A Brief Report on Sex Differences in Identification and Engagement with Anime

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Abstract

Prior research, predominantly focusing on Western fans, has found that the anime fandom is comprised of a majority of males (Reysen, Plante, Roberts, Gerbasi, Mohebpour, & Gamboa, 2016). In the present research we assessed whether this tendency held true in a Filipino and US samples. Specifically, Filipino and US college students completed measures of engagement with anime content and identification with the anime fandom. Converging with prior research, the results showed that males were more engaged with anime (i.e., watching anime, reading manga, reading news, talking with others about anime) and showed higher identification with the anime fandom than females in both samples. Mediation analyses showed that identification with the fandom mediated the relationship between participant sex and engagement with anime. Together, the results highlight the importance of fandom identification to predict engagement with fandom content and the expanding evidence of gender disparity within the fandom in both the Philippines and the US.

Keywords: anime, manga, Philippines, identity, sex differences

Introduction

Anime—Japanese animation—is widely distributed and consumed by individuals both inside and outside Japan (Masuda et al., 2018). Anime first appeared on television in the Philippines in the late 1970s. After a short-lived ban on certain anime by the president of the country, the number of titles shown expanded throughout the 1980s and 1990s (Bravo, 2012). By the early 2000s, anime had become popular throughout the country, as exemplified by the country's first anime convention. And while the anime explosion has somewhat subsided due to the increasing popularity of dramas from other countries, anime continues to have a presence in Filipino media (Bravo, 2012). In fact, the Philippines remains one of the top 20 nations with respect to distribution rights

(Masuda et al., 2018). Moreover, the anime industry is, if anything, growing in the Philippines as Japanese animation companies outsource work there (Bravo, 2012; Tschang & Goldstein, 2010). For example, about half of the animation for the popular anime *One Piece* is done in the Philippines (Johns & Brenton, 2011). Given both the Philippines' history of consuming and producing content for the anime industry, the present study is a preliminary look at some of the demographic and social identity characteristics of the Filipino anime fandom.

Sex Differences

There has long been a stereotype that anime fans are predominantly male (Reysen, Plante, Roberts, Gerbasi, Mohebpour, & Gamboa, 2016). There may be a modicum of truth to such stereotypes, as research by Napier (2006) found that a majority of fans on the Miyazaki Mailing List were, in fact male. Additionally, in a large online sample of mostly Western anime fans, Reysen, Plante, Roberts, Gerbasi, and Shaw (2016) found that males were more likely than females to self-identify as anime fans. That said, however, the ratio of male and female fans is close to equal when sampling anime fans at an anime convention, and flips entirely when examining cosplayers: Females are more likely to cosplay than males (Reysen, Plante, Roberts, & Gerbasi, 2018). Given these apparent discrepancies, researchers have examined whether there exist differences between male and female fans.

Despite the greater prevalence of males in the fandom overall, research has found little evidence of meaningful differences between male and female fans that can be directly attributed to the anime fandom itself. For example, relative to male fans, female anime fans reported a higher prevalence of mood and anxiety disorders, though this rate was found to be comparable to prevalence rates in the wider population (Reysen et al., 2018). Female anime fans were also more likely than male fans to identify more strongly and see themselves as being more similar to their favorite anime character (Reysen, Plante, Roberts, & Gerbasi, in press). However, these results, too, converge with other research showing greater identification with characters outside the context of the anime fandom (e.g., Cohen, 2003, 2004; Eyal & Cohen, 2006). Finally, there is little difference between male and female fans with respect to the psychological needs (e.g., meaning in life, belongingness) satisfied by membership in the anime fandom (Ray, Plante, Reysen, Roberts, & Gerbasi, 2017). However, it should be noted that all these studies primarily sampled anime fans from Western cultures (e.g., United States, Canada). To assess the generalizability of these findings to the global anime population, the primary focus of the present research assesses sex differences in fandom identification and engagement in a non-western sample of anime fans.

Fandom Identification and Engagement

According to a social identity perspective (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), people can feel varying levels of psychological connection (i.e., ingroup identification) with the different groups to which they belong. These differences, in

turn, have implications for the impact of those groups on psychologically relevant variables. For example, greater identification with a group predicts greater adherence to that group's norms. Speaking to this point, organizational identification (degree of identification with one's company) is consistently shown to predict greater job involvement, commitment, job satisfaction, job performance, and organizational citizenship behaviors (Lee, Park, & Koo, 2015). Likewise, identification as a global citizen is associated with prosocial values associated with global citizenship, like the desire to help outgroup members and acting in an environmentally sustainable manner (Reysen & Katzarska-Miller, 2018).

This association between group identification and group-consistent attitudes and behaviors has also been found in fans. In sport fans, for example, greater identification with other fans is positively associated with purchasing and wearing team symbols, with greater desire to evangelize and recruit new fans, and with positive word of mouth (Yoshida, Gordon, Heere, & James, 2015). Identification with the brony fandom (fans of the television show *My Little Pony: Friendship is Magic*) has likewise been found to be positively associated with the prosocial/charitable behaviors consistent with the show's message (Chadborn, Plante, & Reysen, 2016; Edwards, Chadborn, Plante, Reysen, & Redden, 2019) . Moreover, among bronies, fandom identification is positively associated with watching fan-created content, talking to friends about the show, purchasing fan made products, watching reruns of the program, frequency of past convention attendance, and intention to attend a future brony convention (Edwards

et al., 2019; Reysen, Chadborn, & Plante, 2018).

Taken together, these results suggest that identification with other fans is a strong predictor of both important psychological behaviors and, most presently relevant, with important fan-related behavior.

Present Research

The primary purpose of the present research was to examine sex differences in identification with anime fans and engagement with anime content in a sample of Filipino students. Additionally, we examined whether the results observed among the Filipino sample would replicate in a US sample. In Study 1, participants from three universities in the Philippines completed measures regarding identification and engagement with the fandom. Given past research showing that anime fans tend to be male (Napier, 2006; Reysen, Plante, Roberts, Gerbasi, & Shaw, 2016) and showing that fandom identification is associated with group relevant behaviors (Edwards et al., 2019) we hypothesize that male (vs. female) respondents will report both greater identification with the anime fandom and more engagement with anime-related content. Furthermore, we expect this fandom identification to mediate sex differences observed with respect to participant engagement with anime. In Study 2, we predict that the results from Study 1 will be replicated in a sample of US university students.

Study 1

The purpose of Study 1 was to examine sex differences in fandom identification and

engagement with anime. We predict males (vs. females) will report greater identification and engagement, and that fandom identification will mediate the relationship between sex of participant and engagement.

Method

Participants and Design

Participants (N = 2773, 61.5% female; M_{age} = 19.48, SD = 1.77) included students from three universities in Manila, Philippines. As part of a larger survey regarding religious beliefs, participants completed measures regarding demographics, identification with the anime fandom, and engagement with anime content.

Materials

Identification with the Anime Fandom. To assess participants' degree of identification with the anime fandom, we adapted a single item measure ("I strongly identify with other Anime fans in the Anime community") of ingroup identification from prior research (Reysen, Katzarska-Miller, Nesbit, & Pierce, 2013). The item was rated on a 7-point Likert-type response scale, from 1 = *strongly disagree* to 7 = *strongly agree* (M = 2.44, SD = 1.85).

Engagement with Anime Content.

Participants completed four items adapted from past research (Reysen, Katzarska-Miller, Plante, Roberts, & Gerbasi, 2016), to assess how frequently they engaged with anime ("This past year, how often did you watch Japanese animation (Anime)," "This past year, how often did you read Japanese Comics (Manga)," "This past year, how often did you read news/blogs/reviews about Anime," and "This past year, how often did you talk to friends about Anime"). Responses were made on an 8-point scale, including 0 = *never*, 1 = *almost never*, 2 = *several times a year*, 3 = *once a month*, 4 = *once a week*, 5 = *a few times a week*, 6 = *once a day*, and 7 = *many times each day* (α = .90; M = 1.62, SD = 1.83).

Results and Discussion

To examine possible sex differences we conducted a MANOVA with sex as the independent variable and degree of fandom identification and engagement as dependent variables. The omnibus test was significant, Wilks' Λ = .91, $F(5, 2767)$ = 55.67, $p < .001$, η_p^2 = .091. As shown in Table 1, male (vs. female) participants reported greater identification with the anime community and engagement with anime. Thus, across the four engagement items, males were found to be more engaged with anime than female participants over the past year.

We next examined whether participants' degree of fandom mediates the relationship between sex of participant and a combined measure of engagement (α = .90). We conducted a mediation analysis using Preacher and Hayes' (2008) SPSS Macro (with 95% confidence intervals and 20,000 iterations). As shown in Figure 1, participants' sex (0 = female, 1 = male) significantly positively predicted frequency of engagement (β = .25, $p < .001$) and identification with the anime fandom (β = .23, $p < .001$), and identification with the fandom predicted frequency of engagement

(β = .66, p < .001). The addition of identification significantly reduced the relationship between gender and engagement (β = .10, p < .001) as indicated by an absence of zero within the confidence interval of the indirect effect, B = .58, SE = .05, 95% CI [.484 to .683]. In short, identification with the fandom significantly mediated the relationship between students' sex and frequency of engagement with anime.

Although the results were in line with predictions, the present study was conducted in a single cultural context. To examine whether the observed results would generalize to another context we conducted a second study.

Study 2

The purpose of Study 2 was to replicate the results of Study 1 in a different cultural sample. Undergraduate students in the US completed the same measures utilized in Study 1. We predict that the results observed in Study 1 will be replicated.

Participants and Procedure

Participants (N = 701, 76.3% female; M_{age} = 20.93, SD = 5.14) included undergraduate students at Texas A&M University-Commerce participating for course credit or extra credit toward a class.

Measures

The measures were identical to Study 1.

Results and Discussion

To examine possible sex differences we conducted a MANOVA with sex as the independent variable and degree of fandom and engagement as dependent variables. The omnibus test was significant, Wilks' Λ = .92, $F(5, 695)$ = 12.21, p < .001, η_p^2 = .081. As shown in Table 1, male (vs. female) participants reported greater identification with the anime community and engagement with anime. Thus, across the four engagement items, males were again found to be more engaged with anime than female participants over the past year.

Identical to Study 1, we constructed an index of engagement (α = .91) and tested a mediation model with fandom mediating the relationship between sex of participant and engagement (with 95% confidence intervals and 20,000 iterations). As shown in Figure 2, participants' sex (0 = female, 1 = male) predicted frequency of engagement (β = .26, p < .001) and identification with the anime fandom (β = .19, p < .001), and identification with the fandom predicted engagement (β = .77, p < .001). The addition of identification significantly reduced the relationship between gender and engagement (β = .11, p < .001) as indicated by an absence of zero within the confidence interval of the indirect effect, B = .51, SE = .11, 95% CI [.303 to .737]. Thus, the model was replicated.

General Discussion

The primary purpose of the present research was to examine sex differences in identification and fan engagement of students in the Philippines. We hypothesized, and found, that males (vs. females) were

more likely to watch anime, read manga, read anime related news, and talk to others about anime. Furthermore, the relationship between participant sex and engagement with anime was mediated by identification with the anime fandom. These results were also replicated in a second study with a sample of US college students.

In other research (e.g., Napier, 2006: Reysen, Plante, Roberts, Gerbasi, Mohebpour, & Gamboa, 2016) it has consistently been found that among anime fans overall, there is a higher prevalence of male (vs. female) fans. These samples, however, have primarily been drawn from Western countries. In Study 1 we sampled students in the Philippines, a country known for its history of anime consumption and participation in the anime industry (Bravo, 2012; Tschang & Goldstein, 2010). Consistent with prior research on Western fans, the results showed that Filipino males (vs. females) consumed more anime, read more manga, read more news regarding anime, and discussed anime with others more often. The same held true for students in the US

From a social identity perspective (Tajfel & Turner, 1979; Turner et al., 1987), greater identification with one's group is associated with behaving in accordance with that group's norms. Research with sport fans (Yoshida et al., 2015) and bronies (Edwards et al., 2019) suggest that highly identified (vs. low identified) fans are likely to buy more merchandise and consume more group-related content. The results of the present studies are largely in line with this research, showing a strong association between identification with the fandom and engagement with anime content. Furthermore, this fandom identification may

account for at least part of the sex differences observed with respect to engagement with anime content.

The present study is limited in generalizability due to the correlational nature of the data. While we assert that ingroup identification predicts engagement behavior, the reverse may also be true. That said, the present results are consistent with findings from social identity research. However, a longitudinal study is needed to examine a possible causal relationship. Moreover, while the present results support the notion that both college students in the US and Philippines are comprised predominantly of males, they say little about the potential reasons for this. Future researchers may explore why males are more likely to be anime fans. For example, there may exist sociostructural barriers or gatekeeping behavior among fans that hinders the entrance of female fans into the fandom or reduces their tendency to identify with the anime fandom itself.

To conclude, in the present research we examined sex differences in anime fandom identification and engagement with anime content in Filipino and US college students. The results showed that males (vs. females) are more likely to identify with the anime fandom and engage more with anime content. Furthermore, identification mediates this sex difference in engagement. The results demonstrate the generalizability of the association between group identification and engagement with group-related content while also showing that the discrepancy in sex in the anime fandom is not limited to Western fans. The present research also highlights the need for future research concerning gender-roles, gatekeeping, and fandom environment

within the anime fandom specifically and among fandoms in general.

References

Bravo, B. C. (2012). *Japanese cultural influence in the Philippines through anime's popularity and pervasiveness* (Unpublished doctoral dissertation). Waseda University, Tokyo, Japan.

Chadborn, D. P., Plante, C. N., & Reysen, S. (2016). Perceived stigma, social identity, and group norms as predictors of prosocial behavior in a fandom. *International Journal of Interactive Communication Systems and Technologies, 6,* 35-49.

Cohen, J. (2004). Parasocial break-up from favorite television characters: The role of attachment styles and relationship intensity. *Journal of Social and Personal Relationships, 21,* 187-202.

Edwards, P., Chadborn, D. P., Plante, C., Reysen, S., & Redden, M. H. (2019). *Meet the bronies: The psychology of adult* My Little Pony *fandom*. Jefferson, NC: McFarland & Company.

Eyal, K., & Cohen, J. (2006). When good friends say goodbye: A parasocial breakup study. *Journal of Broadcasting and Electronic Media, 5,* 502-523.

Johns, A., & Brenton, S. (2011, November). *The effects of production location on perceptions of product authenticity in creative industries*. Paper presented at the 28th annual EAMSA conference, Gothenburg, Sweden.

Lee, E.-S., Park, T.-Y., & Koo, B. (2015). Identifying organizational identification as a basis for attitudes and behaviors: A meta-analytic review. *Psychological Bulletin, 141,* 1049-1080.

Masuda, H., Sudo, T., Rikukawa, K., Mori, Y., Ito, N., & Kameyama, Y. (2018). *Anime industry report 2017*. Tokyo, Japan: The Association of Japanese Animations.

Napier, S. (2006). The world of anime fandom in America. *Mechademia, 1,* 47-63.

Ray, A., Plante, C. N., Reysen, S., Roberts, S. E., & Gerbasi, K. C. (2017). Psychological needs predict fanship and fandom in anime fans. *The Phoenix Papers, 3*(1), 56-68.

Reysen, S., Chadborn, D., & Plante, C. N. (2018). Theory of planned behavior and intention to attend a fan convention. *Journal of Convention & Event Tourism, 19,* 204-218.

Reysen, S., & Katzarska-Miller, I. (2018). *The psychology of global citizenship: A review of theory and research*. Lanham, MD: Lexington Books.

Reysen, S., Katzarska-Miller, I., Nesbit, S. M., & Pierce, L. (2013). Further validation of a single-item measure of social identification. *European Journal of Social Psychology, 43,* 463-470.

Reysen, S. Plante, C. N., Chadborn, D., Roberts, S. E., Gerbasi, K. C., Miller, J., Gamboa, A., & Ray, A. (2018). A brief report on the prevalence of self-reported mood disorders, anxiety disorders, attention-deficit/hyperactivity disorder, and autism spectrum disorder in anime, brony, and furry fandoms. *The Phoenix Papers, 3*(2), 64-75.

Reysen, S., Plante, C. N., Roberts, S. E., & Gerbasi, K. C. (2018). Motivations of cosplayers to participate in the anime fandom. *The Phoenix Papers, 4*(1), 29-40.

Reysen, S., Plante, C. N., Roberts, S. E., &

Gerbasi, K. C. (in press). Sex differences in parasocial connection to favorite anime characters: A multifactor approach. *The Phoenix Papers*.

Reysen, S., Plante, C. N., Roberts, S. E., Gerbasi, K. C., Mohebpour, I., & Gamboa, A. (2016). Pale and geeky: Prevailing stereotypes of anime fans. *The Phoenix Papers, 2*(1), 78-103.

Reysen, S., Plante, C. N., Roberts, S. E., Gerbasi, K. C., & Shaw, J. (2016). An examination of anime fan stereotypes. *The Phoenix Papers, 2*(2), 90-117.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.

Tschang, F. T., & Goldstein, A. (2010). The outsourcing of "creative" work and the limits of capability: The case of the Philippines' animation industry. *IEEE Transactions on Engineering Management, 57,* 132-143.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.

Yoshida, M., Gordon, B., Heere, B., & James, J. D. (2015). Fan community identification: An empirical examination of its outcomes in Japanese professional sport. *Sport Marketing Quarterly, 24,* 105-119.

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Table 1

Means (Standard Deviation) Sex Differences of Assessed Measures

| Variable	Female	Male	F	p	η_p^2
Study 1					
Fandom	2.10 (1.63)	2.99 (2.04)	160.42	$< .001$	.055
Watch Anime	1.58 (1.95)	2.85 (2.50)	222.66	$< .001$	.074
Read Manga	0.94 (1.70)	1.55 (2.21)	66.05	$< .001$	.023
Read News	1.16 (1.75)	1.94 (2.29)	101.20	$< .001$	.035
Talk with Friends	1.34 (1.81)	2.50 (2.38)	212.06	$< .001$	.071
Study 2					
Fandom	1.95 (1.63)	2.70 (1.84)	25.37	$< .001$	.035
Watch Anime	1.16 (1.80)	2.45 (2.37)	55.60	$< .001$	.074
Read Manga	0.44 (1.18)	0.92 (1.68)	16.85	$< .001$	.024
Read News	0.52 (1.23)	1.22 (1.88)	30.78	$< .001$	.042
Talk with Friends	1.10 (1.66)	2.27 (2.34)	50.49	$< .001$	.067

Note. Study 1 $df = 1, 2771$, Study 2 $df = 1, 699$.
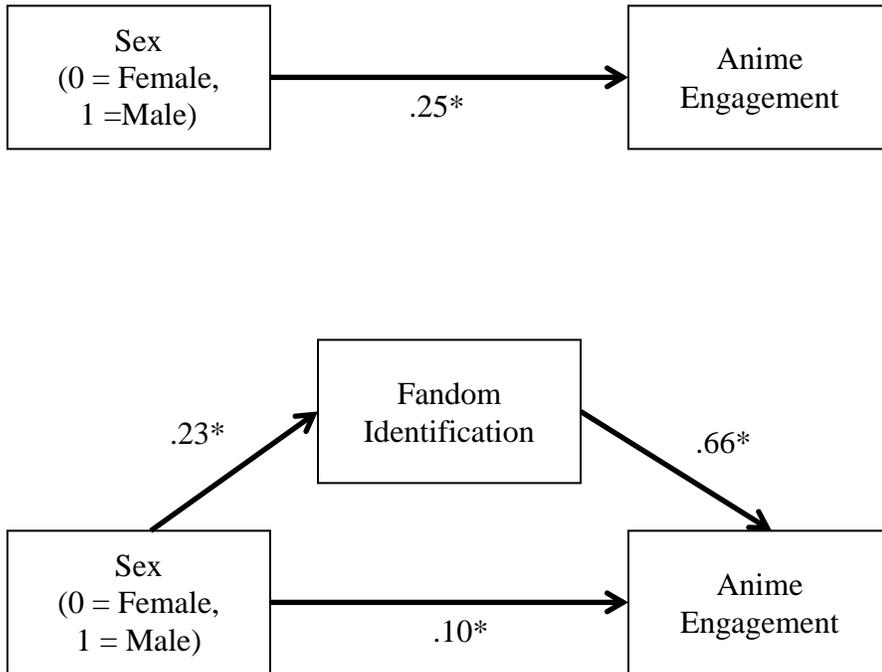
Figure 1. Mediation model of sex of participant predicting frequency of engagement through identification with the anime fandom, Study 1. * *p* < .001.
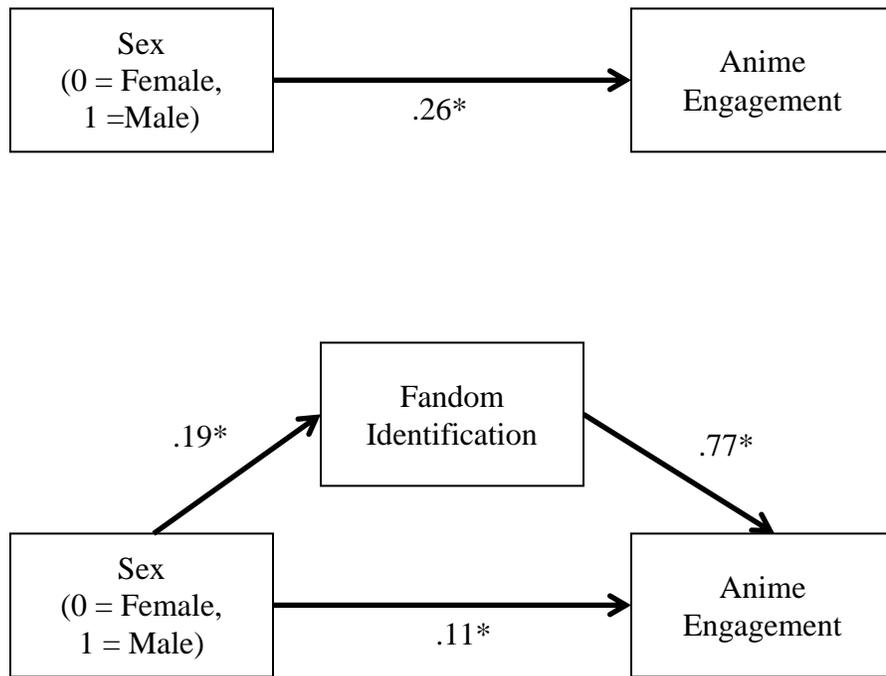
Figure 2. Mediation model of sex of participant predicting frequency of engagement through identification with the anime fandom, Study 2. * *p* < .001.