

# AN EXAMINATION OF ANIME FAN STEREOTYPES

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## Abstract

We tested the veracity of existing stereotypes about anime fans. Self-identified anime fans, both convention-going and online, completed a survey which assessed demographic variables and measures of stereotype-consistent behaviors, attitudes, and physical appearance. Furry fans, fantasy sport fans, and a sample of undergraduate college students served as comparison groups. Of the 24 stereotypes tested in the present study, only nine showed evidence of being consistent with anime fans' self-descriptions. These results reveal a significant discrepancy between non-fan perceptions of anime fans and the actual beliefs and behaviors of anime fans.

*Keywords:* anime, stereotype, furry, fantasy sport, nerd, fan, fandom

## An Examination of Anime Fan Stereotypes

Humans naturally categorize other people into groups (Tajfel & Turner, 1979). Depending on the situational context, people also apply prototypical characteristics, called stereotypes, to members of those groups (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Stereotypes can significantly influence our perception, memory, and behavior in social situations (Adams, Biernat, Branscombe, Crandall, & Wrightsman, 2008; Schneider, 2005). For example, the stereotype of leaders as agentic and masculine can influence perceptions of women in the workplace, which can negatively affect evaluations and limit promotion opportunities (see Heilman, 2012; Koenig, Eagly, Mitchell, & Ristikari, 2011). People are more likely to remember information that is consistent (vs. inconsistent) with stereotypes (Fyock & Stangor, 1994). When primed with the social category elderly (vs. neutral prime), participants walked more slowly when exiting an experimental session, which suggests that stereotypes have an impact at the subconscious level on the behavior of the primed identity (Bargh, Chen, & Burrows, 1996). However, stereotypes can change. Although it is difficult to pinpoint the reasons behind why stereotypes change, social scientists concur that stereotypes do, indeed, change over time (Schneider, 2005). For example, a prevailing stereotype of anime fans was that they consumed pornographic content (e.g., tentacle porn). However, examination of non-fans' perceptions of anime fans, Reysen and colleagues (in press) found that this stereotype was no longer endorsed. Beyond examining what stereotypes are endorsed by outgroup members, researchers also examine whether the stereotypical characteristics are exhibited by ingroup members.

Researchers have examined the accuracy of stereotypes for a variety of groups including college majors (Judd, Ryan, & Park, 1991), races (Ryan, 1996), political parties (Judd & Park, 1993), and gender (Hall & Carter, 1999). Research on stereotype accuracy shows that while some stereotypes are inaccurate, stereotypes are often moderately accurate (Jussim, McCauley, & Lee, 1995; Ryan, 2002). For example, Clabaugh and Morling (2004) found that ballet and modern dancers are able to accurately rate stereotypical dimensions regarding one another's groups. Despite a growing body of research examining large social categories in our culture, there exists relatively little research testing the accuracy of stereotypes associated with fan groups, with a few exceptions (e.g., veracity of stereotypes regarding furry fans: Gerbasi et al., 2008). In the present study, we examine the consistency or inconsistency of stereotypes about one particularly prominent fan group: anime fans.

Anime fans are enthusiastic consumers of Japanese animation and manga novels whose interests often manifest themselves through artwork and costuming (Chen, 2007). In a recent study of the perceived stereotypes of anime fans, Reysen and colleagues (in press) reviewed some of the common stereotypes of anime fans found in prior publications and in online forums (e.g., Dinnie, 2012; Dunbar, 2011; Manion, 2005; Mycella, 2012; Napier, 2001). Reysen and colleagues then assessed whether a sample of non-anime fans endorsed the stereotypes of anime fans. The results showed that non-anime fans endorsed the following stereotypes: (1) anime fans are male, (2) college students, (3) work in a technology related job, (4) watch children's cartoons, (5) spend a large amount of time watching anime, (6) play too many video games, (7) are easily overexcited about anime, (8) watch anime to escape (i.e., detached from reality), (9) spend a large amount of time on the computer, (10) are socially awkward, (11) are awkward around non-anime fans, (12) lack social skills, (13) only associate with a small group of friends who are also anime fans, (14) are introverted, (15) are nerds, (16) do not play sports, (17) do not like sports, (18) have a pale complexion, (19) wear dark (e.g., emo style) clothing, and (20) wear glasses (see Table 1 for list of stereotypes of anime fans). Although Reysen and colleagues (in press) did not find support for four stereotypes regarding anime fans listed in Table 1: (21) anime fans are older adults, (22) live with their parents, (23) are obsessed, and (24) watch pornographic anime material, we included them in the present research as they are prevalent representations of the anime fandom (Dinnie, 2012; Dunbar, 2011; Napier, 2001). Furthermore, the researchers found that non-fans' perceptions of anime fans as introverted, socially awkward, and detached from real life were predictors of stigma against anime fans.

Given the stigmatizing effects of these stereotypes, and in conjunction with prior research showing that discrediting stereotypes can, in some circumstances, undermine their use (see Schneider, 2005), we tested the veracity of stereotypes about anime fans. To provide a context within which to interpret the results, we also examined the applicability of the same stereotypes to other groups, varying in their stereotypical similarity to anime fans: furry fans, fantasy sport fans, and undergraduate college students. Furry fans were chosen as a comparison group because they have been the focus of comparable fan stereotype research (Gerbasi et al., 2008). Furry fans are individuals who self-identify with an interest in anthropomorphism—the ascription of human traits to animals—and zoomorphism—the ascription of animal traits to humans (Gerbasi et al., 2008; Roberts, Plante, Gerbasi, & Reysen, in press). Like anime fans, furry fans often express their interest through artwork, writing, roleplaying, or wearing elaborate costumes (Plante,

Roberts, Reysen, & Gerbasi, 2014a, Plante et al., in press). Also similar to anime fans, furry fans are a stigmatized fan group (Plante, Roberts, Reysen, & Gerbasi, 2014b). As an illustration of this stigmatization, many furry fans report that they hide their furry identity from their friends, family, and coworkers for fear of negative reprisal (Mock, Plante, Reysen, & Gerbasi, 2013).

To provide further context for the present findings, we also investigated a second fan group: fantasy sport fans. Fantasy sport fans are sport enthusiasts who create and manage hypothetical teams comprised of real-world athletes. These managers then compete in fictitious leagues with fellow fantasy sport fans, the results of which are determined by the performance of the actual athletes. There are over 30 million fantasy sport fans worldwide and the industry generates billions of dollars in revenue (see Carlson, 2013). A majority of fantasy sport fans play fantasy football (American football) or baseball, however the list of fantasy sports (e.g., NASCAR, golf) continues to grow (see Billings & Rauhley, 2013). In general, the research examining fantasy sport fans examines motivations that predict fanship, fandom, and consumption behaviors (e.g., Lee, Seo, & Green, 2013). For example, fantasy sport fans (vs. traditional sport fans) are motivated to feel identified with being a fan (i.e., fanship) by entertainment, enjoyment, passing the time, and self-esteem (Billings & Rauhley, 2013). In contrast to furry fans, a fandom which is comparable to anime fans based on prior research, fantasy sport fans are predicted to be relatively distinct from anime fans, based on similar research showing that sport fans were seen by furry fans as being particularly distinct from themselves (Plante et al., in press).

To summarize, our goal is to test the veracity of existing stereotypes about anime fans by comparing the presence of stereotypical attitudes and behaviors across four samples: (1) a sample of anime fans, (2) a sample from a comparable fandom – furry fans, (3) a sample from a distinct fandom – fantasy sport fans, and (4) a sample from a non-fandom control group – undergraduate college students.

## **Present Study**

The purpose of the present study was to examine the veracity of existing stereotypes of anime fans. In prior research, Reysen and colleagues (in press) observed non-anime fans endorsing a variety of stereotypes about anime fans. In the present study we administered measures related to these stereotypes to anime fans, furry fans, and fantasy sport fans (see Table

1 for list of stereotypes). Additionally, we administered the same measures to undergraduate college students, excluding items specifically about fan interest. We then tested whether anime fans' responses to these questions verified the content of the stereotypes. Furthermore, the results of anime fans were compared to responses from a similar fan group (furry fans) and a dissimilar fan group (fantasy sport fans). Thus, the results can inform whether anime fans exhibit the stereotyped characteristics (e.g., introverted) and whether these characteristics are unique to anime fans (or if other fan groups exhibit the same characteristics). We did not have a priori predictions regarding which, if any, stereotypes would be consistent or inconsistent with those endorsed by non-anime fans. We did predict, however, that furry fans, being similar to anime fans, would be more likely than fantasy sport fans or college students to show a similar pattern of stereotype-consistent attitudes and behaviors as anime fans.

## **Method**

### *Participants and Procedures*

Participants were drawn from five separate samples. Anime fans included self-identified anime fans attending A-Kon 2014, a large, regional anime fan convention ( $N = 851$ , 53.1% men;  $M_{\text{age}} = 24.67$ ,  $SD = 7.25$ ; 68% White), and anime fans recruited online from popular anime forums ( $N = 2271$ , 73.9% men;  $M_{\text{age}} = 22.72$ ,  $SD = 6.32$ ; 72.9% White). Furry participants were recruited from at Anthrocon 2014, the world's largest furry convention ( $N = 912$ , 75.3% men;  $M_{\text{age}} = 26.29$ ,  $SD = 7.93$ ; 90.1% White). Self-identified fantasy sport fans were recruited through Amazon's Mechanical Turk ( $N = 386$ , 74.3% men;  $M_{\text{age}} = 31.66$ ,  $SD = 10.18$ ; 77.4% White). Finally, our college student sample was drawn from the undergraduate psychology participant pool at Texas A&M University-Commerce ( $N = 159$ , 81.1% women;  $M_{\text{age}} = 23.57$ ,  $SD = 8.69$ ; 60.4% White). As part of a larger survey, all participants completed items about themselves (e.g., personality, behaviors) and about their fan interest (e.g., degree of obsession with fan interest). For the majority of the results we collapsed across convention and online anime fan respondents. However, in some circumstances (e.g., number of men and women in the fandom) we also examine these samples separately. Unless noted otherwise, items were rated on a 7-point Likert-type response scale, from 1 = *strongly disagree* to 7 = *strongly agree*.

### *Materials*

**Demographics.** Participants completed four items regarding age, biological sex, current occupation, and current living arrangement. These items correspond to several of the existing stereotypes about anime fans: that anime fans are predominantly older males (i.e., 25+), currently residing with their parents, are attending college, and work in a computer-related field.

**Type of Anime Watched.** To assess the stereotypes that anime fans predominantly watch children’s cartoons or pornographic videos, participants completed three items (“The anime I often watch could be considered to be made for...”) referencing “children,” “adults (non-pornographic),” and “adults (pornographic).” For furry fans, the same items referenced “furry art/stories/video that I look at,” while for fantasy sport fans the items referenced “sport that I often watch.” These questions were not asked of the college sample.

**Stereotypical Behavior.** Participants completed items to assess the accuracy of six stereotypes about anime fan behavior (e.g., anime fans spend all their time watching anime). One item (“I spend all of my free time watching Anime”) assessed the stereotype that anime fans spend an inordinate amount of time watching anime. This item was changed to “I spend all my free time on furry related activities” for furry fans and to “I spend all of my free time playing fantasy sport” for fantasy sport fans. One item (“I spend a great deal of time playing video games”) assessed the stereotype that anime fans are computer gamers and was shown to all participants. One item (“I am easily overexcited about anime”) assessed the extent to which participants agreed that they were easily excited by fan-related content and was adjusted to read “I am easily overexcited about furies” for furry fans and “I am easily overexcited about fantasy sport” for fantasy sport fans. One item (“I can sometimes be obsessive about anime”) assessed participants’ self-identified obsession with their fan interest and was adjusted to read “I can sometimes be obsessive about furies” for furry fans and “I can sometimes be obsessive about fantasy sport” for fantasy sport fans. One item (“I participate in the anime community because of escape from everyday life”) assessed the extent to which anime fans engaged in their fan community for escapist reasons and was modified to read “I participate in the furry community because of escape from everyday life” for furry fans and “I participate in the fantasy sport community because of escape from everyday life” for fantasy sport fans. Lastly, one item (“I spend a great deal of time on the computer”) assessed the stereotype that anime fans spend too much time on the computer and was shown to all participants. Four items (spend time engaging

with fan interest, easily overexcited about fan interest, obsessive about fan interest, and escape as motivation for engaging in fan community) were not shown to the college student sample.

**Social Awkwardness.** To assess the stereotype that anime fans lack social skills, are socially awkward, or are socially awkward around non-anime fans, all participants completed modified measures related to these constructs. Two items (“I tend to be awkward in social situations” and “I tend to be socially unaware”) assessed participants’ social awkwardness ( $\alpha = .75$ ). Two items (“I act awkward around non-anime fans” and “I lack social skills when interacting with non-anime fans”) assessed participants’ perceived awkwardness specifically around non-fans ( $\alpha = .88$ ), and were modified to reference “non-furries” for furry fans and “non-fantasy sport fans” for fantasy sport fans. These items were not presented to the college student sample. Two items (“I sometimes find it hard to recognize irony and sarcasm” and “I sometimes find it difficult to read others’ emotions”) assessed participants’ felt lack of social skills ( $\alpha = .68$ ). Additionally, we included a measure of social anxiety (Fenigstein, Scheier, & Buss, 1975), a construct potentially related to social awkwardness. Four items (“It takes me time to overcome my shyness in new situations,” “I get embarrassed very easily,” “I don’t find it hard to talk to strangers” (reversed), and “Large groups make me nervous”) assessed participants’ felt social anxiety ( $\alpha = .77$ ).

**Friends.** To assess the stereotype that anime fans exclusively associate with small groups of fellow fans, participants completed two questions. The first question was adapted from prior research (Wang & Wellman, 2010), and asked the number of friends the participant had (“How many friends outside of your household do you have that you see or speak to at least once a week?”). The second question asked to specify the number of friends in that group who are also anime fans (“How many of the above friends are also anime fans?”). The question was modified to reference “furries” for furry fans and “fantasy sport fans” for fantasy sport fans. This question was not presented to the college student sample.

**Personality.** To test the veracity of the stereotype that anime fans are introverted, we adopted Gosling, Rentfrow, and Swann’s (2003) 10-item measure of the Big Five domains of personality. The measure contains two-item subscales assessing extraversion ( $\alpha = .71$ ), agreeableness ( $\alpha = .41$ ), conscientious ( $\alpha = .53$ ), emotional stability ( $\alpha = .65$ ), and openness to new experiences ( $\alpha = .42$ ).

**Nerds.** To assess whether, consistent with existing stereotypes, anime fans are self-identified nerds, participants completed two items (“I consider myself a nerd” and “I strongly

identify with nerds”) adapted from prior measures of ingroup identification (Reysen & Katzarska-Miller, 2013; Reysen, Katzarska-Miller, Nesbit, & Pierce, 2013) ( $\alpha = .88$ ).

**Sport.** Reysen et al. (in press) found that a stereotype of anime fans is that they do not play sports. To test whether anime fans play and like sports, participants were asked to list any sports they played (“Please list any sports that you play”) and rate one item (“I like sports”).

**Appearance.** To test stereotypes regarding the physical appearance of anime fans, participants rated items regarding complexion (“My complexion is rather pale”) and dark/grey color of clothing (“Most of my clothes are dark”). Additionally, participants indicated whether or not they wear glasses. Although cosplaying was not a stereotype observed in prior research (Reysen et al., in press), we also asked anime participants whether they participated in cosplay.

## Results

### *Demographics*

Stereotypes of anime fans suggest that they are older adults living with their parents, male, college students, and work in technology-related industries (Reysen et al., in press). We first examined whether the samples differed in age by conducting a one-way ANOVA. Anime fans ( $M = 23.25$ ,  $SD = 6.64$ ) did not differ significantly in age from undergraduate college students, but were younger than both furry fans and fantasy sport fans,  $F(3, 4574) = 171.11$ ,  $p < .001$ ,  $\eta_p^2 = .101$ . The observed percentage of males in the anime fandom was 68.2%, a number which we compared to an expected percentage of 49% (U.S. Census, 2011). A binomial test showed that there were proportionately more males in the anime fandom than in the U.S. population ( $p < .001$ ). Looking between the two sources of anime fans (A-Kon or online) the online sample of anime fans had significantly more males than the U.S. population ( $p < .001$ ), the A-Kon sample was more equal in terms of number of men and women, but still significant ( $p = .009$ ). Furry fans (75.3%) had significantly more males than anime fans ( $p < .001$ ) and the U.S. population ( $p < .001$ ). Fantasy sport fans (74.3%,) had more males than anime fans ( $p < .001$ ) and more than the U.S. population ( $p < .001$ ). A large percentage of anime (collapsing across A-Kon and online samples) fans indicated that they are currently college students (53.7%). Furry fans (24.2%) and fantasy sport fans (20.5%) were significantly less likely than anime fans to indicate being a college student ( $p < .001$ ). A small percentage of anime fans indicated working

in the technology industry (7.2%). Furry fans (12.9%) were significantly more likely than anime fans to work in a field related to technology ( $p < .001$ ), while fantasy sport fans (9.4%) were not ( $p = .067$ ). Of the anime fans who responded to the question regarding living arrangement ( $n = 851$ ), significantly more anime fans (44.8%) indicated that they currently lived with their parents than furry fans (36.1%,  $p < .001$ ). This question was not presented to fantasy sport or college student samples. Given the significant age differences between the different fandoms noted above, we decided to look specifically at fans 24 years of age or older. When we examined only fans 24 years of age or older, there was a large drop in the percentage of anime ( $n = 379$ , 26.6%) and furry fans ( $n = 515$ , 23.3%) living with parents. Furthermore, anime fans were significantly more likely to live with parents than furry fans ( $p = .049$ ). Thus, the stereotypes that anime fans are older adults, work in a technology-related field, or live with their parents were not supported. However, the stereotype that anime fans are likely to be male was supported, and the stereotype that anime fans are in college was somewhat supported.

### *Type of Anime Watched*

To assess the stereotypes that anime fans predominantly watch kids cartoons or pornographic anime, we conducted a MANOVA with fan group as the independent variable and type of fan material as the dependent variable. The omnibus test was significant, Wilks'  $\Lambda = .78$ ,  $F(3, 4414) = 193.70$ ,  $p < .001$ ,  $\eta_p^2 = .116$ . As shown in Table 2, furry fans were more likely than either anime or sport to consume fan material that was targeted for kids. Anime and sport (compared to furry fans) were more likely to consume content meant for adults (non-pornographic, but likely violent or containing obscene language). Furry fans were the most likely to endorse viewing/reading fan material that was pornographic, and anime fans were more likely to view pornographic content than fantasy sport fans. We also examined whether the means within each sample differed from the midpoint of the scale (i.e., 4) by conducting one-sample  $t$ -tests split by sample. All of the means displayed in Table 2 were significantly different from the midpoint. Thus, anime fans largely disagreed that the anime they watched was either meant for children or was pornographic, though they did agree that the anime they view tends to be intended for adults (non-pornographic).

### *Anime Fan Behaviors*

To examine fan behaviors (e.g., spend large amount of time doing fan activity) we conducted two MANOVAs with sample as the independent variable and the various behaviors as dependent variables. The first omnibus test (omitting college sample data), Wilks'  $\Lambda = .92$ ,  $F(4, 4413) = 48.69$ ,  $p < .001$ ,  $\eta_p^2 = .042$ , and second omnibus test (including college sample data) were both significant, Wilks'  $\Lambda = .84$ ,  $F(3, 4573) = 137.58$ ,  $p < .001$ ,  $\eta_p^2 = .083$ . Fantasy sport fans spent significantly less time participating in the fan activity than anime and furry fans (see Table 3). All fan groups reported means below the midpoint of the scale suggesting that they do not feel they spend a particularly large amount of time participating in the fan activity. Fantasy sport fans and college students reported spending significantly less time playing video games than anime fans and furry fans. Fantasy sport fans were less likely to agree that they are easily overexcited about their fan interest as compared to anime fans or furry fans. Anime fans were more likely than furry fans and fantasy sport fans to indicate that they can sometimes be obsessed with their fan interest. Furry fans were the most likely to agree that they participate in the fandom for escapist purposes, followed by anime and then fantasy sport fans. Anime fans were more likely to acknowledge spending a large amount of time on the computer than furry fans, fantasy sport fans, and students. Together, with the exception of spending a large amount of time participating in the fan activity, the  $t$ -tests (significant from midpoint of measure) suggest that anime fan behavior is consistent with existing stereotypes.

### *Socially Awkward*

To examine stereotypes regarding anime fans' social awkwardness we conducted a MANOVA (including student sample) and a one-way ANOVA (omitting the student sample), with sample as the independent variable and assessed constructs as dependent variables. The MANOVA omnibus test was significant, Wilks'  $\Lambda = .97$ ,  $F(3, 4572) = 16.65$ ,  $p < .001$ ,  $\eta_p^2 = .011$ . As shown in Table 4, anime fans expressed significantly more social anxiety than fantasy sport fans (but did not differ from furry fans and college students). Both anime and furry fans expressed greater social awkwardness than fantasy sport fans and students. Furthermore, all of the means were significantly below the midpoint of the measure, suggesting that participants disagree or do not endorse feeling socially awkward. Anime fans did not differ significantly from

furry fans and fantasy sport fans with respect to experiencing social awkwardness around non-fans. Anime fans also were found to disagree more than fantasy sport fans with the notion that they lacked social skills. Together, the results suggest that anime fans do not see themselves as socially awkward (relative to other fandoms). The one mean on social anxiety that was above the midpoint (i.e., 4) of the scale (which was significant) was only slightly about the midpoint (i.e.,  $M = 4.19$ ), and likely significant given the large sample size.

### *Friends*

To assess whether anime fans only associate with fellow fans, we asked the how many friends participants had and then how many are also fans. U.S. survey respondents (25 years of age or older) in 2007 reported to have a median of five friends ( $M = 11.3$ ) (Wang & Wellman, 2010). In the present sample anime fans reported a median of six friends ( $M = 8.99$ ,  $SD = 11.82$ ), furry fans reported a median of seven friends ( $M = 11.13$ ,  $SD = 13.84$ ), fantasy sport fans reported a median of five friends ( $M = 8.39$ ,  $SD = 17.89$ ), and college students reported a median of five friends ( $M = 7.72$ ,  $SD = 6.71$ ). Furry fans reported more friends compared to fantasy sport fans and college students; however, anime fans did not differ significantly from the other samples,  $F(3, 4574) = 8.42$ ,  $p < .001$ ,  $\eta_p^2 = .005$ . For anime fans, 51% of their friends were also fans of anime, as compared to furry fans, for whom 51.4% of their friends were also furry fans, and fantasy sport fans, for whom 51.1% of their friends were also fantasy sport fans (these did not differ significantly from one another,  $F(2, 4261) = 0.01$ ,  $p = .946$ ,  $\eta_p^2 < .001$ ). The results suggest that the social networks of anime fans are comparable in size to that of the average American, and, when compared to other fandoms – both similar and distinct – are no more likely to be comprised exclusively of other fans.

### *Personality*

To assess whether anime fans conform to stereotypes about being introverted, we conducted a MANOVA with the sample as the independent variable and the Big Five personality dimensions as the dependent variables. The omnibus test was significant, Wilks'  $\Lambda = .88$ ,  $F(5, 4570) = 40.25$ ,  $p < .001$ ,  $\eta_p^2 = .042$ . Consistent with the stereotype, anime fans did rate below the

midpoint on extraversion (i.e., they were more introverted), significantly more so than furry, fantasy sport, and student samples (see Table 5).

### *Nerds*

To assess whether anime fans are self-identified nerds, we conducted a one-way ANOVA with sample as the independent variable and identification with nerds as the dependent variable. Anime fans ( $M = 4.92$ ,  $SD = 1.70$ ) and furry fans ( $M = 4.95$ ,  $SD = 1.76$ ) did not significantly differ from one another, and were significantly more “nerdy” than fantasy sport fans ( $M = 3.84$ ,  $SD = 1.65$ ) and students ( $M = 3.68$ ,  $SD = 1.93$ ), who did not differ from one another,  $F(3, 4574) = 69.63$ ,  $p < .001$ ,  $\eta_p^2 = .044$ . Consistent with the stereotype, anime fans (and furry fans) scored significantly above the midpoint on the scale, while students were significantly below the midpoint of the scale.

### *Sport*

To assess whether anime fans play and/or like sports, we conducted two ANOVAs (owing to a large number of participants not answering the open-ended question). As shown in Table 6, anime fans did not differ from the other samples in the mean number of sports played. However, anime fans indicated that they do not like sports (below midpoint). Thus, the results are inconsistent with the stereotype that anime fans do not play sports, but are consistent with the stereotype that anime fans do not necessarily like sports.

### *Appearance*

To examine stereotypes regarding the physical appearance of anime fans – specifically the stereotype that anime fans have a pale complexion and wear dark clothing, we conducted a MANOVA with the sample as the independent variable and these items as dependent variables. The omnibus test was significant, Wilks'  $\Lambda = .98$ ,  $F(2, 4415) = 25.02$ ,  $p < .001$ ,  $\eta_p^2 = .011$ . As shown in Table 6, anime fans and furry fans somewhat agreed with statements regarding the paleness of their complexion as indicated by scores that did not differ significantly from the midpoint of the measure. In contrast, fantasy sport fans self-identified as significantly less pale in

complexion. When examining responses only from participants that indicated that their race or ethnicity is White a similar pattern of results was found. A univariate ANOVA showed that anime ( $M = 4.44$ ,  $SD = 2.01$ ) and furry fans ( $M = 4.20$ ,  $SD = 1.99$ ) do not differ significantly, but both were higher than fantasy sport fans ( $M = 3.29$ ,  $SD = 1.94$ ),  $F(2, 3351) = 44.62$ ,  $\eta_p^2 = .026$ . A one-sample  $t$ -test showed that the mean for White anime fans on this item was significantly above the midpoint of the scale,  $t(2233) = 10.31$ ,  $p < .001$ . Anime fans were less likely than furry fans to agree that their clothing was dark, though anime fans did agree with this statement more than fantasy sport fans. Further, 66% of the U.S. population wears corrective lenses (National Eye Institute, 2008). Splitting by sample, 56.2% of anime fans, 57.9% of furry fans, 42.6% of fantasy sport, and 59.7% of students reported wearing glasses. With the exception of college students ( $p = .058$ ), binomial tests show that these percentages are all significantly less than the percentage of the U.S. population that wears corrective lenses ( $p < .001$ ). Presumably the lower percentages are related to the young age of participants. Finally, we also assessed the proportion of anime fans who cosplayed. Splitting by anime sample, A-Kon participants were more likely to indicate having cosplayed (60.3%) than those responding to the online survey (24.7%) (binomial test,  $p < .001$ ). Thus, the stereotypes regarding anime fans' appearance were fully not supported. The one exception is that White anime fans did perceive themselves to be paler in complexion than fantasy sport fans.

## Discussion

The purpose of the present study was to test the consistency or inconsistency of prevalent stereotypes about anime fans. Of the 24 stereotypes tested, evidence strongly consistent with nine stereotypes was found, with two additional stereotypes (anime fans are college students, pale complexion) showing some consistency. Thus, less than half of the existing stereotypes about anime fans perpetuated in publications, online forums, and endorsed by non-anime fans were empirically validated. The results highlight the distortion between the perception of the anime fandom by outsiders and the actual actions, attitudes, and behaviors of anime fans.

## *Stereotypes Supported*

In the present research, we found evidence that anime fans, consistent with existing stereotypes, (1) are mostly male, (2) play a lot of video games, (3) are easily overexcited about anime, (4) can sometimes be obsessive about anime, (5) watch anime to escape from daily life, (6) spend a large amount of time on the computer, (7) are introverted, (8) are nerds, and (9) do not like sports. The stereotype that anime fans are college students was also somewhat supported: just over half of them were college students. Furthermore, the stereotype that anime fans are pale in complexion was somewhat supported: White anime fans they did rate their complexion as pale.

An interesting outcome of the study was finding a relatively equal number of males and females at an anime convention, but a disproportionate number of males in the online responses. One possible explanation is that women do not engage the fandom online. Indeed, the internet is perceived as a male domain (Reed, 2014), where sexual harassment against women is often observed (see Barak, 2005; Citron, 2009). Within video games, female avatars are in the minority, often sexualized, follow stereotypical gender roles, and can influence the players attitudes toward women (see Dill, Brown, & Collins, 2008). For example, women playing a sexualized avatar (vs. not sexualized) are more likely to objectify themselves (Fox, Bailenson, & Tricase, 2013). A second possible explanation is that female anime fans have different motivations to participate in the fandom (e.g., social interactions) that are best achieved at conventions rather than online. A third possible explanation is that our sampling procedure failed to reach online forums where women may be more prevalent. Further research is needed to determine the reason behind this discrepancy in engagement with the fandom.

In previous research, Reysen and colleagues (in press) found that the perception of anime fans as introverted led to a greater desire among non-anime fans to distance themselves from anime fans (an indicator of prejudice), while perceiving anime fans as detached from real life and socially awkward predicted general prejudice against anime fans. These findings are consistent with prior work by Cain (2012), which proposed that introverts are not afforded the positive outcomes of appearing extraverted. The present results are illuminating in light of these past findings, showing that anime fans are motivated to participate in the fandom, at least in part, to escape from everyday life. Further research is needed to examine whether this escape is connected to the view of anime fans as detached from real life.

Although the perception of anime fans as nerds was supported by the present data, we are unsure about the extent to which this contributes toward the prejudice toward anime fans. Indeed, the perception of nerds/geeks in general may be changing (e.g., social representations of nerds as positive in the mainstream media such as *The Big Bang Theory*), which may suggest that identifying as a nerd may not be a source of stigma for anime fans as it may have been. In contrast, social awkwardness and the perception that anime fans are socially awkward is associated with prejudice felt toward anime fans (Reysen et al., in press). Despite the prevalence of the stereotype that anime fans are socially awkward, however, the present results do not support this stereotype. This raises the question of why outsiders view anime fans as socially awkward, a question that future research may find fruitful to pursue.

### *Stereotypes Not Supported*

In the present study we tested four stereotypes that were not endorsed by participants in Reysen et al.'s (in press) research. In line with that research, three of those stereotypes (older adults, live with parents, and watch pornographic cartoons) were not supported. Thus, non-anime fans correctly perceived these as not stereotypical of anime fans. The notion that anime fans are watching pornographic cartoons (e.g., tentacle porn) does not appear to be a prevailing stereotype among non-anime fans, nor do anime fans agree that pornographic cartoons represent the content they regularly view. Participants in Reysen et al.'s (in press) research showed that non-anime fans do not perceive anime fans as obsessive (although that result was marginally significant), however the present results show that anime fans view themselves as sometimes obsessive. As listed in Table 1, there are a number of stereotypes that are not consistent with the obtained results. These point to the misperceptions that many non-anime fans have of anime fans.

### **Who Are Anime Fans?**

Beyond showing what stereotypes are consistent with the attitudes and actions of anime fans, the present results also inform what attitudes and actions are reflective of the average anime fan. Anime fans are, on average, young, male, often college students. Anime fans watch adult (non-pornographic) anime, often to escape from some aspect of their daily life, and they can

sometimes be obsessive and easily excited about their interest. Anime fans play a good deal of video games and spend a good deal of time on the computer. However, they do engage in sports. Although anime fans are nerdy and introverted (which is not necessarily bad: Cain, 2012), they possess social skills, are not socially awkward, and have average-sized networks of friends that include many non-anime fans.

### **Comparisons between Anime, Furry, and Fantasy Sport Fans**

We predicted that anime fans and furry fans would show similar responses as compared to fantasy sport fans. Anime and furry fans both appreciate art related to their interest, participate in costuming, and are stigmatized by non-fans. This prediction was largely supported by the findings. Despite differences in the demographics of the fandoms and the type of material consumed (e.g., furry fans were more likely to watch kids cartoons), anime and furry fans showed many similarities while sport fans differed. For example, anime and furry fans did not differ significantly with respect to time spent engaging the fan interest, playing an overabundance of video games, being easily overexcited about the fan interest, not being socially awkward or lacking social skills, similar sized friendship network, identification with nerds, and wearing glasses (while fantasy sport fans were significantly different on the majority of those measures). The two measures in which anime fans showed the largest discrepancy from furry and fantasy sport fans included introversion and obsession regarding the fan interest. However, despite these two outcomes, the general trend showed anime fans as relatively similar to furry fans, and relatively dissimilar from fantasy sport fans.

Reysen and Branscombe (2010) defined fans as enthusiastic, ardent, and loyal admirers of an interest, and suggested that fans are relatively similar regardless of the object of interest. In other words, anime fans are passionate about anime/manga, furry fans are passionate about anthropomorphic art and cartoons, and fantasy sport fans are passionate about fantasy sport. Thus, the underlying psychological mechanisms that explain fan behavior are similar. So, why would we find differences between anime/furry fans and fantasy sport fans? From a social identity perspective (Tajfel & Turner, 1979; Turner et al., 1987) when an identity is salient, greater identification with the group predicts greater adherence to the group content. The prototypical content associated with social categories are “fuzzy” interrelated sets of characteristics (or stereotypes) that highlight intragroup similarities and intergroup differences in

any given context (Hogg & Smith, 2007). Interpreting the results of the present research, we suggest that the prototypical or stereotypical content of anime fans is more similar to furry fans than the group content associated with fantasy sport fans. Highly identified anime fans may act more introverted and obsessive when an anime identity is salient, while highly identified furry fans may act more open to new experiences and tolerant toward others when the furry identity is salient. However, regardless the content, greater identification should predict greater adherence to the group content when the identity is salient. Stated differently, although the prototypical content may differ, the underlying mechanism to explain fan behavior remains the same.

## **Limitations**

As with any research, there are limitations to consider when interpreting the results of the present study. First, there exists a wealth of potential methodological and participant biases (e.g., socially desirable responding) that may have influenced the results (see Judd & Park, 1993; Ryan, 2002). Caution is always warranted when interpreting or utilizing results regarding stereotype consistency or accuracy. Second, the four samples used in the present research had varying sample sizes. This may have influenced some of reported results. This should be taken into consideration when interpreting the results. Third, the results are quasi-experimental. Future research may overcome this limitation by utilizing a social identity paradigm, priming either an anime fan identity or non-anime identity (e.g., student) to experimentally test the stereotypical characteristics related to anime fandom. Fourth, the college student sample included a larger number of women than men. Future research may attempt to obtain more males for a more comparable non-fan sample.

## **Conclusion**

Little research has empirically examined the veracity of stereotypes in fan groups. Even less research has examined the anime fandom, in particular. The present results attempt to address both of these shortcomings in the literature, showing that many of the stereotypes of anime fans are inconsistent with the actual beliefs and behaviors of anime fans. The present results provide a picture of the demographics, behaviors, traits, and attitudes of average anime fans, placing them within the context of similar and dissimilar fandoms. In general, the results tended to paint anime fans as normal individuals who simply appreciate and are enthusiastic about anime. Given the ubiquity of fan interests in everyday life, further research into the impact

of fan activity on the perception of fans, and the reciprocal influence of stereotypes of fandoms on fans is needed.

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Table 1  
*Anime Fan Stereotypes Compared with Results*

| Stereotype                                  | Outcome             |
|---|---------------------|
| Are older adults                            | Inconsistent        |
| Are male                                    | Consistent          |
| Are college students                        | Somewhat consistent |
| Work in the tech industry                   | Inconsistent        |
| Live with their parents                     | Inconsistent        |
| Watch kids cartoons                         | Inconsistent        |
| Watch pornographic cartoons                 | Inconsistent        |
| Spend a large amount of time watching anime | Inconsistent        |
| Play too many video games                   | Consistent          |
| Easily overexcited about anime              | Consistent          |
| Are obsessed                                | Consistent          |
| Watch anime to escape                       | Consistent          |
| Spend time on computer                      | Consistent          |
| Socially awkward                            | Inconsistent        |
| Awkward around non-fans                     | Inconsistent        |
| Lack social skills                          | Inconsistent        |
| Small group of anime fan friends            | Inconsistent        |
| Introverted                                 | Consistent          |
| Geeks and nerds                             | Consistent          |
| Do not play sports                          | Inconsistent        |
| Do not like sports                          | Consistent          |
| Pale complexion                             | Somewhat consistent |
| Dark clothing                               | Inconsistent        |
| Wear glasses                                | Inconsistent        |

Table 2

*Means (Standard Deviations) for Items Regarding Targeted Audience of Fan Material*

| Type                      | Anime                    | Furry                    | Sport                    | <i>F</i> -value | <i>p</i> -value | $\eta_p^2$ |
|---------------------------|--------------------------|--------------------------|--------------------------|-----------------|-----------------|------------|
| Children                  | 3.80 (1.67) <sub>a</sub> | 4.26 (1.93) <sub>b</sub> | 3.73 (2.09) <sub>a</sub> | 26.46           | < .001          | .012       |
| Adults (non-pornographic) | 6.02 (1.08) <sub>a</sub> | 5.53 (1.44) <sub>b</sub> | 5.99 (1.40) <sub>a</sub> | 61.65           | < .001          | .027       |
| Adults (pornographic)     | 2.79 (1.91) <sub>a</sub> | 4.74 (2.10) <sub>b</sub> | 1.69 (1.43) <sub>c</sub> | 482.04          | < .001          | .179       |

*Note.* Means with different subscripts are significantly different (Tukey's post hoc comparison). 7-point Likert-type scale, from 1 = *strongly disagree* to 7 = *strongly agree*. Within each fan group, all of the means are significantly different from the midpoint of the scale (i.e., 4).

Table 3  
*Means (Standard Deviations) for Items Regarding Fan Behaviors*

| Variable             | Anime                    | Furry                     | Sport                     | Student                  | <i>F</i> -value | <i>p</i> -value | $\eta_p^2$ |
|----------------------|--------------------------|---------------------------|---------------------------|--------------------------|-----------------|-----------------|------------|
| Time on fan activity | 3.49 (1.70) <sub>a</sub> | 3.55 (1.64) <sub>a</sub>  | 2.48 (1.68) <sub>b</sub>  | --                       | 65.65           | < .001          | .029       |
| Play video games     | 4.80 (1.93) <sub>a</sub> | 4.69 (2.02) <sub>a</sub>  | 3.45 (1.86) <sub>b</sub>  | 2.35 (1.84) <sub>c</sub> | 128.75          | < .001          | .078       |
| Easily overexcited   | 4.25 (1.86) <sub>a</sub> | 4.11 (1.88) <sub>a*</sub> | 3.49 (1.85) <sub>b</sub>  | --                       | 28.63           | < .001          | .013       |
| Are obsessed         | 4.55 (1.81) <sub>a</sub> | 3.99 (1.85) <sub>b*</sub> | 3.85 (1.89) <sub>b*</sub> | --                       | 50.14           | < .001          | .022       |
| Escape               | 4.99 (1.90) <sub>a</sub> | 5.64 (1.54) <sub>b</sub>  | 4.42 (1.67) <sub>c</sub>  | --                       | 73.08           | < .001          | .032       |
| Time on computer     | 6.32 (1.16) <sub>a</sub> | 5.87 (1.47) <sub>b</sub>  | 5.02 (1.70) <sub>c</sub>  | 4.28 (1.73) <sub>d</sub> | 229.51          | < .001          | .131       |

*Note.* Means with different subscripts are significantly different (Tukey's post hoc comparison). \* indicates that the mean is not significantly different from midpoint of scale (i.e., 4), otherwise the mean is different from midpoint ( $p < .05$ ). 7-point Likert-type scale, from 1 = *strongly disagree* to 7 = *strongly agree*.

Table 4  
*Means (Standard Deviations) for Items Regarding Social Awkwardness*

| Variable           | Anime                     | Furry                      | Sport                    | Student                   | <i>F</i> -value | <i>p</i> -value | $\eta_p^2$ |
|--------------------|---------------------------|----------------------------|--------------------------|---------------------------|-----------------|-----------------|------------|
| Social Anxiety     | 4.19 (1.47) <sub>a</sub>  | 4.00 (1.46) <sub>ab*</sub> | 3.78 (1.38) <sub>b</sub> | 4.15 (1.33) <sub>a*</sub> | 11.44           | < .001          | .007       |
| Social Awkwardness | 3.79 (1.63) <sub>a</sub>  | 3.68 (1.63) <sub>a</sub>   | 3.27 (1.55) <sub>b</sub> | 3.35 (1.51) <sub>b</sub>  | 14.73           | < .001          | .010       |
| Awkward Non-Fans   | 2.41 (1.65) <sub>ab</sub> | 2.57 (1.70) <sub>a</sub>   | 2.32 (1.56) <sub>b</sub> | --                        | 4.36            | .013            | .002       |
| Lack Social Skills | 2.82 (1.50) <sub>a</sub>  | 3.10 (1.64) <sub>ab</sub>  | 3.14 (1.54) <sub>b</sub> | 2.85 (1.38) <sub>a</sub>  | 11.21           | < .001          | .007       |

*Note.* Means with different subscripts are significantly different (Tukey's post hoc comparison). \* indicates that the mean is not significantly different from midpoint of scale (i.e., 4), otherwise the mean is different from midpoint ( $p < .05$ ). 7-point Likert-type scale, from 1 = *strongly disagree* to 7 = *strongly agree*.

Table 5  
*Means (Standard Deviations) for Items Regarding Personality*

| Variable            | Anime                     | Furry                     | Sport                     | Student                   | <i>F</i> -value | <i>p</i> -value | $\eta_p^2$ |
|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------|-----------------|------------|
| Extraversion        | 3.36 (1.54) <sub>a</sub>  | 3.93 (1.58) <sub>b*</sub> | 4.11 (1.43) <sub>b*</sub> | 4.12 (1.47) <sub>b*</sub> | 59.30           | < .001          | .037       |
| Agreeableness       | 4.58 (1.29) <sub>a</sub>  | 5.07 (1.23) <sub>b</sub>  | 4.96 (1.14) <sub>b</sub>  | 4.97 (1.07) <sub>b</sub>  | 43.90           | < .001          | .028       |
| Conscientiousness   | 4.57 (1.37) <sub>a</sub>  | 4.97 (1.28) <sub>b</sub>  | 5.15 (1.24) <sub>b</sub>  | 5.45 (1.13) <sub>c</sub>  | 51.89           | < .001          | .033       |
| Emotional Stability | 4.73 (1.44) <sub>ab</sub> | 4.62 (1.42) <sub>a</sub>  | 4.96 (1.39) <sub>b</sub>  | 4.59 (1.24) <sub>a</sub>  | 5.36            | .001            | .004       |
| Openness            | 5.10 (1.24) <sub>a</sub>  | 5.63 (1.08) <sub>b</sub>  | 4.87 (1.16) <sub>c</sub>  | 5.03 (1.14) <sub>ac</sub> | 57.39           | < .001          | .036       |

*Note.* Means with different subscripts are significantly different (Tukey's post hoc comparison). \* indicates that the mean is not significantly different from midpoint of scale (i.e., 4), otherwise the mean is different from midpoint ( $p < .05$ ). 7-point Likert-type scale, from 1 = *strongly disagree* to 7 = *strongly agree*.

Table 6  
*Means (Standard Deviations) for Items Regarding Sport and Appearance*

| Variable          | Anime                     | Furry                     | Sport                    | Student                  | F-value | p-value | $\eta_p^2$ |
|-------------------|---------------------------|---------------------------|--------------------------|--------------------------|---------|---------|------------|
| Number Sport Play | 1.39 (1.42) <sub>ab</sub> | 1.10 (1.30) <sub>b</sub>  | 1.68 (1.25) <sub>a</sub> | 1.41 (1.21) <sub>a</sub> | 13.22   | < .001  | .013       |
| Like Sport        | 3.73 (1.99) <sub>a</sub>  | 3.25 (1.94) <sub>b</sub>  | 5.83 (1.38) <sub>c</sub> | 4.70 (1.83) <sub>d</sub> | 179.15  | < .001  | .105       |
| Pale Complexion   | 3.97 (2.11) <sub>a*</sub> | 4.09 (2.03) <sub>a*</sub> | 3.07 (1.95) <sub>b</sub> | --                       | 36.12   | < .001  | .016       |
| Dark Clothing     | 3.79 (2.05) <sub>a</sub>  | 4.09 (2.03) <sub>b*</sub> | 3.32 (1.93) <sub>c</sub> | --                       | 19.85   | < .001  | .009       |

*Note.* Means with different subscripts are significantly different (Tukey's post hoc comparison). \* indicates that the mean is not significantly different from midpoint of scale (i.e., 4), otherwise the mean is different from midpoint ( $p < .05$ ). Some participants did not respond to the number of sports item (the displayed data is from anime  $n = 2014$ , furry  $n = 566$ , sport  $n = 342$ , student  $n = 104$ ).