media has on women's careers. Sources were limited to availability in English, and journal articles were all limited to peer-reviewed articles.

Common search terms included "women in media" "female superheroes," "sexism in media," "twitter and television" and "dual screens." Search criteria for selecting sources focused on the Author, alignment of key words, publication date pending the topic, publisher, locations, the nature and argument of the article, and the author's bias.

Once the data was collected, it was analysed to compile a literature review. The information was organized into five areas of research: 1) Social Media and Sexism, 2) Media Coverage and Women's Sport, 3) Television and Twitter – Dual Screen Viewing, 4) Fandom Culture and Social Medi1, and 5) Collective Action. These five the following section will summarize these five areas.

Women in Media

The following section discusses how women are currently being portrayed and represented in the media. How women are viewed and treated by the media, the existence of double standards, and the importance of women behind the scenes will set the stage for how representation is today. The discussions of female superheroes, and their impact on media and viewers ties into the specific television show being studied for this research, Legends of Tomorrow.

The human race has been obsessed with the representation of beauty of women for centuries - possibly predating Greek times, which can be seen in the personification of Aphrodite, Goddess of Beauty (Kennard et. al., 2016). This obsession leads to a stereotyped view of females, and a toxic sexist environment. For decades, researchers have found there has been an inequality between men and women. These inequalities

and stereotypes have always been encouraged by media, from Beauty Pageants (Johnson, 2007), to television shows that typically portray women in domestic, submissive or sexualized roles (Kurane & Shetty, 2012). The academic field of Gender Studies only began to form in the 1960s, in Anglo American countries, stemming from other professions such as psychology and anthropology (Badaoui, 2016). The University of Alberta's Faculty of Women's and Gender Studies describes the field as "… a field of study that encourages students to ask big questions about the way that gender impacts how we think, how we live, and how we understand ourselves and others. Though the field historically focused on the lives of women, in the contemporary Women's and Gender Studies classroom, an emphasis is placed on the ways that gender, race, class, age, sexuality, ability, and size work together."

This narrow-minded view of women has lasting impacts on society, and the stereotypes that surround women. These representations are slow to evolve and change over the more recent decades, despite (or perhaps because of) a rise in consumption of television and movie entertainment (Kennard et. al, 2016). Over 100 studies have been released that show the impacts of the idealized female beauty, and how they lead to decreased self-esteem, negative body imagery, and poor mental health for 'everyday' females (Kennard et. al., 2016). The media shapes the way we see ourselves, and the way we see the world (Goodall, 2012, p. 161). Because of expanding technology and the internet, it is even fair to say that media developed and produced in one country can very easily influence populations living on the other side of the world (Goodall, 2012, p. 160).

In 1975, 97% of all homes had at least one television set, with young viewers tuning in for at least 80% of their awake hours, and young females spending more time watching TV than they did in a classroom (Fox & Renas, 1977, p.30). In 2011 that number had jumped to an average home in America having more television sets than actual people living in them, with view time for only one of these televisions being on for over 8 hours a day (Goodall, 2012, p. 160). The contents played on television, and any form of communication, reflects the value of the society (Kurane & Shetty, 2012). The people and characters exposed to viewers every day play a role in shaping the viewers perception of the world in which they live. From the evening news, to children's cartoons, to late night comedies, viewers never stop absorbing information through what they consume though media, and through the people who deliver it to them.

In 2012 a study published by the Geena Davis Institute revealed that in the 129 family films released between the years of 2006 and 2011, not a single female played a political figure, a doctor, a lawyer or a judge, where males had at least 45 roles as political figure alone (Tady, 2013). Ceulemans & Fauconnier, (2012) discuss a study revealing women are more likely to be depicted as people who do not do 'important things,' portrayed in an offensive manner, or implies their place is in the home and raising children. When they are employed, they are more likely to be subordinates, and viewed as passive. In 2014 Women only held 12% of the on-screen protagonist roles, and only 30% of the speaking roles (Atler, 2015).

"Until we normalize images of women in positions of the highest power, young girls will struggle to aspire to them, boys and men will struggle to support women

holding them, and women – particularly women of color – will struggle to secure them."
– Megan Tady, Few Roles for Female Role Models

Along with the issue of a lack of authoritative roles and positions for females in mainstream media, there is also a concerning worry of the violence against women portrayed in media. Television 'cultivates' the audience taste (Easteal, 2015, p. 104) and creates a 'sound bite society,' in which important and complex issue are reduced down to simplistic 'sound bites.' This encourages a society that would prefer simplicity, opposed to anything complicated, and generally apathetic to serious issues (Easteal, 2015, p. 104).

Women working in, or discussed in media, are more likely to be subjected to threats of violence. One example of this was Australia's first female Prime Minister being subjected to comments in news articles about how she should be stuffed into a bag and thrown overboard. Australia's newspapers were monitored to compare male and female pronouns. "He" was the 16th most popular used word, whereas the female pronoun "she" fell in at 66th (Lukin, 2016). "He said" was used 9892 times, and "she said" was only used 2709 times. Male names were more likely to be mentioned than female names. This trend continues through news articles released over a one year period, begging the question, where are all the women? Studies released on Canadian media coverage are just as imbalanced, with "he" appearing 6610 times, and 'she' only appearing 2666 times in online news articles between 2010 and 2016 (Lukin, 2016).

In a study done on sportscasters – a male dominated section of the media industry, it was revealed that both men and women have a negative view of women in this profession, believing that it was a position more suited to men (Etling & Young,

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2007, p. 133). With both genders, the credibility of a female sportscaster was always questioned. In a further study conducted via radio announcers, the gender of listeners impacted their views of the speaker's authoritativeness. Males were heard as being more authoritative by male listeners, and female listeners rated the male sportscasters as more authoritative than the male listeners rated the female sportscasters. In 2014, females in sports journalism dropped from an already small 17%, to 10% as reported by the Women's Media Center (Atler, 2015).

Carter (2015) studied the biographies of Olympians provided to media professionals from sports organizations to see if there was a difference in profiles between men and women athletes. Interestingly, contact sports, or those seen as more masculine, had shorter biographies and less personal information. Biographies of female athletes were almost 10% longer than males, with 55% more discussion of their personal lives than male athletes, including employment, family and hobbies.

Females Writers

Would there be a difference if the people writing for these fictional female characters were female themselves? Very few of the strong women depicted in media are created and guided by female writers. One of the most wildly popular was Charmed, the story of three female witches destined to save the Earth with magic (Ingalls, 2012). Wonder Woman, Buffy, and even the Powerpuff Girls were all written by men (Ingalls, 2012). Of a list of 300+ female superheroes read online, Ingalls could only identify 11 heroes or teams of heroes that were created by only women. Joss Whedon, the creator of Buffy the Vampire Slayer, is praised for his idea of Buffy, and for sticking to his vision of a tiny blond cheerleader who can take on vampires, and still remain

relatable to viewers (Griffin, 2016). It is not a negative thing that a man was able to create a show that provided such a strong female role-model, rather it is disheartening that women have such few chances to do the same.

The year 2016 may have been one of change. In 2015 Jessica Jones, an anti-hero of the Netflix series of the same name made her first appearance on screens, and she brought the ratings. The series was an instant hit, and in 2016 the female showrunner of the series announced that the female-centered television show will only be hiring female directors for the second season (Stefansky, 2016). This was a conscious decision on the showrunners part, and the first time it has been done (Stefansky, 2016).

Female Superheroes

A rising figure in media today is that of the superhero. Marvel and DC are enjoying a lucrative age of domination at the box offices, small screens (Tenny, 2012), comic book consumption is on the rise (Lubin, 2014), while toy companies, video games and cartoons are flourishing (Loftus, 2017). Like in most areas of media, the representation of women in all these sectors are poorly developed.

Early days of females in action movies, videogames, television and stories all saw them in the role of the damsel in distress, such as Princess Peach or Zelda. The most prominent evolution of female characters in these genres has gone from weak and helpless, to hypersexualized and angry heroes, such as Lara Croft (Summers & Miller, 2014), or any number of female superheroes on the covers of comics dressed in impractical outfits with their bodies contorted in the obscenest way (Taylor, 2007).

Female characters in blockbuster superhero movies often wield their sex appeal, and are clad in tight outfits that highlight a desirable figure (Penell & Behm-Morawitz, 2015, p. 212). The industry is driven by profit, and with the largest audience being white, middle class boys/men, it is not hard to see why the industry plays the female characters to their desires (Taylor, 2007).

Frustratingly, Hollywood continues to fail to realize that television shows with a strong female lead are capable of captivating audiences, and the female fan-base is capable of carrying the success of a television show. We have seen this success repeatedly in series such as *Clueless, Buffy the Vampire Slayer, Charmed,* and countless other shows, each with being credited as 'starting' a new wave of female empowerment (Hunting, 2014).

One of the most iconic female superheroes of our time, and previous times, is Wonder Woman. The character has survived many adaptations, reboots and personas, and is often seen as the epitome of a powerful female. In 2010, to celebrate the longevity of the character, the writers changed her revealing iconic costume to a much more practical, and covering pants and jacket (Waterhouse-Watson & Kendal, 2012). This shift was meant to celebrate the growing movement of women in the superhero industry, but instead caused an outrage among long time male fans (Waterhouse-Watson & Kendal, 2012).

Many people do not realize the deep ties and influence superheroes have in our history. Some of the original artists used the platform of comics to express concerns on the rise of Hitler (Duncan & Smith, 2011). When these middle class white men were drafted, minorities entered into the field of comic book artists. A psychologist named

William Marston created Wonder Woman around this time, with the intention of teaching America's youth of the power of a positive female role model (Duncan & Smith, 2011). However, many will argue that Marston's creation of this character was not a step forward for feminism, as her iconic costume was clearly designed to appeal to men. Unlike her male counterpart, Superman, Wonder Woman did not just put on a costume and decide to be a hero. Wonder Woman was made to work for her right to be a superhero, having to pass a number of life threatening tests in order to prove her worth (O'Reilly, 2005).

In recent comic history, the God of Thunder, Thor, is no longer a male. A mortal woman was passed Thor's Hammer and became Thor herself. The reaction to the change in gender for the god was one of controversy and some outrage (Dockterman, 2015). Social media was used as a platform to express outrage. Despite this, the female Thor has been a success. Sales increased and the new Thor was quickly grabbed off the shelves (Dockterman, 2015). In the past, the character of Thor had temporarily passed to aliens, and amphibians, but never a woman.

"If we can accept Thor as a frog and a horse-faced alien, we should be able to accept a woman being able to pick up that hammer and wield if for a while, which surprisingly we've never really seen before."

– Axel Alonso, Marvel

Female Thor has outsold the male Thor by 30%, and young women are the fastest growing comic book consumers of comics that are actually designed for women, not men (Dockterman, 2015).

Another example of feminism caught in the patriarchy is that of Buffy Summers, the Vampire Slayer. A single lone teenage girl who is charged with fighting demons, because a council of men decided to make it that way. In the end, Buffy does claim her power, recognizes that the men who make up this continued council need her more than she needs them, and breaks the 'one girl' rule (Stabile, 2009). But this realization takes years, and she is subjected to many horrific tests and trials that would horrify other teenagers (O'Reilly, 2005). While we have female heroes, there is still a question of why they are not allowed to be a hero in their own right, and why they require the support, or testing of male counterparts. Female heroes are more likely than their male counterparts to be put on trial in ways that sanction their power and authority (Taber et. al, 2014, p. 143).   Buffy the Vampire Slayer series is credited as being at the start of a 'Golden Age' of television, with some of the most talented writers, actors and directors now creating more content for viewers to enjoy (Griffin, 2016).

Invisibility is also a term that is often associated with female heroes. Wonder Woman's Invisible Jet, Sue Storm as the Invisible Woman, and in Keatings essay on *Watchmen*, Laurie, aka the Silk Spectre's place in her team. Described as the only female member of the team, she is also the only member of the Watchmen to not have any political affiliations or opinions (Keating, 2012). She is aware of her hypersexualized suit, has stated she hates to wear it, but still does. She is always romantically linked to one of the members of her team and is often forgotten or not as relevant if not attached to a male team member (Keating, 2012).

Pennell & Behm-Morawitz's (2015) study on exposing women to hypersexualized women in distress caused viewers to have less egalitarian beliefs about gender roles

and viewing hypersexualized superheroes can lead to a decrease in self-esteem and body-positivity. Taber et. al. (2014) conducted a similar study on the effects of superheroes on female viewers, where viewers expressed negative opinions of hypersexualized heroes such as Catwoman, and her emotional manipulation and willingness to play the victim to escape situations. The character of Catwoman is hard to define as either a hero or a villain, as she has been both an ally and an enemy of Batman in her many adaptations and appearances. In his attempt to explain why the male villain may be key in challenging America's view of an ideal body for superheroes, Eston (2013) inadvertently highlights that even as villains, women are not considered to be as engaging as males.

"Partly this centrality comes from the relative scarcity of female supervillains so far represented in the superhero film. With the exception of Jean Grey (Famke Janssen) in X-Men: The Last Stand (Brett Ratner, 2006) and Taliah al Ghul (Marion Cotillard) in The Dark Knight Rises (Christopher Nolan, 2012), the superhero genre has been far more fascinated with the conflict between the hero and his male nemeses." (Eston, 2013)

There is an ideal definition of what a male-hero should be and the disruption of heteromasculinity is not welcomed. The entire premise of the superhero franchise is that people need protecting, and these people are typically played my females, or sometimes children, elderly and small animals (Stabile, 2009). In the late 2000s, *Heroes* took the world by storm, and the premise was to 'Save the Cheerleader, save the world.' The Cheerleader herself had superhero capabilities that allowed her to heal, and eventually not even feel pain, but she was never capable of saving herself (Stabile,

2009). The Cheerleader, named Claire, was always counting on the males in her life to protect her.

The character of She-Hulk, cousins with the famous Hulk, is both an attorney at law, and a superhero, who unlike her cousin, can maintain her intelligence when she 'hulks out' (Oler, 2015). The significance of a strong, female superhero who is also a lawyer was significant at the time of its release, but the character still had shallow storylines and was represented using sexist stereotypes (Oler, 2015). She is fired from her job because she is seen as a threat, she is told she parties too much and spends too much time in her 'hulked out' form. She then states that she prefers her She-Hulk form because being a normal female makes her too small and vulnerable (Oler, 2015). When she finds a way to reconnect with her human side and discovers her own power as a human woman, as well as she-hulk, it is done by suppressing her powers. An equal balance was asking too much for a female superhero (Oler, 2015).

The long-lasting series of Star Trek has gone through many casts, crews, and series reboots. But the series itself is known for breaking through many gender roles early in television viewing (Braine, 1994, p.2). Star Trek offered a look at future Utopia with people from vast races and planets interacting on a spaceship to solve impossible missions. Women were no longer dressed in mini-skirts to be stewardesses, and issues were handled calmly and rationally (Braine, 1995, p.2).

It's 2016, and only now, do we have the headline of someone playing television's first black female superhero in the Netflix show Luke Cage. The show aired in 180 countries worldwide and literally caused Netflix to crash (Russian, 2016). While the first black female superhero on TV, Misty Knight, is not the title character, she was a

dominant presence in the show and had a lot of people excited to see another version of a strong woman on television (Russian, 2016). But why did it take so long?

Female superheroes are essential to the superhero franchise, and this is starting to slowly be recognized with shows like Jessica Jones, the popularity of the newcomer *Supergirl.* Other examples include female characters on *The Flash* and *Legends of Tomorrow* (Russell, 2014). *Arrow* did not get the memo, recently killing off the character of Laurel Lance, aka Black Canary. In the comics, the Black Canary is the very heart and soul of Green Arrow (Russell, 2016). She is a strong example of a middle-class woman who works during the day, owns her own business, and puts on a mask at night in the name of justice. Her skills in combat are also considered some of the highest among all heroes. Despite being vital to the Green Arrow storyline, she was brutally murdered in the 2015-2016 season finale. The following season premiere then saw a 36% decrease in viewings, and many speculate it is because of the horrible treatment of a beloved character (Russell, 2016). While the tiny details of what exactly makes someone a feminist can be difficult to understand, especially with the various 'waves' (or generations) of feminism rebelling against each other (Bardsley, 2006), there is a general consensus that violently hurting a vital female character to further a male plot line is not a good idea.

Superheroes and Children

It is not just men, or the growing demographic of young females who love superheroes. Children do as well, and children are susceptible to all they see on TV. Studies show that children, before the age of 10, have a hard time differentiating fiction from reality (Baker & Raney, 2007, p. 25). Superheroes are introduced to children

through cartoons at a young age, and these characters can often be realistic to young viewers. Society digests information through storytelling, and a person's view of society can, over time, develop to mirror what they see on TV (Baker & Raney, 2007). Studies also show that children often identify with the hero-character on television shows, increasing the chances of mirroring the character's behavior in the future (ibid). It is important to introduce gender equal television shows to children at a young age, without hints of stereotypical gender roles. Baker & Raney's study (2007) revealed that children's shows have characters much like adults, with 65.7% of the characters being male superheroes, and only 34.4% were female superheroes. Female superheroes were depicted as more emotional, and more attractive than the male heroes. Males were tougher, females were more superficial. Traditional gender stereotypes begin being broadcasted to society's youth, reinforcing that these stereotypes are the norm from a young age.

Television shows like The Powerpuff Girls are being credited as part of a new wave of female hero shows designed for young girls that challenge stereotypes and present heroes that are girls, not women (Hager, 2008). They have a bedtime, go to school, and are expected to finish chores at home while they save the world. They are cute little girls who are more physically powerful than anyone in their vicinity, but also more-often than not, more mentally powerful than adult men and women (Hager, 2008). They each have strong, independent personalities and present the idea that non-sexualized girls can succeed in the superhero industry.

Social Media

Social media sets the platform for where this research was conducted. This section will first tie in gender inequality and social media by discussing why social media is a potential platform to tackle social issues, provide examples of gender inequality on social media by looking at female athletes, and then examining examples of dual screen viewing, fandom culture and collective action.

Social Media and Sexism

Social media is proving to be a powerful tool to spread news and messages that may otherwise be ignored by traditional media, while providing a platform to engage in conversations or debates with like-minded, or dissimilar people. The ability to reach masses and create trending topics creates a unique opportunity to fight back against sexism and the inequality of females on TV, from professional athletes to fictional characters, to campaigns to raise awareness of inequality.

A lack of balance in gender representation in the media is not a new topic. There is less research available on the use of social media to examine the issue, as new uses to various platforms are still being explored.

The contents of social media has the ability to impact viewers, and can encourage one off comments, debates, feelings of hostility, and sadness (Foster, 2015). Additionally, the ability to use social media as a response platform and address the issues of sexism that people are exposed to can provide an outlet for these feelings, and improve psychological well being (Foster, 2015). It provides a public platform to call for collective action, encouraging all women and people who identify as feminist

(people who believe in equality and equal opportunity between genders) to make a stand. If successful, this can be an incredibly powerful tool that can keep others informed, prompt media coverage, and gain more followings with the attention of celebrities and popular twitter handles.

Media Coverage and Women's Sport

In the field of professional sports, male sports teams dominate the media coverage, even against female sports teams that prove to be superior in terms of overall wins and skill. This is largely because of the media itself (Adams et. al., 3013, p. 426). Media coverage as it currently stands is used to justify the importance of male sports teams, while causing female sports teams to be denied equal coverage. While there is an inequality of representation of sports teams on social media, the same platform can also be used to overcome this issue. It is not just the media with access to the public sphere, but viewers are capable of tweeting, responding, and otherwise covering events that the traditional media ignores.

Research on the effectiveness of Twitter in changing the coverage and discussion of women's sports teams is still underway, because the full capabilities and limitations to Twitter is still being explored due to the platforms relatively new popularity, having only been created in the last ten years, and changing capabilities.

The Australia Netball championship of 2013 used Twitter to monitor social media activity around the championship and the female teams. The monitoring of the Netball Teams using social media concluded that the social media account was not being used to its fullest, with their response rate being less than their fans attempts to interact with

them. Social media accounts that tweeted more content received the most responses and interactions (Vann, 2014), suggesting engaging with audiences in social media requires constant work, upkeep and creation of original content and interaction with followers.

In 2011 the World Cup was held, and a study of tweets posted about women's soccer compared to men's soccer using the United States Soccer Federation. The study examined the tweets posted from the women's specific account, and the general account of the federation. During a period of this study, the women's team played twice the amount of games as the men's team, yet still only received half the coverage of the men's (Coche, 2016). Only 23.33% of the pictures posted were of the women's team, and less than half of the links posted were about the women's team (Coche, 2016). While men athletes were identified by their full first and last names, women were often identified by the first name only, or a nickname (Coche, 2016).

Television and Twitter – Dual Screen Viewing

With the rise of social media, the age of "second screen" viewing (Wang, 2016), or dual screen viewing, is rising in popularity. Television shows are taking advantage of viewers activity on social media to engage them directly, encouraging interaction online through the use of social media while broadcasts are airing. Twitter provides an unmediated, communal discussion platform to engage with other viewers while simultaneously watching the same program on television (Highfield, et. al., 2013). This platform provides a voice to average viewers who would otherwise have their opinions go unheard. Even if there is no response to what is shared on Twitter, a person's views are still made public, and available to read to the masses (Bober, 2014).

With the inclusion of dual screen, or second screen viewing, for many people television is no longer a 'laid back' activity, but is now an 'active' medium, including interaction with other views, many of whom would be strangers (Buschow et. al, 2014, p. 130). In 2014, nearly 80% of people who owned a device such as a cell phone or tablet with internet access, reported using them in dual time with television programs (Cameron & Geidner, 2014, p. 400).

While a user's original Tweet can only be seen by those who follow them, including a hashtag word (#example), their tweet is now linked to other posts discussing the same topic, and will be included in a live feed of users discussing the topic in real time (Highfield, et.al, 2013). The experience and discussion on Twitter becomes an unofficial continuation of the event unfolding on television (Highfield, et. al, 2013), contributing to the overall viewing experience. Collecting the Tweets of viewers tuning into the 2011 Eurovision Song Contest found Twitter was used as 'backchannel' for viewing. Various countries promoted an 'official' Twitter hashtag, often different from the event designated official hashtag, in order to track and record their audiences. This can be used by journalists but is also largely driven by existing fan bases who turn to twitter to view and comment on broadcasts as they unfold.

Tweeting allows users to contact stations and actors who are also on the platform, through the use of the "@" symbol. Buschow et. al, (2014) discusses that over 30% of tweets discussing programs tend to contain opinion tweets, with over a quarter of tweets expressing strong emotions in regard to a program. Also discussed is the appropriate and relative programs discussed on Twitter. Buschow et. al, found that there is a consensus that sporting events and competitions are important to what is

called 'Social TV,' but there is a lack of consensus in regard to programs such as

television series and documentaries. Their research focused on the collection of tweets

generated during the live broadcast of a program and revealed that Twitter is most often

used to interact with the community of viewers, followed by the program and actors

itself, with users more likely to praise actors over the network, and criticize the network

over the actors.

Nagy & Midha (2014) found that Twitter can also be a powerful tool as a call to

action, noting that celebrities attached to a Twitter handle and a program being viewed

on television can encourage viewers to take action, whether that be purchasing

products, following a link or responding to questions.

Cameron & Geidner (2014) reported that viewing a live twitter feed while

watching a television program can influence thoughts and opinions. While viewing

contestants on American Idol, studies revealed that watching while reading positive

Twitter feeds about the performance resulted in positive feelings toward the singer,

whereas viewing the performance with negative comments influenced viewers to have

negative opinions about the performer.

Quintas-Froufe & Gonzales-Neira (2014) found that the personal Twitter

accounts of judges on reality television drew in a larger engagement than the networks

official accounts, with the network account sending out the most tweets having the

lowest rating of the compared reality television shows. Some entertainers now have the

power to impact media and news reports simply by one social media post, Twitter

included (Marchetti & Ceccobelli, 2015). In their Italian study, Marchetti & Ceccobelli

(2015) noted that the entertainment industry tends to make up around 40% of topics

being discussed on Twitter, while Shin (2016) raises a concern that some viewers engaging in dual screen interaction may be less likely to engage in conversation around entertainment, or any topic on Twitter, without feeling some connection to the issue. In this case, cultural difference between countries may also need to be taken into consideration.

In a study conducted on Twitter activity during the 2011 Norwegian Debates leading up to the election, Kalsnes et. al (2014) found that over half of the Twitter activity related to the debate was 'Meta Talk.' Meta Talk being defined as Twitter users debating about the debate. Half of the Meta Talk was around the politicians' answers, with the other half being around the media. Meta Talk drives the discussion of the debate, creating the backchannel discussion around the program and generating conversation and debates between Twitter users (Kalsnes et. al, 2014, Wang, 2016).

Fandom Culture and Social Media

Fandoms, viewers who support specific forms of media, specific shows, books, comics, etc. have had a certain power over the media they consume for decades. What began as writing letters or making telephone calls to make their opinions heard has evolved with the change in technology (Guerrero-Pico, 2017, p.1). Social media offers a direct way to contact actors, writers, producers and networks. It has effectively helped to tip the scales of power (Galuszka, 2015), and fandom has always been at the forefront of developing technology and new media technology (Jenkins, p. 135, 2006). Fandom has been the most active in new media audiences, and taking part in platforms that allow them to interact with the fictional world they follow (Jenkins, p. 135, 2006), such as message boards, social media, fan sites, etc.

Fandom becomes heavily invested in media they consume, and no one knows the fictional universes better than fans, sometimes not even the people who create or write them (Jenkins, p. 167, 2006). Fans coming together online create a community of knowledge around the specific shared area of interest (Misailidou, 2017), which can provide a source of knowledge for television networks, and a collective voice for fans to fight for the content they love. For example, Fox's Television's show *Fringe* had a dedicated fan base that rallied together when the show was under threat of cancellation. Fans mobilized online and used Twitter to gain the attention of television executives through campaigns of creating unique Fringe related hashtags. (Guerroero-Pico, 2017, p. 8). Only months later, the Nielsen Twitter TV Rating system was released in the US, that analyses the number of Twitter users exposed to a Tweet about a show, and the demographics of those users.

Television networks use social media to collect information on viewers and participants in dual screen viewing, but with this data comes a way for fans to make their thoughts and opinions heard. Shows like Fringe, Chuck (Guerroero-Pico, 2017), and more recently Sense8, were saved through fan campaigns on social media. With the news that the Netflix show Sense8 was being cancelled after two seasons, the fan base led a full-scale riot online. Fans used Twitter to share contact information of producers, bombard Netflix's twitter account, distribute petitions, and share emotional reactions (Krishna, 2017). The backlash was so strong, that the Netflix show gave a two-hour finale to provide fans with closure.

Save Our Show campaigns provide a way to prove that social media does provide some power to fans. Successful campaigns achieve this goal through shows

getting another season or extension. The success or failure of a campaign is easily

measured based on the fate of the television show in question. When it comes to

smaller changes, backlash on plots, fan opinions on characters and social issues, there

was a lack of studies available for examination.

Collective Action

Collective Action refers to an action taken by a group of people together in order

to achieve a common goal or objective. There is debate on the effectiveness and

relevance of social media's part to play in collective action. The strategic use of social

media can contribute to the effectiveness and impact of collective action.   This is

commonly viewed in current and urgent campaigns, protests, occupations and other

similar events (Pavan, 2016).

The #SayHerName campaign was a form of collective action and digital activism

used to bring attention to the unfair, violent, and often fatal actions taking against black

women, transgender women and children. (Williams, 2016). The media largely ignored

the violence being directed toward black women, and social media was used to counter

and document this injustice.

The use of the #SayHerName hashtag was implemented during the trial of

Holtzclaw, a man accused of assaulting and murdering many of these women. Where

the media did not cover the story, #SayHerName allowed viewers in the court room to

tell the story and share it with the rest of the world (Williams, 216). If it was not for the

collective action of these twitter users, many more would have remained unaware of the

actions of Holzclaw, and the unwillingness of the media to cover these events,

encouraging the reality that the lives of black women do not matter. #SayHerName, while not solving the problem of media representation, allows the conversation to begin to change (Williams, 2016).

Conclusion

The sexism faced by women in media, journalists, athletes, actresses, characters, is a multifaceted issue that cannot be solved easily, and have had many setbacks on top of what should have been celebrations. There are countless discussions on gender representation in media, but there is a gap in bridging social media and gender inequality. We have seen Twitter campaigns like #SayHerName, or campaigns to save shows like Sense8, but there is little discussion around the mistreatment of characters society watches for entertainment. There is a lack of consensus if drama shows, such as those of superheroes, should even be studied on social media (Buschow et. al, 2014).

Negative sentiments tend to drive discussion on Twitter (Bober, 2014), and there is a large amount of negative sentiment around the treatment of women in the media. There does not seem to be any difference between the mistreatment of fictional female characters, and real-life journalists, sportscasters and athletes.

The age of superheroes is upon us, and networks are capitalizing on this opportunity that appeals to a broad audience. The literature report discussed the representation of women in the media, including how media impacts how women are viewed in real life, the impact of women writers, the importance of female superheroes, and how they impact society from a young age. Twitter provides a rising platform for

fandom culture to make their opinions heard and potentially cause change through their comments and opinions.

The literature sets up the research for the question of how twitter is being used by fandom to discuss and/or raise awareness of gender inequality on the CW Network's DC's Legends of Tomorrow. The following chapter will discuss the research methodology applied to the research question.

RESEARCH METHODOLOGY

"Female characters are rarely treated equally in the superhero genre, but with Laurel Lance, Arrow has continually written her as an afterthought that doesn't bear much regard and in doing so, has ruined her legacy." - Mae Abdulbaki. The Young Folks

As described in the previous chapter, this study looks at how fandom is utilizing Twitter to raise awareness of gender inequality on the CW Networks DC's Legends of Tomorrow, through the use of dual screen viewing. This chapter will discuss the research design and methodology used in this study to examine this issue. Data was gathered from Twitter, through collecting tweets that contain a specific hashtag. Tweets were filtered to focus on the female characters of the show and studied using qualitative data analysis and inducting coding to understand what and how Twitter was being used by fans to discuss gender inequality issues on the show. The following chapter will further explain the research in detail, further describing the significance of Twitter, dual screen viewing, the tools used to collect the data, and other approaches that were considered. It will discuss the research design, the exact procedures used to conduct

the research, provide a thorough description of the analysis process, and finally look at lessons that were learned in the process.

Design

A popular use for social media is the trend of dual screen viewing. Dual screen viewing (also called Social TV) is described as "…merging television and social media technologies... new technologies and social media have extended interpersonal communication beyond the boundaries of family, friends, and geographical regions. On social networking sites such as Facebook and microblogging services like Twitter, users chat in real time parallel to TV reception." (Buschow et. al., 2014).

The concept of dual screen viewing has emerged in the last few years as a form of communication and engagement between television viewers, while each individual remains physically separate from other viewers (Quintas-Froufe & Gonzalez-Neira, 2014). The purpose of the study was to create an understanding of how, if at all, social media is being used by television viewing to address gender inequality. Discussing different approaches to research design, DeVaus (2001), identifies two basic types of studies: descriptive and explanatory. A descriptive study aims to discover *what* is happening whereas an explanatory seeks to *why* it is happening.

The research took a descriptive approach, seeking to establish an overall picture of how social media was being used by fandom to engage in discussion on gender issues in television shows that have faced controversy before. The research was to find out *what* is happening with social media in relation to social issues, or *how* social media is being utilized. Descriptive studies can be both concrete, or interpretive. Qualitative research allows for interpretation of data, allowing the researcher to explore the

meaning behind the data (De Vaus, 2001). The use of an Exploratory Research Design allows for the answer of multiple questions, including how social media is being harnessed, and what is being discussed. Exploratory Research Designs are ideal for research that has little to no previous studies and allows for flexibility, answering multiple types of questions, and develops a base point that allows for further research and questions to develop out of what is discovered (University of Southern California, 2017). The approach of an exploratory design is ideal for a researcher who does not know exactly what will be found, but is open to discover what is there (Tracy, 2013, p. 83). The potential impacts on social issues and the viable use of social media to impact change is still being discovered, allowing for this study to contribute to developing and finding further research ideas.

Due to the nature of the information collected, tweets were gathered from a smaller, select time frame to avoid information and content becoming overwhelming and too large to analyze in one study. Smaller research samples align with the limitations of Exploratory Design (University of South California, 2017). Sampling from a controlled sample of tweets allowed for the development of insight, as opposed to definitive answers.

Twittersphere

Data for this research was collected from the social media platform Twitter, the idea for collecting Tweets came from the study by Gutierrez-Martin & Torrego-Gonazlez (2016) examining the understanding of revolution through movies airing on television. Social TV participants will often include specific hashtags related to the show, such as #LegendsofTomorrow in their tweets. According to Twitter, "A hashtag—written with a #

symbol—is used to index keywords or topics on Twitter. This function was created on Twitter, and allows people to easily follow topics they are interested in."

Viewers engaged on social media while watching the series, often causing the different programs to 'trend' during the nights they air. "Trends are determined by an algorithm and, by default, are tailored for you based on who you follow, your interests, and your location. This algorithm identifies topics that are popular now, rather than topics that have been popular for a while or on a daily basis, to help you discover the hottest emerging topics of discussion on Twitter." (Twitter, 2017). The inclusion of hashtags allows each Tweet that included it to be indexed.

Recognizing that not all viewers who engaged with the show via social media would have used the hashtags in their post, there is a risk that tweets containing critical content were missed. Additionally, by using Twitter as the social media platform, it is also acknowledged that opinions, comments and contributions created on other social media platforms were excluded from this study. The #LegendsofTomorrow hashtag was used to collect the data for the research because the social media accounts behind the Legends of Tomorrow show, writers, the CW, and actors, selected this hashtag to use on their accounts as well. With the networks adopting the use of this hashtag, it is likely they pay attention to the tweets generated with it.

Figure 1: official twitter profile of the Legends of Tomorrow television show, featuring the hashtag #LegendsofTomorrow

The collection of tweets was limited to a twenty-four-hour timeframe, 12:00am –

11:59pm MST on April 4, 2017, the release day of the Legends of Tomorrow Season

Finale. Only content generated in English was included.

Targeting this specific content allowed for the analyzation of real-time reactions

within a manageable time frame and relevant location. That is to say, viewers who had

access to viewing the television programs as they aired in North America, the same

location these shows are filmed, produced and mainly aired. Twitter, used in real time,

allows viewers to tweet their instant reactions and feelings to programs with limited

space. This social media platform was selected because the contents of tweets are

condensed, quickly generated and often contain a viewer's initial reaction and thoughts

if they are engaging in dual screen viewing. Additionally, Twitter is the first social

media tool to allow for the use of the hashtag to archive content (Twitter, 2017).

Hashtagify, a social media analytics tool was used to collect the tweets with relevant

time stamps and hashtags. Hashtagify allows for the collection of Tweets to be filtered

through specific dates and times, ensuring that the data collected was generated during

the viewing of the selected television shows.

Due to the public nature of the tweets collected, users were not directly engaged

with, as the information generated falls under public domain.

Setting

The study focused on the social media platform Twitter. Twitter provides an active

platform that many television viewers actively engage in while viewing television, as a

way to broadcast opinions, reactions and interact with television networks, actors and other program viewers. Twitter allows for real time reactions in condensed forms.

Additional platforms were also considered, including blogs, Facebook and internet forums. Facebook is not as popularly used for real time reactions and discussions about television shows. Blog sites, while providing much more information, are also not in real time, and take longer to go live on the internet, with some reviews popping up months after a show airs. Additionally, blogs do not allow for rapid back and forth interactions of conversations around a topic as it airs. Blogs provide more time for users to reconsider and re-evaluate thoughts and opinions about what they are viewing instead of real-time reactions.

Contacting Twitter users for interviews or surveys was decided against due to the nature of the study. The interest was in what content is being generated by viewers using dual screen viewing as they are watching the show, including their immediate thoughts and reactions. The inclusion of surveys would allow time for thoughts to change, new outside influences to impact views, and could bring more focus on *why* viewers engage in dual screen viewing, instead of how it is being used.

Instrument

There are many programs and tools available for analyzing Twitter's contents. For the purpose of this research I used a tool called Hashtagify, a social media analytics tool that allows for the collection of Tweets that contain specific hashtags selected by the user. Once the hashtag is selected, the tool will generate two reports that shows the analytics around the hashtag. One report provided the specific tweets by users,

including the time the tweet was sent, if it was retweeted, twitter handles mentioned in the tweet, who created the tweet, the language the tweet was created in and how many followers the user who created the tweet had.

The second report provides a summary of the selected hashtag data, including total impressions, total tweets, total users and total retweets, the largest 'influencers' behind the hashtag, the top related hashtags, the words more commonly used in the collected tweets with the associated hashtag. See Appendix A for full summary report.

Top Influencer's Details (1 to 20)

Influencer	Followers	Tweets On Tg	Tweets On Tg %	Tweets Off Tg	Retweeted On Tg	Mentioned On Tg	Mentions On Tg by User	Retweets On Tg
thecw_legends	270,952	5	42%	7	765	66	1	1
natalieabrams	53,627	1	14%	6	18	0	0	0
ew	6,132,934	1	0.4%	240	6	20	0	1
warnerbrostv	152,146	3	11%	24	13	0	0	2
dccomics	2,100,969	1	5.6%	17	55	4	1	0
mguggenheim	74,777	1	6.7%	14	0	30	1	1
variety	1,729,509	1	0.8%	121	22	0	1	0
warnerbrosent	1,759,444	1	20%	4	0	0	1	1
cw_theflash	1,422,061	1	50%	1	0	0	0	1
thecw	812,359	1	17%	5	29	22	0	0
accesshollywood	770,253	1	5.9%	16	1	0	0	0
comicbook	100,909	4	2.7%	144	26	1	2	0
itsfreeatlast	136,774	3	1.2%	255	0	0	0	3
spoilertv	75,186	4	3.5%	109	26	0	0	0
awesomemergency	75,794	2	9.1%	20	9	0	0	0
mattletscher	16,633	4	50%	4	31	14	2	2
lovepaulstefan	12,653	6	5.2%	110	0	0	3	4
dcumoviepage	8,352	4	1.5%	262	0	0	1	3
streamingfeed	26,544	1	0.1%	766	0	0	0	0
chancelloragard	1,150	1	25%	3	0	0	1	0

Figure 2: from the summary report for Hashtagify top 20 influencers on Twitter using #LegendsofTomorrow tag on April 4, 2017

The crucial information for this research is located in the raw tweets collected. Hashtagify allows for the raw CVS to be downloaded into an Excel spreadsheet. From there filters were applied to sort content by required filters, such as language, date, and original content, and the number of interactions each tweet has. Each tweet was produced by dual viewing participants, it was their raw thoughts and opinions, without interruption or influence that allows human observation through the use of the computer (Rudestam & Newton, 2007). The use of Hashtagify is not free, and the platform comes with a variety of pricing points, depending on why it is being used, and the amount of data from Twitter that needs to be tracked and collected.

Other tools that were considered included Union Metrics, Hootsuite, Keyhole, TalkWalker and Hashtracking. Hashtagify was selected for both its price point, and its capability to provide both summary reports on the data collected, its ability to provide information on each individual tweet sent out during the selected time frame, and the ability to export this information into spreadsheet. Other platforms exceeded the budget or did not provide the level of detailed data that Hashtagify did.

Procedures

The CW Television Network, often referred to as The CW, is a television network based out of America. The CW Network has the rights to the multiple television shows, including DC's Legends of Tomorrow. It was from this show that the tweets for the research was collected.

The number of tweets generated by viewers of each television show amasses in the thousands each day an episode airs. While smaller numbers of participants will often mean more detailed and in-depth data (Rudestam & Newton, 2001), this research will incorporate many participants, with shorter amounts of generated information. To ensure the amount of data collected was manageable, tweets were only collected during the day the episode aired. Placing a time frame around data collected helped to avoid over saturation of the researcher (Rudestam & Newton, 2001). The data focused on the second season finale of Legends of Tomorrow, with tweets only being collected from the date the episode aired. The season finale of the show was on April 4, 2017. For a more definitive look into the impacts of social media, one could expand the time frame of data collected, and include the large variety of social media platforms and blogging sites that were utilized by viewers.

Following the air time of the episode, Hashtagify was used to generate a report that was specific to the episode date. The report was generated around specific hashtags associated with each show. The official hashtag for Legends of Tomorrow, as mentioned earlier in the report, is #LegendsofTomorrow.

Once the report was complete, the data was downloaded and exported to an Excel spreadsheet where content was further sorted, using Excel filters, based on the time it was generated, the language it was generated in, and if the content was original, versus a retweet. This final list of tweets was used to provide the research data for this project. Hashtagify was selected because it offered the most simplistic way to collect original data and was able to work with Excel to filter content as required.

There were several difficulties in identifying the right tool for this research project. Many of the tools that were researched were designed specifically for corporate franchises in mind and came with a price point that was not manageable for this research. Other tools generated analytics around specific hashtags, such as the number of interactions, associated hashtags, and how frequent a hashtag was used, but did not provide the original content of the tweet itself.

Analysis

Qualitative Data Analysis was used in the analyzation of the collected data. Per Flick (2013), "Qualitative data analysis is the classification and interpretation of linguistic (or visual) material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it." The purpose of this study was to understand how viewers were using Twitter to engage in dual screen viewing to discuss or contribute to issues of gender inequality on television. The idea is to discover *how* social media, in this case Twitter, can be used as a platform to engage in social issues, in this case gender inequality, as they appear in society, in this case on television.

Qualitative content analysis is used to describe the meaning of the qualitative data (Schreier, 2013). Qualitative content analysis reduces the amount of material from the data to focus on the important emerging aspects of the data that relate to the research question.

Once the data was collected using the tool Hashtagify, and exported into an Excel, it was automatically sorted into an excel spreadsheet. Consideration was given into

using the platform NVivo 11 to assist in coding and examining the data, but in the end, it was ruled out. The program would continuously crash when attempting to upload the collected data from Excel into NVivo, possibly due to the software of the program not being compatible with the hardware, but the exact reasoning is unknown.

The table exported from Hashtagify was edited to include a column that included notes and thoughts for each individual tweet as they were examined. An inductive coding process was used, because it allows for the researcher to identify patterns, important content, and relationships through a process of discovery (Schutt, 2015). Codes were developed by reading each tweet and highlighting key themes and words that were found. The codes focused on who the tweet was talking about, emotional reactions or feelings from the viewer, if it was a positive or negative reaction, if it was a reaction to an action a character took, or a reaction to a relationship between that character and another. Content analysis allowed for the flexibility and design of these emerging codes to ensure the codes match all the material within the database (Schreier, 2013).

The content analysis began to show similar aspects in the data in regard to how each individual female character was perceived, and their relationships with other characters (Schreier, 2013). From the reoccurring aspects, issues around gender inequality began to emerge from the data (Fulkerson, 2011).

Once the coding was completed, the data was then further sorted based on the patterns that had emerged from the original inductive coding, and separated by each of the three female characters on the episode. Tweets that focused on the character

alone, tweets that focused on the character's relationship with other female characters, and tweets that focused on the character's relationship with male characters.

This process of Qualitative Data Analysis was applied to understand the real meaning behind the text, or to understand what the Twitter user was saying when they generated the tweet during the viewing of the television show (Schutt, 2015). Because the data was collected from the internet, the information is still available to go back and re-examine or collect later, pending the researcher has the financial means. (Schutt, 2015). Data collected from Twitter can be difficult to collected after a certain expanse of time. This will be discussed more in lessons learned.

Validity and reliability of the study comes from the ability to replicate the procedure (Golafshani, 2003), and in qualitative research the two are entangled. Qualitative research seeks to understand what is happening from a human experience, and even the most skilled researchers maintain their humanity and core values while seeking to accomplish this (Tanveer et. al., 2008). The norms of validity and reliability as they apply to quantitative research are not transferable to qualitative research (Golafshani, 2003). In qualitative research, reliability provides a level of understanding to the research.

The reliability of the research comes from providing validity behind the research (Tanveer et. al., 2008). The validity behind the reasoning for this research comes from the literature. The studies discussed in the literature show the lack of balance of representation of women in media, and the unrealistic portrayals of women in media. The literature also reveals studies behind the power dynamics between fandom and television networks, and the growing interest and use of dual screen viewing. Gender

inequality, evolving technology and the new forms of communication with dual screen viewing provide a validity to the chosen topic of dual screen viewing and gender issues.

Tanveer et. al. (2008) suggests a list of ten possible strategies in increase validity of qualitative research. This list includes several strategies that have been applied to this research, including 'participant language verbatim accounts' and 'mechanically recorded data'. The data collected and examined was the individual and unique tweets of each viewer. Their words and reactions were mechanically captured from Twitter and copied into an excel form verbatim. The data was not altered, summarized or changed in any way for analysis. 'Low-inference strategies' suggests recording precise and detailed descriptions of people and situations. Each viewer was included in the research because they were using Twitter as a platform to engage in dual screen viewing, and utilizing the hashtag #LegendsofTomorrow, the official hashtag of the show. The data collected allowed access to online contact through twitter handles, location, and access to accounts if needed. Lastly, Tanveer suggests that including 'negative or discrepant' data adds to the validation of research. For this research, every tweet involving female characters was captured and analyzed, it did not matter if the contents suggested gender inequality, or suggested gender equality. The data was not filtered to sway the findings in any way, because the overarching goal was to find *what* was happening. For this to be discovered, all data must be included.

Trustworthiness is a term that is often associated with qualitative research, and is used to apply rigor (Golafshani, 2003). Rigor is considered a factor in establishing validity and reliability in research, but is not transferable to qualitative research. Rigor is precise and exact, where as qualitative research is open to discovery (Cypress, 2017).

By providing the exact tools, methods and steps used in this research, allowing readers to recreate the research if desired, I am to establish trust in the research and results.

Noble & Smith (2015) suggest it is imperative to acknowledge biases in sampling when engaging in qualitative research. The data collected for this research was limited to one social media platform that could be engaged in dual screen viewing, and limitations were set to only include viewers who engaged with the use of the shows official hashtag #LegendsOfTomorrow. The research acknowledges that the use of this platform means the opinions will be limited to those who have access to a second screen, who use social media, choose to engage on it, and is limited to the English-speaking world. It is also acknowledged that I, as the researcher, entered this project with my own personal bias that comes from age, background, beliefs and education.

Lessons Learned

The original concept for this research paper was centered around the idea of collecting tweets from the four DC television shows that air on the CW Network: Supergirl, The Flash, Legends of Tomorrow, and Arrow. Due to human error in data collection and incorrect data gathering timelines, I was only able to successfully collect the data from DC's Legends of Tomorrow. Twitter only allows for data to be collected for a window of 7 days, and after that, the cost to retrieve the data increases. When I learned of the error in data collecting, I approached Hashtagify to see if anything could be done about my mistake. The price to retrieve the missing data started at $1,250.00. Contacting other hashtag collection platforms revealed similar pricing.

The cost of retrieving the data was unrealistic, but upon further examination of the data collected from Legends of Tomorrow, it was decided there was enough data from the season finale air date to do a more focused study on the one series.

Working with Twitter it is important to remember that this platform charges for the access of the data after one week, whereas other platforms may not apply this fee.

Summary

Applying Exploratory Research Design, and Qualitative Data Analysis to data collected through Twitter, this research was completed to answer the question, how is Twitter being used as a back channel by television audiences to discuss the issues of gender inequality as they appear on superhero television programs airing on the CW? Data was collected through the use of the tool Hashtagify and analyzed applying qualitative data analysis and inductive coding. The focus of the research was done on tweets collected from users who archive their tweets with specific hashtags promoted by Legends of Tomorrow. Data was only collected from the tweets generated during the air date of the show and typed in English.

The aim of this research was to provide a better understanding of how dual screen viewing is being used to deal with social issues, and if there is any potential future studies or opportunities that may surface from the collection and analyzation of the data.

FINDINGS AND DISCUSSION

The focus of this study is to understand how fandom is discussing the issue of gender inequality on DC's Legends of Tomorrow through the use of dual screen viewing. To understand this issue, I undertook a qualitative content analysis of tweets generated during the season 2 finale air date of Legends of Tomorrow. Using inductive coding I examined the conversations happening about the female characters on the show as they were generated on the social media platform. The goal was to better understand how viewers are using Twitter to discuss or contribute to the issue of gender inequality on television shows.

For the purpose of this study, data collection involved examining a collection of Tweets posted by fans about the TV series Legends of Tomorrow. Tweets were gathered during a 24-hour period on April 4, 2017 to coincide with the finale of its second season.   The method for collecting Tweets involved the tool Hashtagify, a platform that collected tweets containing #LegendsofTomorrow that were generated during a specific time frame (April 4, 2017). The resulting data set was then filtered to include only those tweets that were about the female characters or actors on the show. Tweets that were only about male characters were excluded.   By applying inductive coding to the tweets, three major themes emerged from the data

1. Viewers opinions on individual female characters
2. Viewers opinions on female's relationships with other females (platonic)
3. Viewers opinions on romantic relationships, or 'shipping'

In this chapter I will provide a summary of the Legends of Tomorrow episode that was used, entitled "Aruba," and provide a description of the characters that appeared on the episode, and characters that were mentioned in gathered tweets. Following this the chapter will present each of three themes from the data previously mentioned, provide examples as it pertains to each character, and discuss how they help to answer the research questions. The next session of the chapter will discuss the analysis of the data, the analysis process and addressing issues of validity. Finally, the last section will discuss the insights found by this research, possible further research and continuation in the future.

Legends of Tomorrow

In October of 2012, the CW Network aired the show entitled 'Arrow,' which provided us with the story of how the Green Arrow of DC comics began. From the success of this show launched an array of other shows, including The Flash, Constantine, Supergirl, Vixen, and Legends of Tomorrow. Legends of Tomorrow was the only show not directly created from a comic series, and focuses on a number of, arguably 'fan favorite' characters from Arrow and The Flash, that did not quite find their home on the shows they originally appeared on.

Legends of Tomorrow focuses on a group of 'misfits,' both 'good guys' and 'bad guys' who, in the big picture, would have no large impact on the timeline if left where and when they were originally found. Calling themselves Legends, the team was originally recruited by a man named Rip Hunter, a Time Master. The purpose of the Time Masters is to protect the flow of time and insure no one is able to disrupt or change it. Rip recruits the Legends to help him do just that.

The tweets analyzed in this research are gathered from the seventeenth episode of the second season, and the season finale entitled 'Aruba.' In order to save one of their own and stop the Legion of Doom from rewriting history with the Spear of Destiny (also called the Holy Lance), a biblical artifact, said to be the spear that punctured the side of Jesus Christ while he was on the cross. The spear has god-like powers, allowing the wielder to have mystical offensive powers, and to completely rewrite reality anyway they see fit. Do to this, the Legends must break the most important law of time travel, never come in contact with yourself from a different time, or you risk breaking time. Deciding the threat, the Legion posed on Earth as more important, the Legends team up with the Legends of the recent past to take down the Legion and save reality.

The tweets used for this analysis were those that were about, or included the female characters of this episode, or who are part of the DCTV board universe. As all television shows in the DCTV universe on the CW Network are connected, characters from other shows can cross over, and directly impact the outcomes of another. Because of this, a description of all characters on Legends of Tomorrow, as they stand in season 2, episode 17, as well as females from other shows that are mentioned is provided.

Character Description

Sara Lace

Sara Lance is the Captain of the Waverider, and the third and current leader of the Legends. Her codename is White Canary, previously the Canary. Sara originated in the television show Arrow. The character of Sara does not exist in the DC Comics,

but in this show, she is the younger sister of Laurel Lance, aka Black Canary. Before she was the White Canary, she was simply 'The Canary.' She is a trained assassin, former member of the League of Assassins, and a former love interest of Oliver Queen/Queen Arrow, who her sister/Black Canary was also a love interest for. Out of all of the characters on Legends of Tomorrow, Sara has the longest and most developed character arc and backstory.

On the second season of Arrow, Sara was killed off, prompting her older sister Laurel Lance to take up her mantle as the Canary, and become the Black Canary. The death of Sara caused large backlash from the fans of Arrow, to the point that her character was officially resurrected in order to join the start of the Legends of Tomorrow show.

Sara is also notable for being one of television's first openly bisexual characters, having relationships with both men and women on the show. She is also without any super powers, her value coming from her training, intelligence and capabilities at a completely human level. She was the only character to be killed and brought back to life, as well as one of the characters to have the most deaths or presumed deaths across her story line.

Amaya Jiwe

Amaya is the second, and only other main female team member of the Legends, and was born in Africa, circa the 1920s. Amaya's character is unique in that before we were introduced to her character in season 2 of Legends of Tomorrow, we were introduced to her Granddaughter, Mari McCabe. Both Amaya and Mari, like many

women of their bloodline, carry the mantle of Vixen. Each generation in their family passes on to the next a necklace that allows the wearer to take on the life essence of animals, essentially harnessing their powers and abilities.

Amaya is different from the other Legends because she was not originally selected by Rip to be a member of the team. She joined up with the Legends in season 2 to hunt down the person responsible for attacking her team in the 1950s, the Justice Society of America. Mari is her descendent, and in order to be born, Amaya must eventually leave the Legends and return to her own time. Unlike the rest of her team, her existence has an important impact on the timeline, or she has an important destiny.

Laurel Lance

Laurel Lance is not a main character in Legends but makes a guest appearance in one scene. She was formerly a main character of the show Arrow. Despite only being on screen for a few short minutes, her return is meaningful to the DCTC universe. Laurel Lance is the Black Canary, older sister to Sara Lance, and ally of Oliver Queen, aka the Green Arrow. She became the Black Canary after her younger sister, Sara aka The Canary, died. Laurel was a main character of Arrow for the first four seasons, before ultimately dying at the hands of a man named Damien Dhark.

Besides being a vigilante, Laurel was an Assistant District Attorney, and a well-known figure in her city. When Laurel took on the mantle of Black Canary, there was a large debate between fans of Arrow over if she deserved it. While Laurel Lance has been the Black Canary in the comics, the Laurel Lance of Arrow was mostly untrained when she began crime fighting, and many fans argued that her young sister Sara, The

Canary, was the 'rightful' Black Canary. The show would develop Laurel's character into a skilled fighter in her own right, while struggling to become the Black Canary after her sister's death, while facing opposition and resistance from Oliver Queen aka Green Arrow. In the end, she won over many fans of the show, and won the right to be the Black Canary, despite opposition.

There was a large black lash from viewers when her character was killed off. The entire plotline was largely viewed as a way to further the story line, and the pain of the shows lead male and title character, Oliver Queen/Green Arrow. Laurel made an appearance in the episode Aruba as a vision Sara has of a possible alternate reality where neither sister became a vigilante, and both are alive and together. Laurel's return was ultimately a test of strength and will for Sara.

Female Characters

Other females to note are Gideon, the ships AI (Artificial Intelligence) who is technically not any gender but has a female voice. She briefly takes the form of a female in one episode of Legends that finds the team trapped in the mind of Rip Hunter, the first leader of the Legends. Since then Gideon is often viewed as female.

Kendra Saunders is a former member of the Legends, and a pivotal character to the first season of the show. Kendra is a demi-goddess who keeps resurrecting each time she dies, along with her partner. Her codename is Hawkgirl, her partners codename is Hawkman, both of these characters have comic book counterparts. Kendra left the show after the first season to be with her partner, and many fans

disagreed with writing off a black woman, and one of the only two racially diverse characters on the show.

Lastly, Mari McCabe is the granddaughter of Amya Jibe, and the Vixen in the early 21st Century. She makes no appearance on the show but is mentioned frequently because of her connection with Amaya. Like Amaya, Mari has the same totem that allows her to harness the essence and powers of animals.

The Legends

Other members of the Legends include Rip Hunter, former Time Master, and former captain and leader of the Legends. Dr. Nate Heywood (Steel), who joined the team in season 2 as a historian. He is the grandson of a member of the Justice Society of America, and later gains the ability to turn his skin into a metal-like substance, granting him strength and durability. Dr. Rey Palmer (Atom), a genius who builds a suit that allows him to grow and shrink in size, fly, and provides some protection and strength. Mick Rory (Heatwave) is a criminal, with a tendency to lean towards pyromania. He is human, but is an experienced fighter, and wields a gun that is similar to a flamethrower. Lastly, Jefferson Jackson, the ships mechanic, and Professor Martin Stein, have the ability to combine and become a metahuman known as Firestorm, with powers of fire manipulation and flight.

Legion of Doom

There are four main villains in the episode of Aruba that are important to know. Acting as the main antagonists for season two, the group became known as the Legion of Doom. Their members consist of Malcolm Merlyn (originating on Arrow), a former

League of Assassins member, and directly responsible for Sara Lance's death, while also playing a part in her resurrection. Damien Darhk, (originating on Arrow) also a former League of Assassins member, with the ability to wield dark magic. Darhk is responsible for the murder of Laurel Lance/Black Canary. Eobard Thawne/Reverse Flash (originating on The Flash) was a speedster (a metahuman with the ability to move inhumanly fast) born in the 22nd century and came back in time to kill the Flash. When the Flash managed to defeat him, Eobard Thawne teamed up with the other members of the Legion in a last-ditch effort to save his own life. Lastly, Leonard Snart/Captain Cold, former/future member of the Legends and former partners with Mick Rory. Leonard was a member of the Legends in season 1, where he died at the end of the season saving the teams life. To recruit him to the Legion, and use him against the Legends, Merlyn, Darhk, and Thawne travelled back in time to a point before Snart is recruited as a Legend and used his future fate to die as motivation to join them instead.

To keep it simple, the three most discussed characters in this research are Sara Lance/White Canary, Laurel Lance/Black Canary, and Amaya Jiwe/Vixen, as they are the three female characters that appeared on the episode the data was collected from. Sara and Laurel are sisters, Laurel is deceased. Sara and Amaya are teammates; Sara is Amaya's Captain. Laurel and Amaya have never met.

Findings

The findings that follow will be presented in a way that aligns with the emerging themes collected from the data. These themes again are, tweets about individual female characters, tweets about female characters relationships with other females, and tweets about female characters and their relationships with male characters. These are

the themes that emerged from the inductive coding. They consistent with the question of *how* viewers are using Twitter to discuss gender inequality on television, because the themes emerged from what the viewers choose to tweet about.

A database of tweets was created using the hashtag #LegendsOfTomorrow. The dataset was created through the use of the platform Hashtagify, a platform that allows for the collection of tweets coded with selected hashtags. The dataset resulted in 15,053 individual tweets with the #LegendsofTomorrow hashtag. Of these tweets, 1,390 of these referenced female characters through name, code name, or details of scenes that centered around the female characters. This number also includes guest appearances, or references to other female characters within the DCTV universe. That is just over 10.83% of the entire conversation on Twitter.
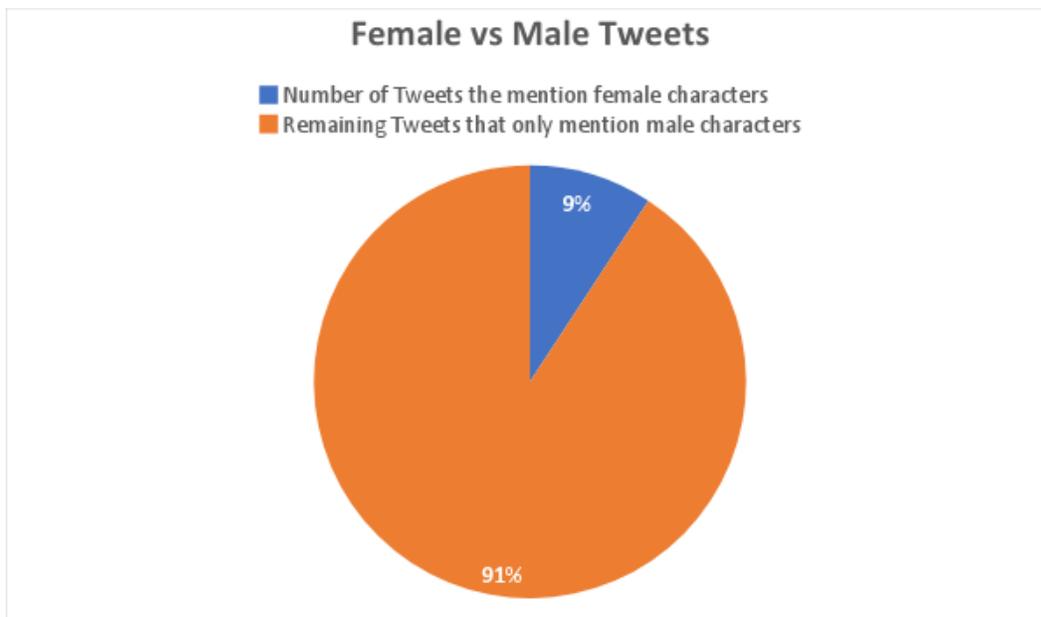
Figure 3: Number of tweets collected mentioning female characters, vs tweets only mentioning male characters

The main cast of characters is only 1/4 women, or 1/3 if you include the ships AI which has previously been portrayed in human female form.
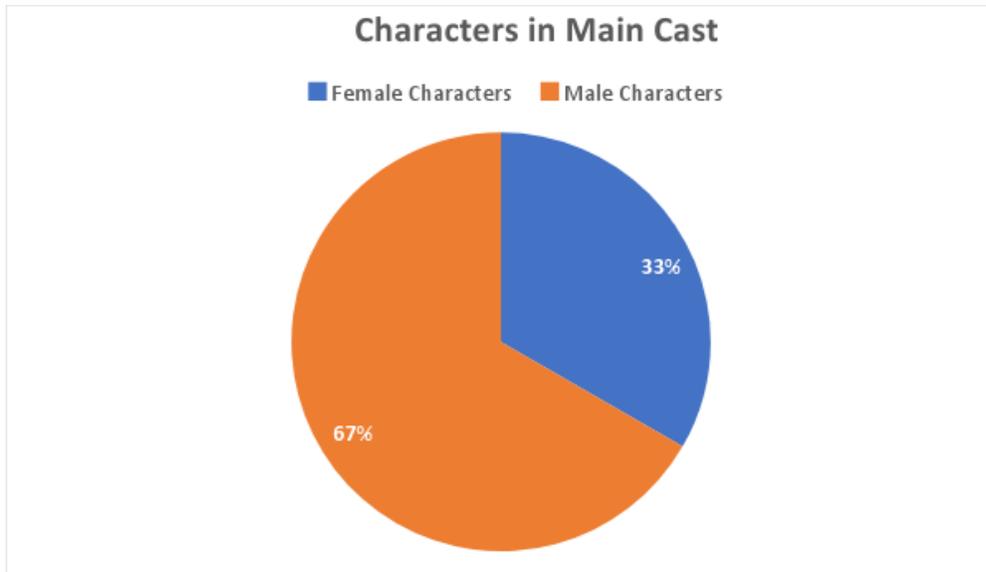
Figure 4: Number of female characters in main cast of Legends of Tomorrow, vs number of male characters

These numbers are similar with the study done by Atler (2015), that revealed women only held 10% of protagonist roles, and 30% of speaking roles on screen.

Of the 1,390 tweets with a focus on women, 776 of them were about Sara Lance/White Canary, 181 of them were focused on Laurel Lance/The Black Canary, and 165 were about Amaya Jiwe/Vixen. The remaining tweets focused on relationships between characters and mentions of other female characters from the DCTV universe.
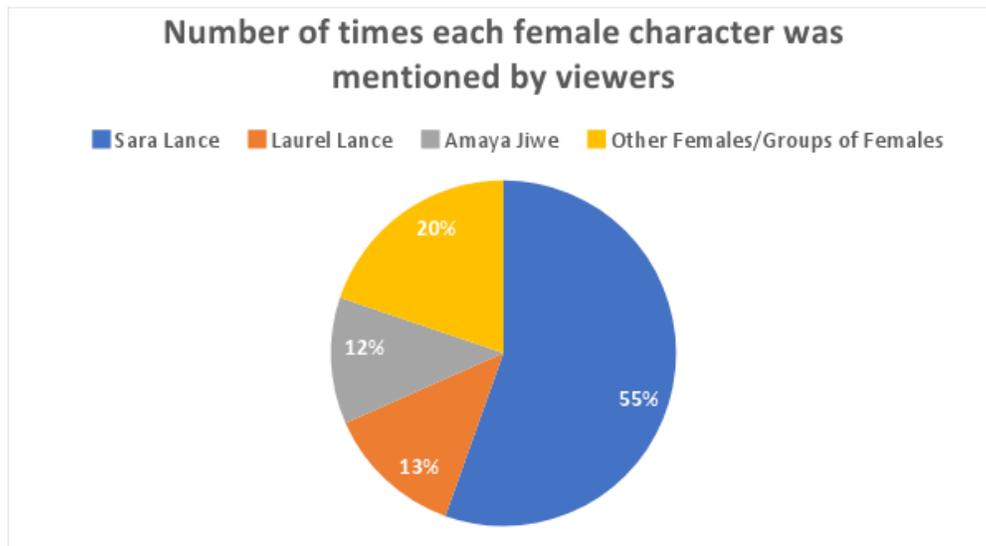
Figure 5: Number of times each female character was mentioned compared to the others

Most Popular

There were four tweets that were the most popular (largest number of retweets) out of the collected data, with two tied for third place. The first, with 322 retweets was sent from actress Caity Lotz, who plays Sara on Legends of Tomorrow.

@caitylotz viewing party for finale of #LegendsofTomorrow at @mguggenheim casa https://t.co/5FdNTPTb9F

The second was sent the Legends of Tomorrow's official Twitter account with 202 retweets.

@thecw_legends What should Sara do? #LegendsOfTomorrow https://t.co/Ud0P7OsZms

Tied for the third most popular tweets collected at 178 retweets were

@natalieabrams .@caitylotz was right, this was a great scene #LegendsOfTomorrow https://t.co/ZoDqDX0evy

@caitylotz Some of the reactions you guys shared while watching #LegendsofTomorrow finale! You guys are greatness https://t.co/AuViTfhRS4

The first was sent out by a Hollywood writer, and the second by Caity Lotz.

Hashtags

While the #LegendsOfTomorrow hashtag was the only hashtag used to collect the data, Twitter users are not restricted to the use of one hashtag when creating their tweets, and there was one hashtag to note that was directly associated with female characters, "#CawCawMFS". It is important to note that this hashtag was not involved in the data collection process, but their reoccurring appearance through the collected data suggested a level of importance for the viewers watching the show.

#CawCawMFS was used whenever one of the female characters on the show did something that could be considered impressive, or the fans were calling for the characters to do something impressive. #CawCawMFS stands for 'Caw Caw Mother Fuckers'. The "Caw Caw" is likely in reference to the bird theme among Laurel and Sara Lance and their code names, Black Canary and White Canary. While the hashtag was used along tweets about Sara, Laurel, and Amaya, the majority of the tweets that included #CawCawMFS were about Sara.

Caw Caw could also be a reference to the DC Comics *Birds of Prey*. The Birds of Prey originated as a comic book series that focused on the partnership between Black Canary, and a character called Barbara Gordon/Oracle. As there is no known

Birds of Prey in the CW Network's TV verse, the female characters associated with the Black and White Canaries were compared to the comic book team.

The top three most popular tweets associated with #CawCawMFS are all about Sara:

@punkystarshine SARA LANCE SAVED THE DAY WITH A LANCE #LegendsOfTomorrow #cawcawmfs

@carlafowler16 We've been asking for more Sara, and I am all about more Sara. Can we keep multiple Saras? #LegendsofTomorrow #cawcawmfs

@clonenic She's so badass #LegendsOfTomorrow #CawCawMFS https://t.co/DkJIcDMUfB

Individual Characters

There were three female characters that appeared on the episode Aruba, Sara Lance, Laurel Lance, and Amaya Jiwe. The first theme focuses on how these characters are discussed by viewers on their own, without connection or influence from other characters. These tweets were only about one character, the viewers were only discussing the characters of Sara, Laurel or Amaya.

The most discussed female character in this episode was Sara Lance, aka White Canary, Captain of the Waverider, and Leader of the Legends. Sara has arguably always been a fan favorite, with most of the discourse around Sara having been positive among viewers. Having the largest number of tweets generated about her, one could assume that Sara would be regarded as the fan favourite female on the show, and overall one of the favourites of all the DCTC verse. In 2016 she was ranked the 3rd

most powerful female in DC TV (Dello Russo, 2016), and the 8th overall, despite having no superpowers or extraordinary gifts. In terms of female characters, she was ranked behind Katana, a highly skills warrior with a sword that can trap the souls of her victims, and Supergirl, cousin to Superman with all the same powers.

@backofthehead Sara Lance is the greatest original creation of the Arrowverse. Yes, even greater than John Diggle. #LegendsofTomorrow @caitylotz

A reoccurring theme amongst the tweets about Sara Lance was her characters growth, not just on Legends, but starting from when she first began to regularly appear on Season 2 of *Arrow.*

@thedeviljackie SARA LANCE HAS THE BEST CHARACTER ARC IN THE ENTIRE ARROWVERSE #LegendsOfTomorrow

The three top tweets related to Sara Lance came from Sara's actress, Caity Lotz, and the writers room, where the writers asked fans what they thought Sara should do in regard to a choice she had to make on the show. The other two came from Caity, when she shared an image of the viewing part she was attending, and mentioned the comments that fans were sending her during the airing of the finale.

The three top tweets that were involving Sara specifically have 18, 13, and 12 retweets respectively. In that order they are:

@damianholbrook Based on #LegendsOfTomorrow's season finale, Barry Allen needs to call Sara Lance about his Savitar problem. She gets shit DONE. #TheFlash

@punkystarshine SARA LANCE SAVED THE DAY WITH A LANCE #LegendsOfTomorrow #cawcawmfs

@awesomemergency Goonies, really? #TheFlash #LegendsOfTomorrow https://t.co/aAmuren76Z

The first tweet is about another DCTV show, the Flash. Sara was able to outsmart the Reverse Flash and kill him, where Barry could not. Despite Reverse Flash being portrayed as both a genius and a metahuman with incredible powers similar to the Flash, Sara was able to defeat him, and at the same time not fall for the powers of the Spear of Destiny. In one move she defeated one of the Flash's greatest enemies, and proved to herself that she was strong enough to not abuse god-like power.

The second tweet is humor, and praise for saving the day. The Spear of Destiny is also called the Holy Lance, and Sara Lance used it to save the universe. Likewise, the third tweet is also humorous, and is actually a quote from the character of Nate Heywood. Just as the other version of Sara was about to fade from existence in the show, she quoted the movie Sandbox, saying "Remember, Legends never die." Nate mistook the quote for the movie the Goonies, and fans found the whole exchange entertaining.

Not all the tweets around Sara were positive, but they were largely outnumbered by the viewers who praised the character of Sara, and her actress, Caity. While the negative tweets around Sara did not generate interaction, there were a few tweets that directly challenged her, or passed judgement on the choices she had to make.

@kennymichal00 #Feminism caused rip to stop being captain!
#LegendsofTomorrow

@digiranma So...give the spear to the woman that says she's broken.
#LegendsofTomorrow

@girl_wonder7 If Sara uses the spear I will lose all respect for her
#LegendsOfTomorrow

Second to Sara in the amount of discussion generated, was her older sister Laurel Lance. Laurel was a main character on the CW's *Arrow*, until she was killed off in season 4 of the show. Laurel made a guest appearance on Legends when Sara used the Spear of Destiny. While it was unclear if the Laurel that appeared on the show was an illusion, an alternate reality, or something else, the brief appearance by the actress was well received on the show. Despite only being on screen for less than two and half minutes, fans tweets about Laurel (on her own, not in relation to any other character), 181 times.

While most fans reacted with excitement to see Laurel in the DCTV verse again, there were some fans who chose this moment to call out the writers on the CW for killing Laurel, and the mistreatment of her character overall.

@cloneposter @TheCW_Legends might bring its max limit of women allowed on the show/Wave Rider to two if Laurel returns. #LegendsofTomorrow

@xgomez13 It's always nice to see Laurel. Arrow fucked up everything
#LegendsofTomorrow

@mercijimenez10 WHY DOES LAUREL HAVE TO BE USED TO PROP EVERYONE ELSE BUT HERSELF?? #LegendsofTomorrow https://t.co/ja4NH7gY9G

@jayjayaguirre91 ANOTHER chance to bring back @MzKatieCassidy & it didn't pan out. Writers of ALL OF THE SHOWS need to stop teasing Laurel #LegendsofTomorrow

The most popular Tweet about Laurel Lance generated that day was retweeted 19 times, and read:

@normangoldenl I hope for a day where Laurel Lance is respected by CW writers. Not too much to ask. #LegendsofTomorrow

The second most popular tweet, with 10 retweets was an article about the return of Laurel Lance to the DCTV verse.

@caitylotzarmy . @MzKatieCassidy #LegendsofTomorrow: Here's the scoop on Laurel's finale return! https://t.co/9Ra8F5yexX via @EW https://t.co/LNKvcP2pDa

The third, with 7 retweets, is a simple emotional reaction to the return of the character.

@williamshatner #LegendsOfTomorrow Aww Laurel!!! ??????

These type of tweets, short, mentioning the character and with multiple exclamation points and questions marks were very common among viewers who were live tweeting during the show. As twitter is often used as a way to instantly react, or express your thoughts as something happens, it can be determined that the brief return of Laurel to the screen was met with a lot of enthusiasm from fans.

Despite being the only other main female character on Legends of Tomorrow, there was only a small number of Tweets generated about Amaya Jiwe. At 165 tweets that were only about Amaya, she was still mentioned 16 times less than the guest appearance of Laurel.

The most popular tweets about Amaya had three tweets with three retweets each, and the third had two.

@legends_podcast I'm so happy and emotional seeing Amaya again #LegendsofTomorrow -Kat

@fandemoniumnet "what's a goonie?" Oh no she didnt!?! #LegendsOfTomorrow #gooniesneverdaydie

@punkystarshine I DON'T CARE HOW YOU DO IT JUST FIX THIS #SaveAmaya #LegendsOfTomorrow #cawcawmfs

Fans were relieved when the character of Amaya was saved in the season final, leaving it possible for the character to return in the following season. They were also amused, on a number of occasions, about her lack of 21st century pop culture knowledge and laughed at her inability to understanding a movie reference.

As mentioned previously, Amaya only had 165 tweets that were only about her as a female. Out of those 165 tweets, 73 of them were focused on romantic relationships with other members of the team. Almost half of the conversation around Amaya was focused on her interactions with men. This will be discussed more further on.

Female Relationships

The second theme that emerged from the data was female character relationships with other females. These tweets showed how viewers were discussing the female characters in relationship with other females, either on the show or other shows in the DCTV universe. These female relationships show other aspects of Sara, Laurel and Amaya, and bring up other important areas of the characters lives and how viewers interpret them.

The most commonly talked about relationship Tweeted about during the airing of Aruba was the relationship between Laurel and Sara Lance. Because it featured one of the former main cast members of Arrow, it is not surprising the Lance Sisters would be a popular discussion. However, given the screen time of the scene was less than two and a half minutes, it was both surprising and encouraging to see it was the most discussed.

The most popular tweet about the Canaries was created by a senior writer for Entertainment Weekly and was retweeted 178 times, and said.

@natalieabrams .@caitylotz was right, this was a great scene #LegendsOfTomorrow https://t.co/ZoDqDX0evy

The second most popular Tweet provided a link to an article that was published before the season finale, discussing the relationship between the Lance sisters. It had a total of 15 retweets.

@comicbook #LegendsOfTomorrow's cast and crew share details on the Laurel/Sara reunion in tonight's finale!… https://t.co/wRJvviQB8y

The third most popular tweet about the sisters had 11 retweets and was about the emotional impact the sisters' reunion had on the viewer.

@theflashpodcast Yeah, someone will need to help me put my broken heart back together again --- THEM FEELS. #LegendsofTomorrow

Most viewers appear to support the sisters, their relationship, and how Laurel's guest appearance on the show was able to provide Sara with closure, and the support she needed to make the right choice. They praise the way the sisters are with each other and praise the actresses' performance and the way they work together.

@nsennholtz11 The Lance Sisters played by @caitylotz and @MzKatieCassidy always having me tearing up when they are on screen together #LegendsofTomorrow

@fakealtgirl one of the most beautiful scenes in television history, i love the canaries so much oh my god #LEGENDSOFTOMORROW https://t.co/2pzJvczjuE

But despite the overwhelming positive response to the sister's relationship, there were many viewers who did not see the scene in a positive way. While the numbers were small, there were viewers who viewed the sister's relationship as one of inequality, or one of rivalry.

@turchkid03 People will hate me for this but I don't see the hype around Laurel. Sara I definitely see it. #LegendsofTomorrow

@queenllkc Damn right she was the better sister #laurellance ❤️ #LegendsofTomorrow

@mercijimenez10 LAUREL DIDN'T GIVE A FUCK ABOUT THE CONSEQUENCES WHEN SHE BROUGHT BACK SARA BUT THAT BITCH CAN'T DO THE SAME FOR HER. #LegendsofTomorrow

@circleman628 Laurel was the strong one? Alcoholic died after barely being a vigilante Laurel? Give yourself some credit Sara #LegendsofTomorrow

The second focus on a female and female relationship is that between Amaya Jiwe and Mari McCabe. Amaya is Mari's Grandmother, and both women hold the title of Vixen, a vigilante that can channel the powers of animals. Though Mari does not make an appearance in this episode, her birth balances on Amaya's survival, and the choices she makes about her future. Amaya is the only one of the Legends that has a 'destiny' that will have an impact on time. If she does not return to her own time in the 1940s, the Vixen of the early 21st century will never be born.

@tvchica I love Amaya she a terrific character she should've gone back to 1942 It's pretty selfish concerning she knows about Mari #LegendsofTomorrow

@mercijimenez10 Sooo they are gonna get rid of Mari then?? #LegendsofTomorrow

@coreyacrowley So Golden Age Vixen is now the de facto Vixen of the Arrowverse, granddaughter be damned? That's... kind of shitty. #LegendsofTomorrow

There were only two tweets that received any interaction from other Twitter users, each with only one retweet each.

@tvchica Damn It! Nate let Amaya go! Mari has to be born! #LegendsOfTomorrow

@trushadowking Amaya please dont let him mess you up you gotta be granny Vixen to the future Vixen #LegendsofTomorrow

The last relationship between women to focus on was between the female members of the Legends themselves, including past members, and Gideon, the ships AI. The most popular tweets about the female Legends only received one retweet each, and there are only three of them.

@tinkerbelle3257First they got rid of Kendra and next Amaya why can't they have diversity on here #LegendsofTomorrow

@israeldoeslife Season 2 >>> Season 1. Mick's arc. Nate & amp; Amaya =great adds. JSA! Legion of Doom! Captain Sara! It was fun. #DemLegends #LegendsofTomorrow

@tvenjoyer Oh hey Sara 1... And Amaya... And Martin... Well that didn't work out as planned did it? #LegendsOfTomorrow

Most tweets generated about the women on team Legends were laughing over humors lines delivered by the characters, or thanking actresses for a good season. Of the 46 tweets about the female Legends, 21 one of them were focused on humor. Though they did not receive any interaction, there were also many tweets that included some very specific issues that viewers had with the show.

@whatlsmynamee These bitches can fuck up the timeline for a 2 second relationship but Sara can't save Laurel ? #LegendsofTomorrow

@cloneposter back to two women on the Wave Rider. (Need more please) #LegendsofTomorrow

@austinsgbg lady, a racist/misogynistic action, could've been undone w/ having her saved the day. #LegendsofTomorrow

@moviegeek1997 Please next season have more #VixenCanary moments @caitylotz @maisie_rs #LegendsofTomorrow

Female and Male Relationships (Romantic Relationships, or Shipping)

The third theme to emerge from the data was female characters relationships with male characters. These tweets were sorted based on the mention of Sara or Amaya combined with at least one male character from the show. How female characters were discussed in relation to male characters was another dominant topic by viewers and proved to be different from how females were discussed in comparison with other females. Most of tweets between female and male characters focused on romantic relationships that happened on the show, or that fans saw potential for on the show.

It is noted that Laurel will not be discussed in this section of the paper, as her scene was limited to interactions with Sara only, and therefore was not mentioned in relation to male characters on the show.

Sara has been tied to a number of characters romantically, with long term relationships, affairs, hookups, and relationships that never quite happened, but were favourite among the fans for chemistry between the actors. During the finale there were two main relationships that the viewers were focused on: Rip Hunter, the former Captain of the Waverider, and a mentor and friend to Sara, and Leonard Snart/Captain Cold, a former member of the Legends who previous died in combat but had expressed his interest in a relationship with Sara just before he died.

The most popular tweet about Sara and shipping, with four retweets, was about Leonard Snart and Sara, who are commonly referred to as Captain Canary by fans, with Captain coming from Snart's code name, and Canary coming from Sara's.

@assassinscrook #LEGENDSOFTOMORROW WILL GET BETTER RATINGS IF YOU BRING BACK SNART AND MAKE HIM KISS SARA #JustSayin #CaptainCanary

The following two most popular had two retweets each, and were about Rip Hunter and Sara, who fans often refer to as Time Canary, Time coming from Rip's job as a Time Master, and Canary coming from Sara's code name.

@saravabbeh Not to be dramatic but I love them ? #TimeCanary #LegendsofTomorrow https://t.co/AUx42gpPmy

@slinehan1 Did anyone else want Rip & Sara to kiss just then? Never thought I'd be saying that but I felt a vibe. ?? #LegendsofTomorrow xx

The dynamic between the Captain Canary relationship and the Time Canary relationship is different among the fans. While Captain Canary is almost purely looked

at as a romantic relationship, Time Canary is viewed both as a romantic relationship, and as a strong friendship, and mentorship. Neither of these 'ships' are actual relationships that have occurred on the show. The Leonard Snart that Sara knew is dead, and the shipping was discussed so much in this episode because a past version of Snart came back for a guest appearance. There was no shared screen time between Leonard and Sara in this episode. The relationship between Rip and Sara was never able to move forward before his death, but some viewers can imagine it from the dynamics that the characters do have, and the chemistry between the actors. While there were discussions about relationships between Sara and both these men, there was no overly aggressive tweets that called one better than the other or expressed any hatred.

Honourable mentions when discussing Sara's romantic relationships go to the various women that Sara has 'hooked up' with throughout time. While none of these women made an appearance on the episode, fans seem to be happy to bring them up when they wanted.

@pamplemoussee76 Can Sara go to any timeline with a hot GF?! #LegendsOfTomorrow #CawCawMFS

@mazaru_briefs Sara flirting with Guinevere. I'm dying. #LegendsofTomorrow

@mazaru_briefs Sara Lance will fuck every historic important woman and i root for her. #LegendsofTomorrow

Almost half of the tweets about Amaya were about romantic relationships. Most of the shipping tweets were focused on the relationship she was in with Nate Heywood,

with mentions of a relationship with Mick Rory that some fans were hoping would be romantic due to the characters on screen chemistry with each other. Her relationships with male characters was the most focused on aspect of Amaya during the airing of Aruba.

The top three tweets with the most interaction was about Amaya's relationship with Nate. The first of these tweets had four retweets, the other two had three each.

@lbwhileblack #LegendsofTomorrow #DemLegends I hate this Nate/Amaya relationship. https://t.co/h9ha7wk7m8

@fatherjass Dear god, must there be a stupid goo goo eyed romantic pair of selfish dummies EACH SEASON?! #LegendsofTomorrow… https://t.co/4Lg2zeyw1Q

@missboxyfrown They can keep this I'm in love with Amaya storyline. #LegendsofTomorrow #DemLegends https://t.co/W4hkIhzeFy

Out of the top three mentioned tweets, only one of them was in favour of the relationship between the two characters. Support for the relationship could be found with the fourth most popular tweet, that had two retweets.

@jonbar123 Despite popular opinion, I ship Nate and Amaya and I'm trash for this ship #LegendsofTomorrow

The relationship between Mick and Amaya generated much less content, with only four tweets. Two of those tweets were sent with a romantic context, the other two being more about friendship. None of the tweets that were sent received any retweets or interaction.

@noelle2k10 AMAYA STANDING UP FOR MICK WE WERE ROBBED OF

THEM #LegendsofTomorrow

@alexsophiarose The legends BETTER save Amaya tonight?Also, I hope that

her and Mick realise that they have real feelings for each… https://t.co/JLn8SJXnre

Data Analysis

Tracy (2013) talks about an Exploratory approach to research through the use of public documents, which can reveal the values of users, and *how* they interact with public documents. In this case of this research project, archived Tweets are the public documents used. Qualitative Content Analysis applied in an Exploratory Research Design is used to help the researcher find the true meaning behind the data that was collected (Schreier, 2013).

Using an Exploratory Design, tweets that included #LegendsofTomorrow, were collected over a 24-hour period on April 4, 2017, the day the season finale of Legends of Tomorrow Aired. A total of 15053 tweets were collected over a period of 24 hours. From there the collected tweets were filtered to focus on tweets that were about female characters, or actresses on the show.

Rather than predetermining coding to apply to each tweet, coding was derived from the contents and reoccurring patterns of the contents discovery. This is referred to as inductive coding and allows the researcher to pull codes from the data as they appear, to allow for qualitative content analysis discovery (Schutt, 2015).   Patterns emerged from the content analysis (Schreier, 2013) that focused on relationships, both romantic,

familial and a few platonic, character development, positive and critical response to character choices, a character's physical appearance, and character death.

After filtering out the tweets around female characters and actresses, the number of tweets was 1390. Qualitative Content Coding and Inductive Coding was used to examine each individual tweet. Codes that developed through inductive coding included 'return of deceased character,' 'anger,' 'positive reaction,' 'leadership,' 'humor,' 'sister relationship,' 'female vs female,' or 'character development.' The codes covered emotional reactions, reactions to character actions, social issues that were directly named in tweets, such as racism, and dynamics between characters. Because of the limitations of Twitter, sometimes contents of the tweets were short bursts of text with sometimes only a name and exclamation point, while others were well thought out for limited characteristics, describing exactly what point the person was trying to make.

Once coding was applied to all tweets, the list was further broken down into separate categories, labeled Sara, Laurel, Amaya, one each for the two main female characters of the show, and the main female guest star, one list for the sister relationship between Sara and Laurel, one for the relationship between Amaya and her Granddaughter Mari, who was not in this episode but frequently mentioned, one for all current and past female members of the Legends. These smaller lists allowed for a better understanding of how each character is perceived by the audience, as well as how the views of each character compare with each other.

The reliability of the research comes from providing validity behind the research (Tanveer et. al., 2008). Validity of the research is found in the literature review, how gender inequality continues as a social issue, and how fandoms interaction with

networks is changing because of social media and developing technology. Validity is also established through trustworthiness, like rigor and often used in qualitative research (Golafshani, 2003).   The steps taken, tools needed, and methods applied to conduct this research are transparent and made repeatable to the reader. Data was collected verbatim, directly from Twitter. The Tweets were the direct words of the participants, and not altered or filtered to specific content past the date range, and gender of characters discussed to insure validity (Tanveer et. al., 2008). Validity and reliability are essential to be established from the start of the project, to ensure data is as reliable and relevant as possible, which allows for the most honest findings.

Discussion

The following section will discuss the findings as they emerged from the data in three key areas; each of the three main female characters of the episode, Sara Lance, Laurel Lance, and Amaya Jiwe; how Sara, Laurel, and Amaya were discussed by fans when it came to their relationship with other females; and how Sara and Amaya were discussed in terms of romantic relationships/male characters. Following the discussion of each character and their relationships on the show, will be a summary of issues of gender inequality on DC's Legends of Tomorrow as it emerged from the data. Finally, there is a discussion on surprises from the research and alternate interpretations.

What I expected would be a more prominent case of gender inequality or These stereotypes and inequalities are more easily visible while comparing the discourse around one character versus another, or comparing the relationships between female characters, or relationships between women and men. While some issues around gender inequality were easily visible in the contents of the data collected, a large

part of the research required a 'broad picture' look, that was less to do with each individual tweet, and more about the similar themes that emerged while coding tweets together. Findings are discussed around each female character in the episode of Aruba, and the main relationships that impact them.

Sara Lance

It was not surprising to see the majority of conversations around female characters revolved around Sara Lance, but the content itself was not what was originally expected. While I expected to find more negative comments about a female in command of a team, her sexuality, or choices of action, there were more tweets with praise for both the character, the actress, and the development of the character.

There were a few negative comments about a woman being in charge and leading a team of Superheroes (or Legends, as they prefer), and most of the criticisms of her strategic choices were not pointed out as problems because she was a woman, but because they did not agree with her choices. When it came to the characters sexuality and romantic relationships, there was nothing that was blatantly criticizing the characters bisexuality or relationship history.   The number of tweets that criticize Sara based off of her gender is limited to four, with no interactions of engagements from other viewers.

The majority of the tweets, including the tweets with the most interaction, praise Sara for her defeat of villains, efficiently handling problems better than some of her male counterparts, and her sense of humor.

The frustration around the character was instead apparent in the characters self doubt, her validity and her assurance having to come from other characters instead of herself, but even these were not common. The majority of the negative tweets were focused around her relationship with her sister, Laurel, which will be discussed further at a later point.

Laurel Lance

The second most discussed female character of the episode was Laurel Lance, who only made a brief guest appearance on the episode in one scene. The total amount of screen time Laurel had was under two and a half minutes. The character of Laurel Lance, also called Black Canary, was killed off on the show Arrow during a previous episode.

The death of the character caused a large outcry among fans, many saying the character was only killed off for the sake of further adding to the pain of Arrow's main male protagonist. Fans also speculated her death was also to remove any barriers to a romantic storyline between Oliver Queen/Green Arrow, who is famous for being involved with the Black Canary in the comics, and Felicity Smoak, the technology expert on the Green Arrows team. There was only one viewer who touched on this theory in the data collected.

@theforgiversign So #Olicity stans still hating on Laurel Lance for having a scene with her sister Sara? #LegendsOfTomorrow… https://t.co/cWlMeuHycU

The guest appearance of Laurel was well received by fans, most expressing excitement, praise, and sadness that she would not be coming back for good. Along

with the praise for Laurel, the data showed praise for Katie Cassidy and her performance. Viewers called out the writers of the Arrow show for the mistreatment of the character of Laurel and the reoccurring theme of killing off female characters to further the plot of a male character.

The most popular tweets collected around Laurel highlight the issue viewers have with the mistreatment of Laurel, and around women in the DCTV universe in general. Tweets point out the horrible ending Laurel had, and the lack of female representation on both Arrow and Legends of Tomorrow. On some level, viewers are aware of the treatment of women on this show, the violence that happened to Laurel Lance and the way she was killed off of the show. With less than two and a half minutes of screen time, it would suggest that viewers are taking notice of the inequality, and are, in some capacity, talking about it.

Amaya Jiwe

Amaya is the only other main female character on Legends of Tomorrow, and one of the only two Person's of Colour (POC) on the show, the other being a black male named Jefferson Jackson. Despite being one of the two main characters on the show, she had the least amount of discussion on twitter, falling a few tweets short of Laurel. On top of having little discussion about her, over half of the tweets sent about Amaya were about her romantic relationship on the show. The Tweets about her relationships with other women were largely also tied into her romantic relationships.

In the previous episode of Legends, Amaya had been killed by Leonard Snart. Part of the mission of the season finale was to go back in time to save Amaya while

saving the world, and fans were wondering though the entire episode if Amaya would be saved, or if this would be the end of the character. Fans criticized the lack of diversity, both with female characters, and with POCs. Some fans pointed out that if Amaya left the show after this season, she would be the second black female to be written off the show in only two years. Fans were referring to Kendra Saunders/Hawkgirl, who was a main character in season one, and central to the overarching plot of the first season. Kendra's character left the show at the end of season one to focus more on her relationship with her partner.

Examining each character individually, there is an overwhelming support for strong female characters, better storylines, less focus on romantic relationships, and more diversity on the show. The biggest difference between the three most talked about characters on the show is the lack of content generated about Amaya, a main character, especially compared to Laurel, a character making a guest appearance. One possibility for this is an issue of race, while another possibility is the character of Amaya not having as much of a history in the DCTV verse the Lance Sisters. One viewer pointed out her love for the Lance Sisters, but believed that their storyline, and that of Amaya's was incredibly imbalanced.

@austinsgbg I LIVE for the Lance sister, Laurel in particular, but I think Sara ruined Amaya's moment. #LegendsofTomorrow having fridge their only Black

The Lance Sisters/The Canaries

Sara and Laurel Lance are vigilantes, superheroes and sisters. Laurel Lance was the main character from the start of season one of Arrow. While Sara was

introduced as a person in the first season, her storyline really started in season 2 of Arrow. Sara and Laurel have been both supportive sisters, and in competition with each other from the start. They've had a complicated storyline and history together that has developed over several seasons several television shows. Their characters are continuously challenged and inspired by each other, and both operate under the same Canary mantel.

While Laurel was dating Oliver Queen, Sara was dating him behind her back. Sara initially went missing and was presumed dead while sneaking around with Oliver. During the time she was gone, she became a highly trained assassin. Upon her return home, she took on the role of the masked vigilante known as the Canary. When she was killed off in the show, Laurel took on the name of Black Canary in her place, and memory. When Sara was resurrected, Laurel encouraged her to take on the mantle of White Canary. The relationship between the sisters has been up and down through the entire run of Arrow, and that continued into Laurel's guest appearance in Aruba.

While many tweets generated were quick spams of how great it was to see the sisters back together on their screen, there were some viewers who saw the scene more critically, both negatively and positively. Despite everyone watching the same scene, the data revealed two very different views of the exact same situation.

Viewers pointed out how important it was to have sisters that supported each other, and how even though Laurel's appearance on the show was not *actually* Laurel, but the Spear of Destiny testing Sara, it still offered Sara a form of closure. Her conversation with Laurel allowed Sara to make several realizations about herself, and

accept that her experiences, limitations, and capabilities make her someone strong enough to make the right choice to save reality.

Meanwhile, other viewers viewed the scene as something much darker and competitive. The sisters are viewed as rivals, competing for the title of 'best' Lance Sister and 'best' Canary, rather than two sides of the same coin. Sara supporters were quick to point out that Sara was the stronger of the two women, and that Laurel would never have been able to withstand the trials and traumas that Sara had. Laurel supporters were swift to point out that Laurel had gone to extreme levels to bring Sara back to life after she was killed, but Sara chose not to do the same thing for Laurel, despite having a time ship, and in this episode, briefly having the power to rewrite history completely through the Spear of Destiny.

The interesting aspect of the discourse around the Lance Sisters was the two very different views of the exact same relationship. While some saw their bond as strong and supportive, others saw it as a challenge to prove which sister was 'better,' as if there was not enough room for two Canaries. While it was stated in the show that Sara choosing not to use the Spear of Destiny to bring her sister back was the right choice, this mattered little to viewers. Despite the fact that Laurel had to fight to earn her title as Black Canary and find her own way out from under Sara's position as the Canary, some fans seemed quick to dismiss that development. Why were there such discussions happening when there is room for both characters? Despite being sisters, the two characters are very different. Why are viewers quick to compare the sisters and tear one down, while others see their relationship as supportive?

The Vixens

The second family relationship on the episode as discussed by viewers engaging on Twitter, was the relationship between Amaya Jiwe and Mari McCabe. Mari is the Vixen of 2017, where as Amaya is the Vixen from the 1940s, and Mari's future Grandmother. Though Mari did not actually make an appearance in this episode, or any episode besides through photographs that Amaya was able to view, she was still a topic of discussion because of her established presence as a hero in 2017.

Amaya has been named as Mari's grandmother, but there has been no confirmation of who her grandfather is, thus Amaya's relationship with her team-mate Nate is a point of debate with fans of the show. Many fans used Mari as a way to defend or protest Amaya's relationship with Nate. The following trends were noted when discussing the relationship with Mari and Amaya.

First observation, fans assume that Nate will become Mari's grandfather, and decide this is a reason it is acceptable for Amaya to stay with the legends. If Mari is still born, Amaya's choice is justified. This implies that her ability to choose her future for herself is not a justified option.

Second observation, fans call Amaya selfish, and disagree with her decision to choose what made her happy, instead of making choices based on the knowledge that she would someday have a Granddaughter at an unknown point in time. Amaya's importance is then reduced to being part of the key for Mari to exist, instead of her character being recognized as a hero and having her own life in return.

Third observation, fans are genuinely concerned for the fate of Mari, who runs the risk of being erased from time if Amaya chooses to let her knowledge of the future and involvement with the Legends keep her from her own times. Mari was established as a character in DCTV, with her own spin off animated series, before Amaya was introduced. With DCTV's history of writing off characters, fans have a genuine concern for Mari's future.

Even though the crew of the show reside on a time travelling ship, and have changed history in many different situations, Amaya's and Mari's relationship is boiled down to one of blame, and the loss of choice. Amaya's importance is then reduced to a maternal role, and Mari's existence hangs in the balance of Amaya's decision to return to her timeline or follow her heart.

Shipping

The last major area to discuss is that of 'shipping,' the act of fan support of romantic relationships between two characters. This section focused entirely on Amaya and Sara, as Laurel's guest appearance on the show did not start any comments on relationships.

Sara's relationships are already considered ground-breaking for primetime television, being one of the first openly bisexual characters in mainstream media. She has had relationships with both men and women since she first appeared on Arrow during season two. While her character was currently not dating anyone in the season finale of Legends, there were still a lot of comments on who fans wish to 'ship' her with.

One of these 'ships' is with Leonard Snart/Captain Cold, their relationship commonly referred to as Captain Canary by fans. Leonard Snart was a former member of the Legends before he died saving their lives. There was unresolved tension between the characters of Leonard and Sara before he died, many fans believing the two characters were on their way to a relationship before he was gone. Captain Cold made an appearance in the last few episodes as a villain, and fans were excited to see the character again and hopeful of a reunion with Sara. There was disappointment over the lack of on screen time shared between the two characters, and one viewer stated that Legends would be better if Leonard came back and entered a relationship with Sara, but for the most part viewers were just happy to have Leonard back, and hopeful for interaction with Sara.

The second relationship discussed on this show was between Rip Hunter and Sara Lance, which fans commonly refer to as Time Canary. Fans 'shipping' of this relationship move between a romantic relationship, and a supportive friend relationship. The conversation among fans discussing Time Canary remained civil with no extreme reaction from fans who did not believe in the ship.

The last are of shipping around Sara Lance is not with any specific person, but rather the characters tendency to hook up and sleep with random powerful woman through history, from the Queen of France, to Guinevere of King Arthur's Court. The comments about her connections to women throughout time appear to have nothing to do with the actual episode and is just something the viewers love to support.

The relationships around Sara were part of who she was, but not a main focus point for her character. Fans treated her relationships as a point of interest, but she

was still discussed as an important figure outside of those. This is the exact opposite of her teammate, Amaya.

While the tone around shipping with Sara is relaxed, and avoiding any heated debate or strong opinions, conversations around shipping with Amaya is vastly different. On the show Amaya is in a relationship with Nate Heywood/Steel, and viewers have very strong, and very opposing views of the two characters together. Fans either loved the relationship, or hated it, and the numbers of viewers who opposed the relationship were higher than those who supported it.

Supporting the relationship between Nate and Amaya or not, the part that was interesting, and depressing, is that most of the discussion on Amaya was about her relationship. As discussed in the literature review, female characters can be reduced to their connection to their male love interest, despite having the potential to be interesting all on their own (see Silk Spectre of *Watchmen*). From reading the collected tweets, one could assume that the character of Amaya did next to nothing except focus on her own personal relationship.

Honourable mentions of shipping with Amaya must include her relationship with Mick Rory. The two characters grew to trust and count on one another, with strong chemistry on screen. A few fans pointed out their support for their relationship and believed viewers had been robbed of it. However, this relationship remained purely platonic on the show, and then mentions of it from the tweets collected were minimal.

From the data collected on Twitter, social media *is* being used to discuss gender issues, and it is also a way to *point out* the issues of gender representation. There were

some tweets collected that directly highlighted issues of sexism, violence against women, and lack of diversity, but most of the issues became more apparent when viewing the fully coded tweets and comparing the discussions around each of the female characters that were present in the episode. The following are four key observations.

1. Issues may not be obviously spelled out in many tweets, but more obvious in the overall trends of the discussion. Because of this, viewers who use twitter to participate in dual screen viewing may not be overly aware of the overarching issues being tweeted about.

2. Viewers see an issue with violence against women, poor writing for women, and mistreating women for the purpose of plot development. Violence does not stop at physical violence or death. It also includes mental violence and potential harm that can come from the mentality that female characters must always be in competition with each other. Rather than being supportive of each other, one has to better than the other, even at the cost of the other. This type of view of characters and relationships between women is toxic, and present within viewers.

3. When romantic relationships are involved, women are being reduced to the significance of that relationship, and viewers are taking note. While some viewers are speaking out about it, and stating a lack of interest in romantic relationships, they are still talking more about romance than other aspects of a character, such as the personality, history, contributions to the show, or skill set.

4. The issues of gender inequality can not be discussed without acknowledging that the issue of racism, and the difference between how white characters are discussed in comparison to POCs.

The research set out to answer the question of how Twitter is being used to discuss gender inequality on television, and the results were mixed. Some viewers were using the platform to blatantly call out issues of sexism and inequality, while others were using it to contribute directly to the issue, knowingly or not. Social media is not only a platform to discuss social issues as people view them live, but it is also a platform to perpetuate them.

Some issues that were discussed in the literature review around women in media were apparent in the data, such as violence against women, and women being reduced to the significance of their relationship with a male character. An area that can be considered for further research or available research is the issue of how racism impacts gender inequality, and the dangers of white feminism. A second area to consider for future research is the competition that is driven between female characters, and the toxic mind frame viewers have when it comes to arguing which female character is 'better.' Additionally, do large amounts of users on social media posting the same message potentially have the ability to be as powerful as organized collective action taken by fandom, if enough viewers share the same opinions?

The issue of gender inequality is heavily ingrained and rooted deep into society, and the way characters are portrayed on television can contribute to that issue or be used to fight against it. Some viewers are very aware of the issue of gender inequality and poor representation on television. Some of the more popular tweets collected

revealed that people are using social media as a platform to engage with other viewers, and some viewers are listening and reacting in both a positive and negative way.

Summary

Twitter provides a platform for fandom to express their thoughts and opinions on shows they watch using dual viewing. This can be seen by fans posting obvious opinion posts that clearly state thoughts or issues they have with the show. This can also be noted in the sheer volume of tweets and the number of people with like minded thoughts and opinions on the show as it airs. Viewers may also not be aware of their contribution to gender inequality through their opinions, as the popularity of these thoughts may not be revealed until examining all tweets. Dual screen viewing provides the opportunity to collect the views of the fans that watch television. Their opinions are posted on Twitter and become a source for feedback for television executives.

CONCLUSION

Dual viewing provides an opportunity for viewers to publicly comment and discuss issues or thoughts that occur to them about the shows they are viewing. Audience engagement on gender issues is an important area of study as gender inequality continues to be a problem in our media. Media can impact viewers and the way they view themselves and society (Kurane & Shetty, p. 136, 2012). Growing in popularity is the genre of superheroes. Marvel and DC films have been dominating the box office and small screens, and the number of females reading comic books is on the rise (Dockterman, 2015). These three important areas of discussion come together to

form the question behind this research: how is Twitter being used by viewers to discuss the issues of gender inequality as it appears on DC TV's Legends of Tomorrow?

The following chapter provides a summary of the findings of the research, and the importance of these findings as it relates to the question. Suggested further research that would provide further exploration and follow up to the question posed in this study is also discussed.

There were four ways noted from the data that viewers were using Twitter to discuss the issues of gender inequality. First, the commonalities of shared opinions on specific characters that lead to dominating opinions that may seem insignificant on their own but hold weight when hundreds of people react the same way. The second, viewers directly stated issues they saw on the show, such as violence against women, poor character development, and emotional violence, or contributed to this issue by encouraging violent actions, putting female characters in direct competition with each other, or degrading one female character in favour of another. Thirdly, viewers discussed characters in terms of romantic relationships, particularly with Amaya fans almost solely looked at her character in terms of her relationship with a male character or called out the show for only writing these romantic storylines. Lastly, while this paper set out to discuss gender issues, issues of racism are intertwined with sexism, and can not be viewed separately.

The issues around gender and inequality really made an appearance in the volume of tweets, and comparing the topics and codes placed on each individual tweet. The volume of tweets about women compared to men matched the amount of female characters compared to male characters on the show. The overall theme around tweets

surrounding each female character highlighted how fans supported the character or demanded better of the writers. The themes around how each female character was perceived in relation to other female characters, or male characters highlighted the issues of gender inequality on the show, and the sexist mind frame of many of the viewers.

The Geena Davis Institute released a study that stated women only held 12% of on screen protagonist roles, and 30% of speaking roles in film (Atlger, 2015). This number transferred easily to this episode of Legends of Tomorrow, with females only making up 25% of the main cast, with one female actress lending her voice to the show, and another female actress making a guest appearance. Lukin (2016) released a study in Canada that showed the word 'he' was likely to be found 40% more than 'she' in online news articles. Out of all the collected Tweets from this research, female characters only made up 10% of the comments.

The women on Legends of Tomorrow in this episode were not portrayed or viewed by fans as hypersexualised or as stereotypical angry women (Summers & Miller, 2014). There were some Tweets about a character's physical appearance, but none of the viewers had any concern or notice of sex appeal, or revealing clothing being part of the female casts main weapons (Penell & Behm-Morawitz, 2015). While there are fewer female characters on the show, Legends of Tomorrow does have a female as a team leader with much success (Hunting, 2014). A large part of the season finale of Legends revolves around Sara Lance stepping up to claim her power, much like successful female heroes such as Buffy the Vampire Slayer (Stabil, 2009). There were

some questions from fans who felt that the character of Rip Hunter was in place to provide male validation and encouragement when she did (Taber et. al, 2014).

The term *Invisibility,* as discussed in the literature, is applied to a character, usually female, that is often forgotten save for her ties to male characters (Keating, 2012). This term could be applied to Amaya Jiwe. Despite her status as a main member of the Legends and cast member, she had the least amount of discussion among fans, and most of their comments revolved around her relationship status with her team-mate Nate, or her future position as a mother. Fans did not discuss her contributions, or capabilities, instead only focusing on her love life. Additionally, besides saving the world, the Legends main goal through the episode was to save Amaya, who had been murdered in a previous episode. On top of being Invisible, Amaya was also the stereotypical female who needed saving (Stabile, 2009).

The Twitter account of Caity Lotz, who plays Sara Lance of *Legends* had the most popular tweets released in the selected time frame, mirroring the study by Quintas-Froufe & Gonzales-Neira (2014) that revealed judges of reality TV shows drew the largest amount of engagement on their social media accounts.

Fans felt no hesitation to contribute to one off comments, the majority of tweets that night receiving little to no interaction (Foster, 2015), with some viewers proving to have no issue showing a wide range of emotions, from hostility and violence (or even indifference over a character's death), to sadness, as in the case of the guest appearance by Laurel Lance.

Twitter provides a platform that could potentially lead to collective action. Certainly, it provides a place for fans to post short thoughts and updates to create some form of a community of knowledge (Misailidou, 2017), their shared interests being linked using hashtags. This episode of Legends of Tomorrow did not appear to have any fan mobilization that was noticeable, and we may never know for certain how much attention the Legends Executives pay to fans Tweets. To find out if executives agree with the fans opinions would require further studies in the future to compare fans online comments as the next season airs. Has fandom on social media reached a point where television executives consider their views and opinions without fans having to mobilized online to create specific campaigns like the viewers of Fringe or Sense8 (Guerroero-Pico, 2017)? With enough fans interacting on their own, could the use of hashtags and common opinions among fans be loud enough to be heard?

Studying one episode of the show, from one season limits the amount of data analyzed, and the overall understanding of the show. Plot lines of each episode are different, and the possibility that one show is written in a more gender-neutral way compared to another, thus changing the conversation on Twitter, is a possibility. Additionally, other television shows within the DCTV verse may also have different reactions from fans, based on writers, actors, and plot lines of episodes.

Because of the limitations set to focus on sexism, the overlapping issue of racism is not fully addressed in the research. Further research around racism, and how sexism cannot fully be eliminated without eliminating racism first a research possibility. Studies around different genres of television shows, or even different shows within the DCTV universe is also an option. A follow up study comparing the next season of Legends of

Tomorrow would also be a potential research opportunity, to understand if writers made any changes or improvements to the show, and to see if there were any changes in viewers opinions.

The goal of this study was to examine how Twitter is being used by fandom to discuss or raise awareness of the issue of gender inequality as in appears on DC's Legends of Tomorrow.

While some viewers use the platform to state exactly what is wrong in terms of gender inequality, it's not always obvious. The overarching issues that can be picked up from conversations on social media come from the themes that are gathered from the data. When enough viewers state a dislike for a romantic relationship between characters, or when the only points of discussion around a female character are those of her romantic relationships, the data reveals an issue. When relationships between female characters lead to competition and dragging other female characters down, instead of finding the positive aspects, the data reveals an issue with gender inequality.

Potential future research could be to see if writers and television executives are listening to the conversations happening by fans on Twitter and compare episodes in the television season that follows. Does the writing of the characters change in the following season, and do these changes align with the issues that were prominent to viewers from the previous season? Are viewers engaging in dual screen viewing without mobilized collection action able to pose an impact on shows?

Viewers are using social media to react to what they view on television. Twitter is not necessarily used for in depth conversations from viewers, but enough participate

in dual screen viewing to generate a solid database of thoughts and opinions about social issues as it appears on screen, even if viewers are not necessarily intentionally contributing. Some of the data collected initially seemed like spam comments from fans that had nothing of substance to offer, but the substance comes from the collective voice of viewers shared through social media platforms. If executives of Legends of Tomorrow, or other shows, are watching Twitter and paying attention to their fandom, future studies based on episodes in the following seasons of shows could be done to examine if there have been any changes in response to fan comments. Gender inequality and other social issues are being discussed and contributed to by fandom. Some of the discussion was found in the sheer volume of participants collectively sharing the same feelings and thoughts and follow up studies would be required to see if anyone is really listening.

REFERENCES

Adams, C., Ashton, M., Lupton, H., & Pollack, H. (2014). Sport is king: an investigation into local media coverage of women's sport in the UK East Midlands. *Journal of Gender Studies, 23(4),* 422-439. doi:10.1080/09589236.2013.795114

Atler, C. (2015). 8 Sad Truths About Women in Media. *Time.* Retrieved from: http://time.com/3908138/women-in-media-sad-truths-report/

Badaoui, S. E. (2016). Gender-Based Portrayal as Media Form in Society. *Global Media Journal: American Edition, 14(26),* 1-8.

Baker, K., & Raney, A. A. (2007). Equally Super?: Gender-Role Stereotyping of Superheroes in Children's Animated Programs*. Mass Communication & Society, 10(1),* 25-41. doi:10.1080/15205430701229626

Bardsley, A. (2006). Girlfight the Power: Teaching Contemporary Feminism and Pop Culture. *Feminist Teacher, 16(3),* 189-204. Retrieved from http://www.jstor.org.login.ezproxy.library.ualberta.ca/stable/40535472

Bober, M. (. (0001). Twitter and TV events: an exploration of how to use social media for student-led research (English). *Aslib Journal of Information Management. New Information Perspectives, 66(3),* 297-312. http://dx.doi.org/10.1108/AJIM-09-2013-0097

Braine, F. (1994). Technological Utopias: The Future of the Next Generation*. Film & History (03603695), 24(1/2)*, 2-18.

Buschow C., Schneider, B., & Ueberheide, S. (2014). Tweeting television: Exploring communication activities on Twitter while watching TV (English). *Communications (Sankt Augustin), 39(2),* 129-149. DOI 10.1515/commun-2014-0009

Cameron, J., & Geidner, N. (2014). Something Old, Something New, Something Borrowed From Something Blue*: Experiments on Dual Viewing TV and Twitter. Journal of Broadcasting & Electronic Media, 58(3),* 400-419. doi:10.1080/08838151.2014.935852doi:10.1080/1041794X.2015.1116593

Carter, J. A., Casanova, E., & Maume, D. J. (2015). Gendering Olympians: Olympic Media Guide Profiles of Men and Women Athletes. *Sociology of Sport Journal, 32(3),* 312-331. doi:10.1123/ssj.2013-0123

Ceulemans, M., & Fauconnier, G. (2012). Mass Media: The Image, Role, and Social Conditions of Women. *Global Media Journal: Indian Edition, 3(1),* 1-79.

Coche, R. (2016). Promoting women's soccer through social media: how the US federation used Twitter for the 2011 World Cup. *Soccer & Society, 17(1)*, 90-108. doi:10.1080/14660970.2014.919279

Cypress, B. (2017). Rigor or Reliability and Validity in Qualitative Research: Perspectives, Strategies, Reconceptualization, and Recommendations. *Dimensions of Critical Care Nursing. 36(4),* 253-263.

Dello Russo, M. (2016). The 15 Most Powerful Arrowverse Heroes, Ranked. *Screenrant.* Retrieved from: https://screenrant.com/best-arrowverse-flash-legends-of-tomorrow-arrow-supergirl-cw-heroes/

De Vaus, D (2001). *Research Design in Social Research.* University of Queensland. *(p. 1)*

Dockterman, E. (2015). Everyone's a Superhero. *Time, 186(9/10),* 76-80.

Easteal, P., Holland, K., & Judd, K. (2015). Enduring themes and silences in media portrayals of violence against women. *Women's Studies International Forum, 48* (103-113).

Easton, L. (2013). Saying No to Hetero-Masculinity. *Cinephile, 9(2)*, 38-44.

Etling, L., & Young, R. (2007). Sexism and the Authoritativeness of Female Sportscasters. *Communication Research Reports, 24(2),* 121-130. doi:10.1080/08824090701304816

Foster, M. D. (2015). Tweeting about sexism: The well-being benefits of a social media collective action. *British Journal of Social Psychology, 54(4),* 629-647. doi:10.1111/bjso.12101

Fox, H. W., & Renas, S. R. (1977). Stereotypes of Women in the Media and Their Impact on Women's Careers. *Human Resource Management, 16(1),* 28-31.

Fulkerson, G [gregfulkerson] (2011). *Tutorial: Qualitative Analysis in Word.* Retrieved from https://www.youtube.com/watch?v=FX9R6Y6fyfk

Galuszka, P. (2015). New Economy of Fandom. *Popular Music and Society, 38(1),* 25-43.

Giffin, E. (2016). How Buffy the Vampire Slayer Changed the World. *The Young Folks.* Retrieved from: http://theyoungfolks.com/featured/how-buffy-the-vampire-slayer-changed-the-world/88476

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report, 8(4)*, 597-606. Retrieved from http://nsuworks.nova.edu/tqr/vol8/iss4/6

Goodall, H. (2012). Media's Influence on Gender Stereotypes. *Media Asia (Asian Media Information & Communication Centre), 39(3)*, 160-163.

Guerrero-Pico, M. (2017). #Fringe, Audiences, and Fan Labor: Twitter Activism to Save a TV Show From Cancellation. *International Journal of Communication. 11(2017),* 2071-2092

Gutierrez-Martin, A & Torrego-Gonzalez, A. (2016). Watching and Tweeting: Youngsters' Response to Media Representations of Resistance. *Media Education Research Journal. 27(24)* 09-17

Hager, L. (2008). 'Saving the World before Bedtime': The Powerpuff Girls, Citizenship, and the Little Girl Superhero. *Children's Literature Association Quarterly, 33(1),* 62-78. doi:10.1353/chq.2008.0006

Highfield, T., Harrington, S., & Bruns, A. (2013). Twitter as a Technology for Audiencing and Fandom. *Information, Communication & Society, 16(3),* 315-339. doi:10.1080/1369118X.2012.756053

Hunting, K. (2014). Furiously Franchised: Clueless, Convergence Culture, and the Female-Focused Franchise. *Cinema Journal, (3),* 145.

Ingalls, V. (2012). Sex Differences in the Creation of Fictional Heroes with Particular Emphasis on Female Heroes and Superheroes in Popular Culture: Insights From Evolutionary Psychology (English). *Review of General Psychology, 16(2),* 208-221. DOI:10.1037/a0027917

Jenkins, H. (2006). *Convergence Culture. Where Old and New Media Collide.* New York City, New York. New York University Press

Johnson, A. (2007). The Subtleties of Blatant Sexism. *Communication & Critical/Cultural Studies, 4(2),* 166-183. doi:10.1080/14791420701296521

Kalsnes, B., Krumsvik, A., & Storsul, T. (2014). Social media as a political backchannel: Twitter use during televised election debates in Norway (English). *Aslib Journal of Information Management. New Information Perspectives, 66(3),* 313-328. http://dx.doi.org/10.1108/AJIM-09-2013-0093

Keating, E. M. (2012). The Female Link: Citation and Continuity in Watchmen. *Journal of Popular Culture, 45(6)*, 1266-1288. doi:10.1111/j.1540-5931.2011.00808.x

Kennard, A. R., Willis, L. E., Robinson, M. J., & Knobloch-Westerwick, S. (2016). The Allure of Aphrodite: How Gender-Congruent Media Portrayals Impact Adult Women's Possible Future Selves. *Human Communication Research, 42(2),* 221-245. doi:10.1111/hcre.12072

Kircher, M. (2015). 'I ship them' – the strange concept that changes the way people talk about relationships. *Business Insider.* Retrieved from: http://www.businessinsider.com/what-shipping-means-to-teens-2015-8

Krishna, R. (2917). Inside The Totally Insane And Sort Of Successful Fa Campaign to Bring Back "Sense8." *Buzzfeed.* Retrieved online from: https://www.buzzfeed.com/krishrach/how-fans-brought-sense-8-back?utm_term=.xkVQAQmbv#.pdGPrP2QM

Kurane, A., & Shetty, J. (2012). Role of Mass Media in Women's Development. *Journal of Social Welfare & Management, 4(3),* 133-142.

Loftus, J. (2017). Who's Buying Superhero Toys? (Spoiler Alert: Not Children). *Inverse Entertainment.* Retrieve online from: https://www.inverse.com/article/29841-superhero-toys-market-adult-collectors

Lubin, G. (2014). The Comic Book Industry Is On Fire, And It's About More Than Just The Movies. *Business Insider. Retrieved online from:* http://www.businessinsider.com/the-comic-book-industry-is-*on-fire-2014-8*

Lukin, A. (2016). 'He' vs 'she' in Australian media coverage: what the language of news tells us about gender imbalance. *The Conversation.* Retrieved online from: https://theconversation.com/he-vs-she-in-australian-media-coverage-what-the-language-of-news-tells-us-about-gender-imbalance-67139

Marchetti, R., & Ceccobelli, D. (2016). Twitter and Television in a Hybrid Media System. *Journalism Practice, 10(5),* 626-644. doi:10.1080/17512786.2015.1040051

Misailidou, E. (2017). Social Media Fandom: The construction of identity in the cases of "The 100" and "Once Upon A Time" Tumblr communities. *The American College of Greece.*

Muhammad Tanveer, A., Muhammad, A., Muhammad, B. (2015). Reliability and Validity of Qualitative and Operational Research Paradigm. *Pakistan Journal of Statistics and Operation Research. 4(1),* 35-45.

Nagy, J., & Midha, A. (2014). The Value of Earned Audiences: How Social Interactions Amplify TV Impact. *Journal of Advertising Research, 54(4),* 448-453. doi:10.2501/JAR-54-4-448-453

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing, 18(2),* 34-5. DOI: 10.1136/eb-2015-102054

O'Connell, T. (2016). Excluding Female Characters From Merchandise Doesn't Just Impact Girls. *The Mary Sue.* Retrieved from https://www.themarysue.com/women-heroes-merchandise/

O'Reilly, J. D. (2005). The Wonder Woman Precedent: Female (Super)Heroism on Trial. *Journal of American Culture, 28(3),* 273-283. doi:10.1111/j.1542-734X.2005.00211.x

Oler, T. (2015). She-Hulk, Attorney At Law*. Bitch Magazine: Feminist Response to Pop Culture, (66)*, 17-19.

Pavan, E. (2017). The integrative power of online collective action networks beyond protest. Exploring social media use in the process of institutionalization. *Social Movement Studies, 16*(4), 433-446. doi:10.1080/14742837.2016.1268956

Pennell, H., & Behm-Morawitz, E. (2015). The Empowering (Super) Heroine? The Effects of Sexualized Female Characters in Superhero Films on Women. *Sex Roles, 72(5-6),* 211-220. doi:10.1007/s11199-015-0455-3

Quintas-Froufe, N., & Gonzalez-Neira, A. (2014). Active Audiences: Social Audience Participation in Television. *Comunicar, 22(43),* 83-90. doi:10.3916/C43-2014-08

Rudestam, K. E. & Newton, R. R. (2007). *Surviving Your Dissertation: A Comprehensive Guide to Content and Process.* SAGE.

Russell, A. (2016). Why Female Superheroes are Vital to Comic Book Television. *Uloop.* Retrieved from: http://www.uloop.com/news/view.php/216430/Why-Female-Superheroes-are-Vital-to-Comic-Book-Television

Russian, A. (2016). Simon Missick Opens Up About Playing TV's 'First Black Female Superhero.' *People.* Retrieved from http://people.com/tv/luke-cage-simone-missick-talks-playing-first-black-female-superhero-tv/

Shin, D. (2016). Do Users Experience Real Sociability Through Social TV? Analyzing Parasocial Behavior in Relation to Social TV. *Journal of Broadcasting & Electronic Media, 60(1),* 140-159. doi:10.1080/08838151.2015.1127247

Schreier, M. (2013). Qualitative Content Analysis in *The SAGE Handbook of Qualitative Data Analysis.* (pp. 170-183). London: SAGE Publications LTD.

Schutt, R. (2015). *Investigating the Social World. The Process and Practice of Research.* Boston, Massachusetts. Sage Publishing

Stabile, C. A. (2009). "Sweetheart, This Ain't Gender Studies": Sexism and Superheroes. *Communication & Critical/Cultural Studies, 6(1)*, 86-92. doi:10.1080/14791420802663686

Stefansky, E. (2016). Every Episode of Netflix's Jessica Jones Season 3 Will Be Directed by a Woman. *Vanity Fair.* http://www.vanityfair.com/hollywood/2016/10/jessica-jones-season-2-female-directors

Summers, A., & Miller, M. K. (2014). From Damsels in Distress to Sexy Superheroes: How the Portrayal of Sexism in Video Game Magazines Has Changed in the Last Twenty Years. *Feminist Media Studies, 14(6)*, 1028-1040. doi:10.1080/14680777.2014.882371

Taber, N., Woloshyn, V., Munn, C., & Lane, L. (2014). Exploring Representations of "Super" Women in Popular Culture: Shaping Critical Discussions with Female College Students with Learning Exceptionalities. *Adult Learning, 25(4),* 142-150.

Tady, M. (2013). Few Roles for Female Role Models. *Extra!, 26(2),* 4.

Taylor, A. (2007). "He's Gotta Be Strong, and He's Gotta Be Fast, and He's Gotta Be Larger Than Life*": Investigating the Engendered Superhero Body. Journal of Popular Culture, 40(2),* 344-360. doi:10.1111/j.1540-5931.2007.00382.x

Tenny, G. (2012). Superheroes super hot on big screen, small screen, dead trees. *Fox News. Retrieved online from:* http://www.foxnews.com/entertainment/2012/06/01/digital-takeovernot-for-comic-books-*yet.html*

Tracy, S. (2013). *Qualitative Research Methods.* Chichester, West Sussex. John Wiley & Sons, Ltd.

TVSeriesFinale (2017). *CW 2016-17 Season Ratings.* Retrieved from:
http://tvseriesfinale.com/tv-show/cw-2016-17-season-ratings/

Twitter (2017). www.twitter.com

Van Wyk, K. (2015). The Paneled Lives of Extraordinary Women: Comic Books, Superheroines,
and American Women in the 1940s. *History Matters, (12),* 35-51.

Vann, P. (2014). Changing the Game: The Role of Social Media in Overcoming Old Media's
Attention Deficit Toward Women's Sport. *Journal Of Broadcasting & Electronic
Media, 58(3),* 438-455. doi:10.1080/08838151.2014.935850

Wang, Y. (2016). How Do Television Networks Use Twitter? Exploring the Relationship between
Twitter Use and Television Ratings. *Southern Communication Journal, 81(3),* 125-135.
DOI: 10.1080/1041794X.2015.1116593

Waterhouse-Watson, D., & Kendal, E. (2012). Tights and Tiaras: Female Superheroes and
Media Cultures. *Colloquy: Text Theory Critique, (24),* 114-117. Retrieve from:
www.arts.monash.edu.au/ecps/colloquy/journal/issue024/tights-and-tiarasintroduction.
pdf

Williams, S. (2016). #SayHerName: using digital activism to document violence against black
women. *Feminist Media Studies, 16(5),* 922-925. doi:10.1080/14680777.2016.1213574
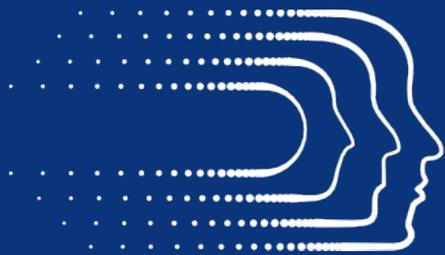
#LegendsofTomorrow

Hashtag Intelligence Report

Monday, 10th of April 2017

Hashtag Summary Data

1	24.27 M	2,206	24,268,533	2,206
Observed Days	Total Impressions	Total Tweets	Daily Impressions	Daily Tweets

20.69 M	1,419	20,689,467	1,419
Total Unique Impressions	Total Users	Daily Unique Impressions	Daily Users

653	1,553
Original Tweets	Retweets

Trend Analysis: Whole Period

Total Impressions Trend

Trend

-100   100

NaN
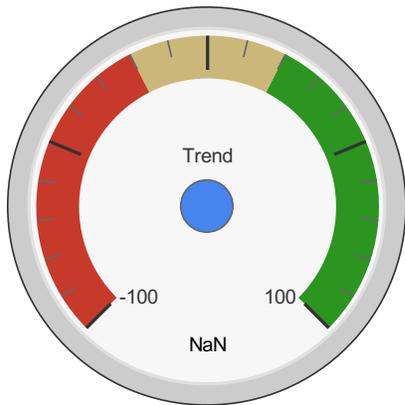
Unique Users Trend

Trend

-100   100

NaN
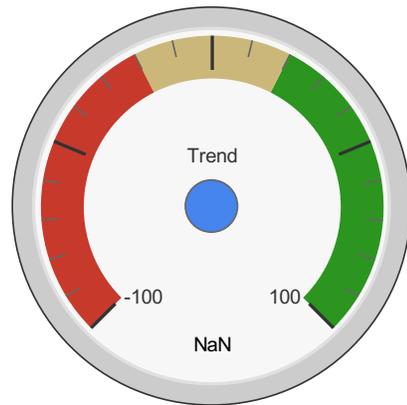
Average Engagement

Engagement (RT+Mentions) %

Engagement %

0   100

76
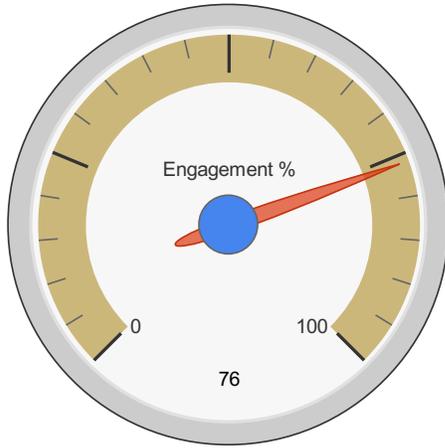
Hashtag Amplification Over Time

Hashtag Impressions: Total and Tracked influencer's contribution

● Total Impr

24268533,5

24268533

24268532,5

24268532

11:59:59.999 PM   12:00:00.000 AM

1…   12:00:00.000 AM

Hashtag Tweets: Total and Tracked influencer's contribution

● Total Tweets

2206,5

2206

2205,5

2205

11:59:59.999 PM   12:00:00.000 AM

1…   12:00:00.000 AM

Hashtag Users vs Tweets

● Tweets ● Active Users

2100

2000

1900

1800

1700

1600

1500

11:59:59.999 PM   12:00:00.000 AM

1…   12:00:00.000 AM
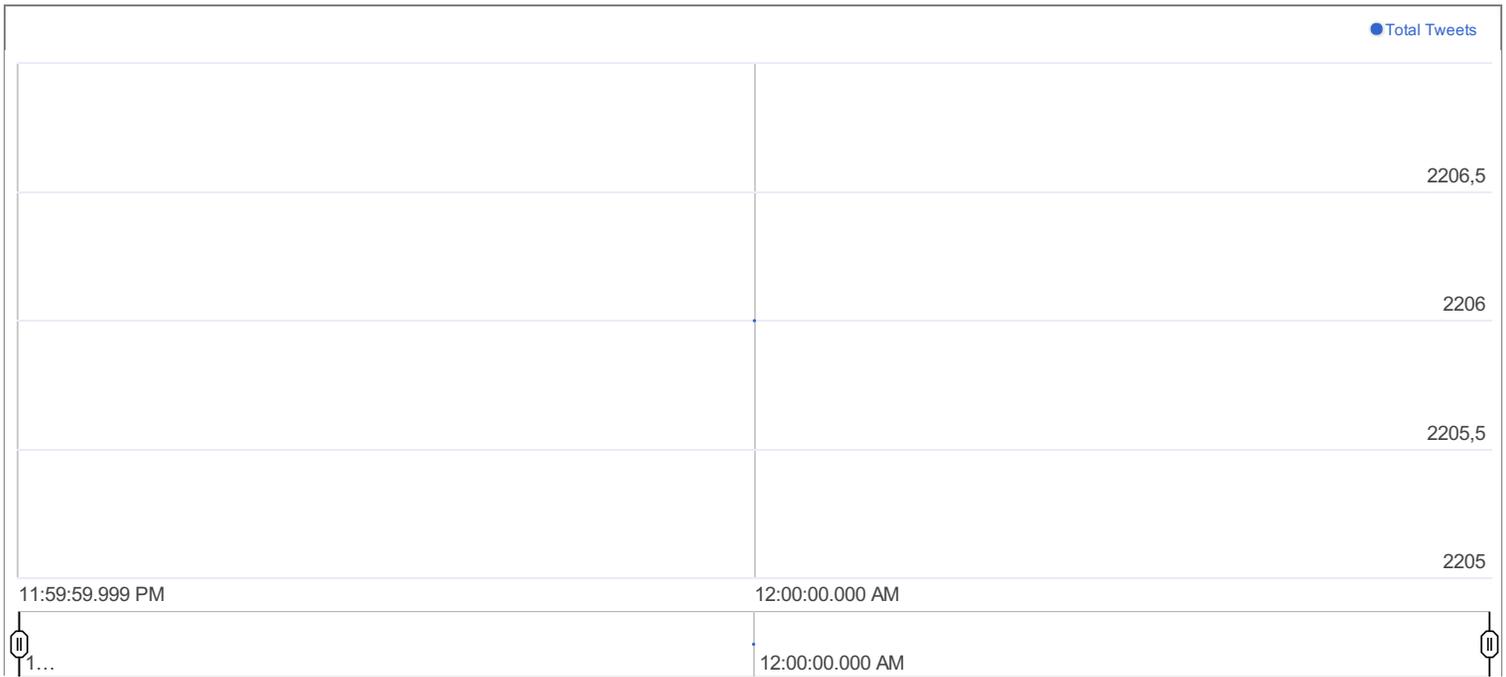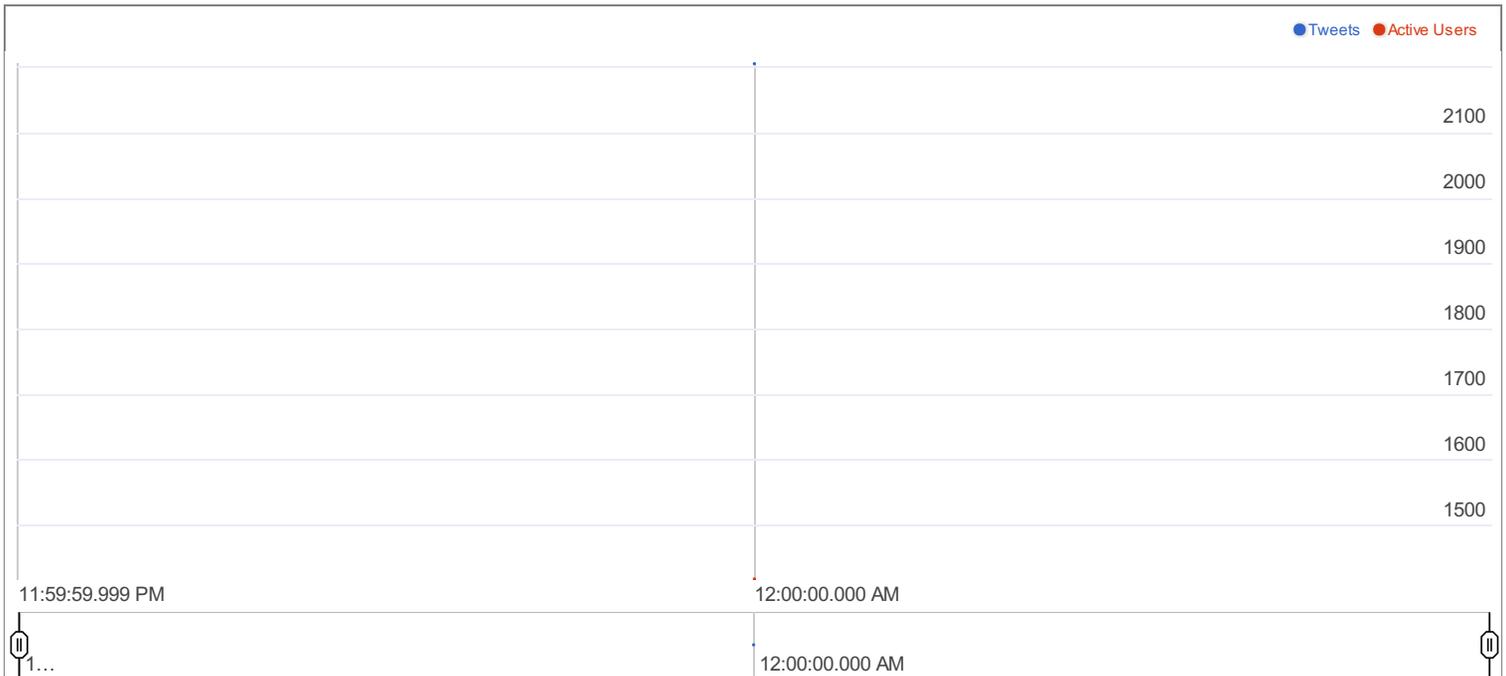
Hashtag Original Tweets vs Retweets

● Original Tweets ● Retweets

1400

1200

1000

800

11:59:59.999 PM   12:00:00.000 AM

1…   12:00:00.000 AM
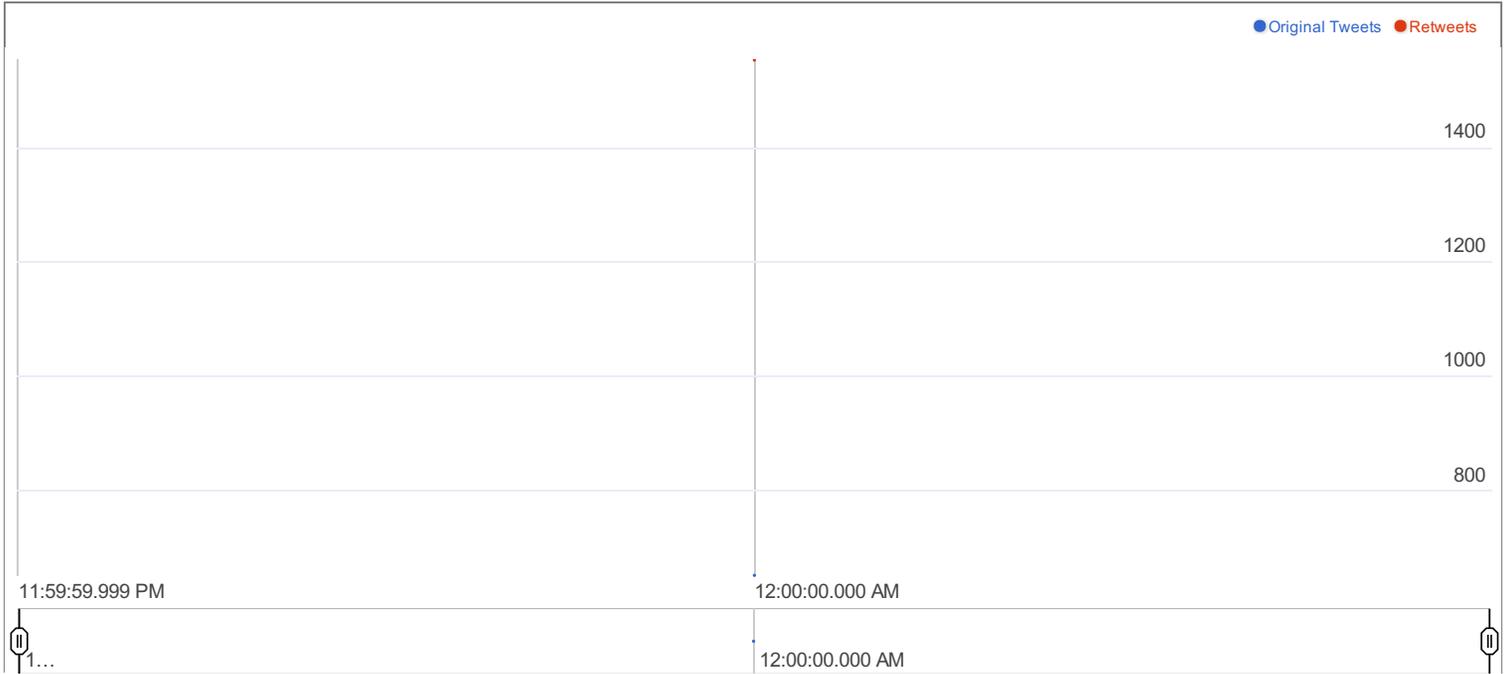
Hashtag Tweets: Days of the week and hours of the day

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Mon																									
Tue																									
Wed																									
Thu																									
Fri																									
Sat																									
Sun																									
Total																									

Scale ░░░ High
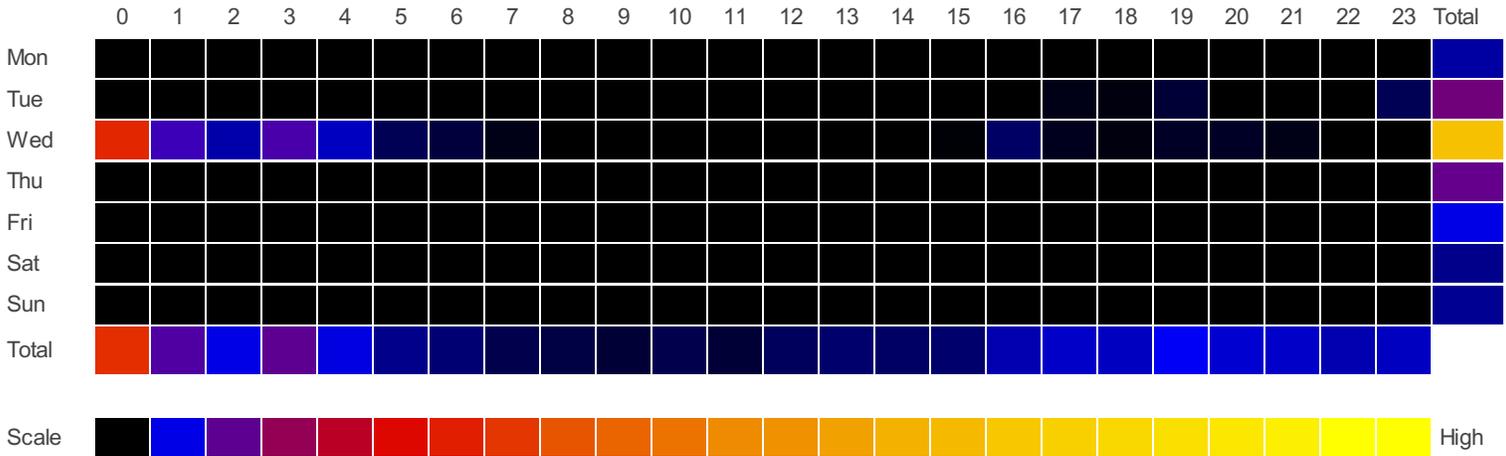
Time zone: GMT

Hashtag Top Influencers

Showing 1 To 20 Of 20 Influencers Found

1. thecw_legends
2. natalieabrams
3. ew
4. warnerbrostv
5. dccomics
6. mguggenheim
7. variety
8. warnerbrosent
9. cw_theflash
10. thecw
11. accesshollywood
12. comicbook
13. itsfreeatlast
14. spoilertv
15. awesomemergency
16. mattletscher
17. lovepaulstefan
18. dcumoviepage
19. streamingfeed
20. chancelloragard

Top Influencer's Details (1 to 20)

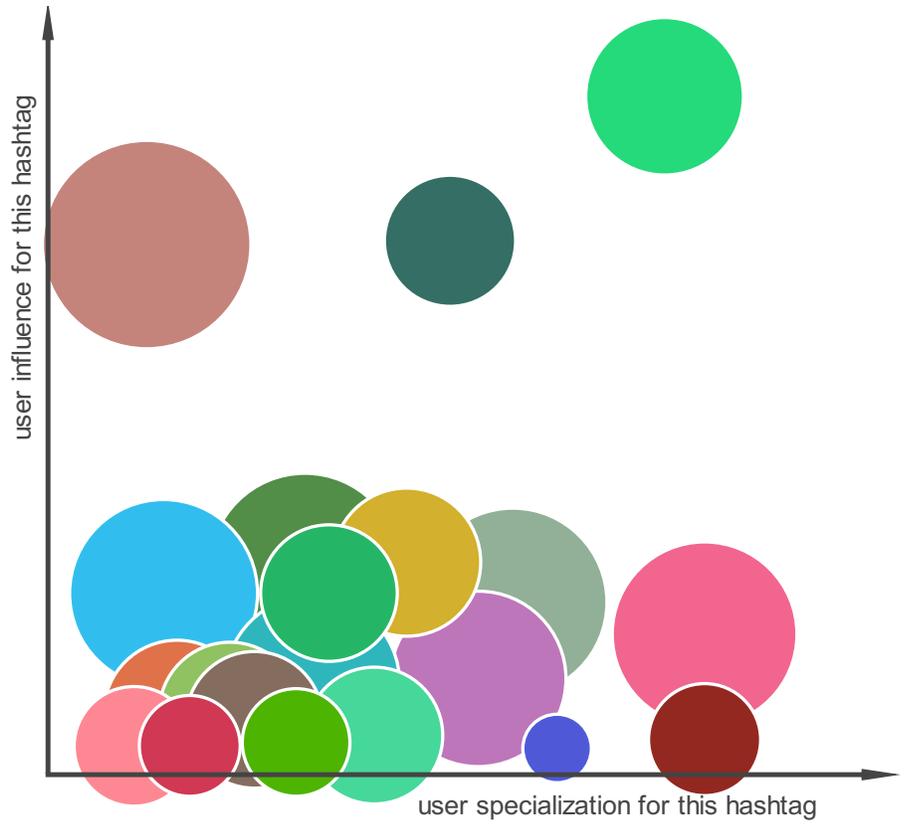| Influencer	Followers	Tweets On Tg	Tweets On Tg %	Tweets Off Tg	Retweeted On Tg	Mentioned On Tg	Mentions On Tg by User	Retweets On Tg
thecw_legends	270,952	5	42%	7	765	66	1	1
natalieabrams	53,627	1	14%	6	18	0	0	0
ew	6,132,934	1	0.4%	240	6	20	0	1
warnerbrostv	152,146	3	11%	24	13	0	0	2
dccomics	2,100,969	1	5.6%	17	55	4	1	0
mguggenheim	74,777	1	6.7%	14	0	30	1	1
variety	1,729,509	1	0.8%	121	22	0	1	0
warnerbrosent	1,759,444	1	20%	4	0	0	1	1
cw_theflash	1,422,061	1	50%	1	0	0	0	1
thecw	812,359	1	17%	5	29	22	0	0
accesshollywood	770,253	1	5.9%	16	1	0	0	0
comicbook	100,909	4	2.7%	144	26	1	2	0
itsfreeatlast	136,774	3	1.2%	255	0	0	0	3
spoilertv	75,186	4	3.5%	109	26	0	0	0
awesomemergency	75,794	2	9.1%	20	9	0	0	0
mattletscher	16,633	4	50%	4	31	14	2	2
lovepaulstefan	12,653	6	5.2%	110	0	0	3	4
dcumoviepage	8,352	4	1.5%	262	0	0	1	3
streamingfeed	26,544	1	0.1%	766	0	0	0	0
chancelloragard	1,150	1	25%	3	0	0	1	0

Top Hashtags

Top Related Hashtags (1 to 20)

Hashtag	Tweets	Correlation	Impressions
#izombie	128	2.59%	3075450
#prisonbreak	78	1.58%	300931
#dctv	74	1.50%	2304097
#dcallaccess	60	1.21%	2237263
#arrow	60	1.21%	150413
#theflash	38	0.77%	180866
#supergirl	28	0.57%	1945683
#dccomics	27	0.55%	127104
#agentsofshield	24	0.49%	212430
#bts	22	0.45%	39029
#flash	17	0.34%	1996204
#saralance	17	0.34%	97117
#caitylotz	16	0.32%	105812
#ncis	14	0.28%	317210
#wentworthmiller	13	0.26%	6444
#dominicpurcell	13	0.26%	5161
#reverseflash	12	0.24%	32729
#trakt	12	0.24%	2722
#lotfinale	11	0.22%	5291
#americanhousewife	10	0.20%	580721

Related Hashtags Cloud

#neilmcdonough #reverseflash #sdliveaftermania
#firestorm #mattletscher #eobardthawne
#felicitysmoak #aruba #wentworthmiller #lotzers
#captaincanary #reviews #tv #pc #prisonbreak #dominicpurcell
#newgirl #caitylotz #cw#americanhousewife
#lot #thecw #bts #ncis #t #constantine
#trakt #supergirl #izombie #theflash #quantico
#dclegends #thefosters
#agentsofshield #dccomics #seaso
#legranddebat
#themiddle #arrow #dctv #bull #dcallaccess #crossovers
#outsiders #dc
#datflash #lotfinale #thefl #flash #le #saralance #overwatch #crossover
#1 #2 #gameofthrones
#comics #tgit #legendsofsmoak #themick

Word Cloud

only smoak eobard casa black cheers
even well more
think off going week mick got make
great show rip ray guys
look never watch world lance die
team see flash will good right new
better laurel just legends not return felicity
best west like dead dead catch barry natemiss reality i'm save sara now back our coast much
favorite thawne reality really him season dc's finale tonight tomorrow awesome
time one app own reverse
been next stream rules break episode thanks his too scene amaya
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starts still party last viewing aruba