# Ingroup Bias and Ingroup Projection in the Furry Fandom

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# Abstract

In two studies, we examine ingroup favoritism within the furry community. Furry fans construct personas ("fursonas") that are often related to a species of animal (e.g., fox, wolf). In Study 1, furries were found to rate their fursona species more favorably than other species. In Study 2, we examined whether the ingroup projection model may aid in understanding this ingroup species bias. Participants' ratings of prototypicality of their species within the fandom was associated with greater favoritism of one's species. A serial mediation model showed that identification with the fursona and perceived benefits of one's fursona mediated the association between ingroup projection and ingroup species bias.

Keywords: furry, ingroup bias, ingroup favoritism, social identity, ingroup projection

# 1. Introduction

Social Identity Theory (SIT) states that people naturally categorize themselves and others into groups (Tajfel & Turner, 1979). By making favorable intergroup comparisons, SIT argues, people create positive, distinct social identities that enhance their self-esteem (Tajfel & Turner, 1979). Three decades of SIT research has shown that people routinely exhibit preferential treatment toward ingroup members (Brewer, 1999; Hewstone, Rubin, & Willis, 2002). Such favorable comparisons include ingroup bias—preferentially favoring ingroup members and/or derogating outgroup members—which enhances the positivity of one's ingroup (Aberson, Healy, & Romero, 2000). Presently, we examine ingroup bias in the context of members of a leisure group.

# 1.1 Fan Ingroup Bias

Ingroup favoritism ranges from biased perceptions of ingroup members to more positive behavior toward ingroup members. This variety of ingroup favoritism has been documented in numerous real-world groups, even when those groups represent seemingly trivial leisure-based social identities, such as one's fan group identity. In terms of biased perception, sport fans evaluated ingroup fans more favorably (e.g., well behaved, demonstrate good sportsmanship) than fans of rival teams (Wann & Grieve, 2005), trusted fellow fans more than fans of rival teams (Wann et al., 2012), and even saw ingroup fans as having more human emotions than fans of a rival team (Gaunt, Sindic, & Leyens, 2005). These biases in fan perception have even been found in children as young as 5 years old, who evaluated ingroup soccer fans more positively than outgroup fans (Abrams, Rutland, & Cameron, 2003). Studies of biased fan behavior show similar effects, with soccer fans more likely to help fans of the same team than fans of a rival team in an emergency situation (Levine, Prosser, Evans, & Reicher, 2005; see also Reysen & Levine, 2014), and fans contributing more to ingroup charities than to charities related to outgroup teams (Platow et al., 1999). Not limited to positive behavior, sport fans also punish a fellow fan less harshly than an outgroup fan for violating norms (Schiller, Baumgartner, & Knoch, 2014).

Although the majority of fan research in psychology has focused on sport fans (Reysen & Branscombe, 2010), similar ingroup biases have also been demonstrated in other fandoms. For example, fans of specific music genres evaluate fans of similar genres more positively and allocate more rewards to them than fans of different musical genres (Lonsdale & North, 2009; North & Hargreaves, 1999). Despite the fact that a growing number of researchers have begun to examine ingroup bias effects in non-sport fandoms, there nevertheless remains a need

to test the generalizability of these effects to diverse fan groups. It is for this reason that we chose to study furries, described later.

## 1.2 Ingroup Projection Model

Although various motivations have been proposed to explain ingroup bias (e.g., self-enhancement and collective action, Scheepers, Spears, Doosje, & Manstead, 2003), in the present paper we focus on ingroup projection. Building on self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), which states that that subgroups compare themselves to outgroups by referencing a superordinate group, the ingroup projection model (Mummendev & Wenzel, 1999) posits that subgroups see their ingroup as more prototypical of the superordinate category than the outgroup. Whether or not a group is perceived as being prototypical of a category label is important, as members of non-prototypical groups may be targeted by prejudice and discrimination (see Devos & Mohamed, 2014). For example, members of fan groups that are not prototypical of the category "fan" (e.g., Barbie and stamp collectors) experience greater prejudice than members of more prototypical fan groups (e.g., basketball and football) (Revsen & Shaw, in press). Applying the ingroup projection model, those who view the superordinate group positively and who are psychologically connected to their subgroup are likely to view their subgroup as being prototypical of the superordinate category, leading to greater intergroup bias (Waldzus, Mummendey, Wenzel, & Weber, 2003). Furthermore, by projecting positive ingroup traits onto the superordinate category, ingroup members obtain a positive, yet distinct social identity (a key tenet of social identity theory), though it comes at the cost of stigmatizing outgroup members, who are perceived as being non-prototypical of the superordinate category (see Wenzel, Mummendey, & Waldzus, 2007).

The ingroup projection model, which attempts to explain the motivational factors underlying intergroup biases, has largely focused on the negative outcomes of ingroup projection for outgroup members. For example, Kessler and colleagues (2010) examined Germans' prejudice toward immigrants. In their study, Germans identified with both the subgroup (native Germans) and the superordinate group (people who live in Germany). The perception that their subgroup was prototypical of the superordinate category was correlated with various measures of prejudice toward immigrants (e.g., blatant prejudice, social distance). In other research, the perceived legitimacy of status differences between the ingroup and outgroup was found to mediate the relationship between perceived ingroup prototypicality and negative behaviors (Reese, Berthold, & Steffens, 2012) and attitudes (Weber, Mummendey, & Waldzus, 2002) toward the outgroup.

While research has shown that ingroup projection underlies negative evaluations and behavior toward outgroup members, a paucity of research has focused on more positive aspects of ingroup projection. For example, ingroup projection has been found to be associated with positive evaluations of the ingroup (Ng Tseung-Wong & Verkuyten, 2010), suggesting that, negative outgroup evaluations aside, ingroup projection is beneficial for ingroup members. In the present research, we expand upon prior ingroup projection research by focusing on ingroup bias in a fan group: the furry community.

## 1.3 Furry Fandom

Furry fans, also known as furries, are individuals with an interest in anthropomorphism (ascription of human traits to animals) and zoomorphism (ascription of animal traits to humans; Gerbasi et al., 2008; Plante et al., 2015). The community consists of artists, costumers (who wear mascot-like costumes called fursuits), writers, musicians, and fans of anthropomorphic writing and artwork (Plante, Roberts, Reysen, & Gerbasi, 2014a). Furries, far from a homogeneous group, are diverse, expressing their interest in anthropomorphism through roleplaying, writing, fursuit construction, and anthropomorphic art (Mock, Plante, Reysen, & Gerbasi, 2013; Plante, Roberts, Reysen, & Gerbasi, 2014b). Perhaps most important for the present research, most furries construct elaborate, animal-themed, alternate identities (i.e., fursonas) that they use to represent themselves to others in the fandom (Roberts, Plante, Gerbasi, & Reysen, 2015).

More than 95% of furries report having a fursona (Plante, Roberts, Reysen, & Gerbasi, 2015), which usually consists of a species of animal or a hybrid of several animals (e.g., wolf, fox/wolf hybrid) coupled with a name that differs from the fan's name given name. Some furries construct elaborate histories for the character, assign personality traits, and specify the colors and physical characteristics of the fursona. Furries interact with other furries as their fursona, both online, with the fursona as an avatar, and at local gatherings and large-scale conventions, where furries may display their fursona on a badge or, in some cases, by wearing a fursuit. Far from trivial, fursonas are significant and meaningful to most furries, who strongly identify with their fursonas and construe them as idealized versions of themselves (e.g., confident, outgoing) that they can draw upon in everyday life (Roberts et al., 2015).

Given the importance of furries' fursonas, we suspect that furries may show ingroup favoritism for one's fursona species. For example, furries with a fox-based fursona may evaluate foxes more favorably than other species, such as wolves. While there has been little research examining ingroup favoritism as an outcome of ingroup projection, the research which has been done (e.g., Ng Tseung-Wong & Verkuyten, 2010) leads us to believe that, if fursona species favoritism does exist in the fandom, the perceived prototypicality of one's fursona species in the furry fandom may explain this phenomenon. And, given that fursonas have been found to be a source of resilience for furries facing difficult situations (Roberts et al., 2015), furries' connection to their fursona and perceived benefits afforded to them by their fursonas may mediate the relationship between species prototypicality in the fandom and ingroup bias.

Researchers examining the ingroup projection model find that group members that strongly identify with both the subgroup and superordinate group express the highest degree of ingroup projection (see Wenzel et al., 2007). Thus, identification in ingroup projection research is typically measured to check that both groups relevant to participants (e.g., Waldzus, Mummendey, & Wenzel, 2005). Identification with the subgroup may also be an outcome of ingroup projection (Adelman, 2010). Following social identity theory (Tajfel & Turner, 1979), individuals desire to belong to positively distinct groups. Identification with one's subgroup may reflect a positive evaluation of one's group that is highly prototypical of the superordinate category. In other words, perceiving one's subgroup as prototypical may predict a stronger felt connection with the group. Prior research shows that legitimization mediates the association between prototypicality and outgroup derogation (e.g., Reese, Berthold, & Steffens, 2012; Weber, Mummendey, & Waldzus, 2002). Perceiving the benefits of one's subgroup may reflect an alternative manner of expressing the legitimacy of the superiority of one's subgroup. In the present research we aim to test a model with connection to one's fursona (subgroup) and perceived benefits of one's fursona as mediators of the relationship between ingroup projection and ingroup bias.

#### 1.4 Overview of Present Studies

The purpose of the present research is to test the existence of species favoritism in the furry fandom and, if it exists, to explain this favoritism through a model of ingroup projection. In Study 1, furries evaluated the presence of positive characteristics in their fursona species and in other popular species in the furry fandom. Based on prior research showing ingroup bias in various groups (see Brewer, 1999; Hewstone et al., 2002), including fan groups (e.g., Levine et al., 2005; North & Hargreaves, 1999), we predicted that furries would rate their fursona species more positively than other species in the fandom. In Study 2, furries rated their identification with their subgroup (fursona species group) and with the superordinate group (the furry fandom). In addition, participants rated the perceived prototypicality of their species in the fandom (ingroup projection), rated the functionality of their fursona (e.g., benefits it provided), and completed a measure of ingroup bias (species favoritism). We predicted that ingroup projection would be positively associated with ingroup species favoritism. Moreover, analogous to the way legitimization mediated the association between ingroup projection and outgroup derogation in prior research, we predicted that a felt connection to one's fursona species and the perceived functionality of one's fursona would mediate this association between ingroup projection and ingroup species favoritism. Put other way, endorsing the functional benefits of one's fursona legitimizes the tendency to view one's ingroup species favorably.

#### 2. Study 1

The purpose of Study 1 is to test for the existence of fursona species favoritism in furries. We predict, in line with the large body of research on ingroup favoritism in fans, that furries will exhibit ingroup favoritism toward their fursona species.

#### 2.1 Participants and Procedure

Participants (N = 2098, 84.9% male;  $M_{age} = 22.90$ , SD = 5.74) included self-identified furries solicited from a number of furry-themed art and social media websites. As part of a longer online survey of the furry fandom, participants indicated their fursona species and rated 10 of the most popular species in the fandom in terms of their perceived sociability, fun-loving nature, and in terms of how admirable they were.

#### 2.2 Measures

#### 2.2.1 Fursona Species

Participants indicated their fursona species at the beginning of the survey in an open-ended fashion. Responses were coded for whether the fursona species fell into one of 10 popular species categories: wolf (n = 555), fox (n = 468), dragon (n = 314), dog (n = 270), house cat (n = 183), tiger (n = 107), rabbit (n = 73), lion (n = 58), bear (n = 36), mouse (n = 34). Only participants with a fursona that fell into one of these species categories were

included in the present study. If the participant indicated a hybrid fursona (e.g., fox/wolf), then the first species listed was coded as the participant's fursona species (e.g., fox).

## 2.2.2 Ingroup Bias

Participants rated 10 non-human animal species (wolves, foxes, lions, tigers, dogs, house cats, dragons, rabbits, bears, mice) on the degree to which the species could be described as "sociable", "fun-loving", and "admirable" on a 7-point Likert-type scale which ranged from 1 = not at all to 7 = extremely well. Ratings for the species matching participants' fursona constituted our measure of ingroup evaluation, while ratings of all other species averaged together constituted our measure of outgroup species rating.

# 2.3 Results and Discussion

To examine whether furry fans rate their fursona species more positively than other species, we conducted a series of repeated-measures ANOVAs. Within-subjects tests showed that participants rated their fursona species as more sociable (M = 5.21, SD = 1.70) than other species (M = 4.35, SD = 0.79), F(1, 2097) = 491.69, p < .001,  $\eta_p^2 = .19$ , more fun-loving (M = 5.57, SD = 1.46) than other species (M = 4.52, SD = 0.85), F(1, 2097) = 989.96, p < .001,  $\eta_p^2 = .32$ , and more admirable (M = 5.93, SD = 1.30) than other species (M = 4.41, SD = 0.92), F(1, 2097) = 2391.37, p < .001,  $\eta_p^2 = .53$ . In effect, across three different positive dimensions, furry fans exhibited an ingroup bias such that their fursona species was seen as more positive than other species in the fandom. To examine whether ingroup projection may underlie this observed ingroup species favoritism, we conducted a second study.

# 3. Study 2

The purpose of Study 2 is to examine ingroup projection as a possible mechanism underlying the ingroup species bias observed in Study 1. We predict that there will be a positive association between ingroup projection and ingroup species bias analogous to the findings of existing ingroup projection research. Moreover, we predict, in a model analogous to the legitimization mediation model tested in prior research, that species identification and the perceived functionality of one's fursona will mediate the relationship between ingroup projection and ingroup species bias.

## 3.1 Participants and Procedure

Participants (N = 214, 79% male; 82.7% White;  $M_{age} = 27.78$ , SD = 8.79) included self-identified furries recruited to complete a survey about furries while attending a regional furry convention in Dallas, TX. As part of a larger study examining the furry fandom, participants completed measures of identification with their fursona species, identification with the furry community, ingroup projection, perceived benefits of one's fursona, and ingroup species bias. All measures utilized a 7-point Likert-type scale, which ranged from 1 = strongly disagree to 7 = strongly agree.

## 3.2 Measures

## 3.2.1 Identification

Three items ("I am emotionally connected to my fursona species", "I strongly identify with my fursona species", and "My fursona species is part of me") were adapted from prior research (Reysen & Branscombe, 2010) and were combined to assess furries' identification with their fursona species ( $\alpha = .89$ ). Three items ("I strongly identify with other furries in the furry community", "I am glad to be a member of the furry community", and "I see myself as a member of the furry community") were adapted from prior research (Doosje, Ellemers, & Spears, 1995; Reysen, Katzarska-Miller, Nesbit, & Pierce, 2013) to assess identification with the furry community ( $\alpha = .84$ ).

## 3.2.2 Ingroup Projection

Three items ("Furries who identify with my species are prototypical of furries in general", "I feel that furries (in general) possess characteristics that are prototypical of my species", and "Furries who identify with my species are more prototypical of furries in general than are other species") were adapted from prior research (Adelman, 2010) and were combined to assess subgroup projection onto the superordinate group ( $\alpha = .80$ ).

## 3.2.3 Fursona Benefits

We constructed six items ("My fursona lets me try out a different way of being", "My fursona lets me express parts of myself that I often have to hide", "My fursona allows me to 'take a break' from being judged", "My fursona helps me to be more of the person I wish I were", "My fursona allows me to become greater and better

than myself", "My fursona has helped me to meet people I couldn't have met otherwise") to assess the perceived functions of furries' fursonas ( $\alpha = .88$ ).

#### 3.2.4 Species Bias

Two items ("My species is better than other species in the furry fandom" and "Furries who identify with my species do more to help the furry fandom than people who identify with other species") were constructed to assess participants' endorsement of subgroup bias ( $\alpha = .67$ ).

# 3.3 Results and Discussion

## 3.3.1 Preliminary Analyses

We first examined the correlations between the assessed variables. As shown in Table 1, all of the variables were positively correlated with one another with the exception that ingroup species bias was not significantly related to species identification and furry fandom identification. The ingroup projection model notes that both the subgroup and superordinate group should be relevant to participants (Waldzus et al., 2003). One way to check the relevance and importance of the groups under investigation is to ensure that the mean rating of identification with both the subgroup and the superordinate group is above the midpoint of the scale (Kessler et al., 2010; Waldzus et al., 2005). Testing this, we found that identification with one's fursona species, t(213) = 13.49, p < .001, d = 1.85, and identification with the furry community, t(213) = 19.71, p < .001, d = 2.70, were both significantly above the midpoint of the scale.

Table 1. Correlations, means (Standard Deviation) between assessed variables

| Variable                    | 1     | 2     | 3     | 4     | 5   | Mean (SD)   |
|-----------------------------|-------|-------|-------|-------|-----|-------------|
| 1. Species Identification   | 1.0   |       |       |       |     | 5.43 (1.55) |
| 2. Community Identification | .38** | 1.0   |       |       |     | 5.72 (1.28) |
| 3. Ingroup Projection       | .29** | .26** | 1.0   |       |     | 3.73 (1.31) |
| 4. Fursona Benefits         | .44** | .43** | .36** | 1.0   |     | 5.13 (1.57) |
| 5. Species Bias             | .13   | 08    | .18** | .23** | 1.0 | 2.95 (1.73) |

*Note*. \*\* p < .01. 7-point Likert-type scale, 1 = strongly disagree to 7 = strongly agree.

## 3.3.2 Serial Mediation

A hierarchical linear regression showed that ingroup projection predicted greater ingroup bias (see Table 2, Step 1). However, when the mediators were included in the analysis, the association between ingroup projection and ingroup bias was no longer significant (see Step 2), while fursona benefits was a significant predictor.

Table 2. Unstandardized coefficients for regression showing association of ingroup projection, species identification, and fursona benefits with ingroup bias

|                        | Step 1   |     |        | Step 2   |     |       |  |
|------------------------|----------|-----|--------|----------|-----|-------|--|
| Variable               | В        | SE  | t      | В        | SE  | t     |  |
| Ingroup Projection     | .24      | .09 | 2.62** | .14      | .10 | 1.49  |  |
| Species Identification |          |     |        | .02      | .08 | 0.02  |  |
| Fursona Benefits       |          |     |        | .20      | .09 | 2.32* |  |
| $R^2$ Change           | .03      |     |        | .03      |     |       |  |
| F Change               | 6.86**   |     |        | 3.47*    |     |       |  |
| <i>df</i> Change       | (1, 212) |     |        | (2, 210) |     |       |  |

*Note*. \* *p* < .05, \*\* *p* < .01.

To examine the predicted serial mediation model (i.e., that ingroup projection would predict species identification, which, in turn, would predict fursona benefits which, itself, would predict ingroup bias) we used

the PROCESS SPSS macro, to create bootstrap-generated (20,000 iterations) 95% confidence intervals estimating the effect of each pathway in the model (Hayes, 2013). Significance of pathways is inferred through the non-inclusion of zero in the 95% confidence interval estimating each effect size. The total effect (i.e., association between ingroup projection and ingroup bias) and direct effect (i.e., association between ingroup projection and ingroup bias) and direct effect (i.e., association between ingroup projection and ingroup bias) and direct effect (i.e., association between ingroup projection and ingroup bias) and direct effect (i.e., association between ingroup projection and ingroup bias partialling out the potential mediators) were found in the regression results presented above. The mediation of the relationship between ingroup projection and ingroup bias through species identification as a single mediator was not significant, as indicated by zero within the confidence intervals of the indirect effects (see Table 3). In contrast, perceived fursona benefits, as a single mediator of the same relationship, was found to be significant. Most relevant to the model being tested, however, the predicted serial mediation model of ingroup projection to ingroup bias through both species identification and fursona benefits was found to be significant (see Figure 1 and Table 3). The statistical significance of this final pathway supports our hypothesis that ingroup projection predicts greater ingroup bias, an effect mediated by ingroup (species) identification and perceived functional benefits of one's fursona. Together, the results of Study 2 support a model of ingroup species favoritism that is driven, at least in part, by ingroup projection.

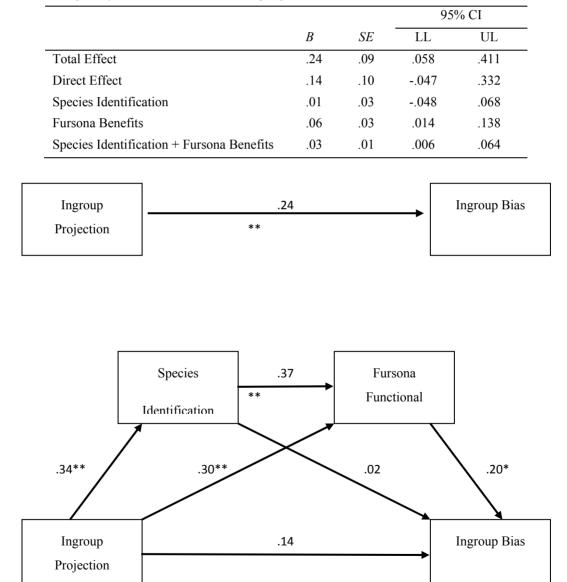


Table 3. Bootstrap analysis of indirect effects through species identification and fursona benefits

Figure 1. Unstandardized coefficients for serial mediation model of ingroup projection, species identification, perceived functional benefits of fursona, and ingroup (species) bias. \* p < .05, \*\* p < .01

#### 4. General Discussion

The purpose of the present studies was to test the existence of ingroup species favoritism in the furry fandom and the possible role that ingroup projection plays in this phenomenon. We predicted, and found, that furries rate their fursona species more favorably (i.e., ingroup favoritism) than other species in the fandom (Study 1). Moreover, we found that projection of furries' species characteristics onto furries in general was related to this ingroup species bias (Study 2). Furthermore, as predicted, the data supported a serial mediation model positing that this relationship was mediated by both the degree of psychological connection furries felt with their fursona species and the perceived benefits of their fursona. Taken together, the results of the two studies show that ingroup favoritism is present in the furry fandom and that its presence can be explained, at least in part, by ingroup projection. What follows is a discussion of the implications of these studies for ingroup bias, ingroup projection, and for members of the furry fandom, specifically.

Research on social identity theory has found ingroup bias across a variety of naturally-occurring groups (e.g., Brewer, 1999; Hewstone et al., 2002). Research on fan groups, in particular, has illustrated ingroup bias in helping behavior (Levine et al., 2005), charitable donations (Platow et al., 1999), soccer chants (Scheepers et al., 2003), language usage (Maass, 1999), and evaluations of others (e.g., Wann et al., 2012). In the present research, we assessed ingroup favoritism through ratings of positive traits of one's ingroup species compared to other species in the fandom (Study 1) and explicit statements regarding the superiority of one's species compared to others in the fandom (Study 2). These studies extend the reviewed fan research by providing a novel example of ingroup favoritism in a non-sport fandom, demonstrating the generalizability of ingroup favoritism. Interestingly, while the results of Study 1 showed strong ingroup favoritism, as evidenced by the large effect sizes, the mean response on the explicit measure of ingroup favoritism in Study 2 was below the midpoint of the scale. Given the furry fandom's norms of inclusion and valuing diversity (see Plante et al., 2014b), such explicit statements may have resulted in lower endorsement, a finding illustrating the importance of considering the norms and values of a group as possible moderators of ingroup bias effects as assessed with explicit measures. Future research may find it useful to employ implicit measures of ingroup favoritism (e.g., reaction time measures), which could be compared to explicit measures to determine both the relationship between the two and the extent to which ingroup projection affects both implicit and explicit ingroup favoritism.

As noted in the introduction, with some exceptions (e.g., Ng Tseung-Wong & Verkuyten, 2010), the majority of research examining the ingroup projection model (Mummendey & Wenzel, 1999) focuses on outgroup prejudice and discrimination as an outcome of intergroup relations (e.g., Kessler et al., 2010; Reese et al., 2012; Waldzus et al., 2003). The present research expands the ingroup projection literature by focusing on ingroup bias in particular, rather than on outgroup degradation. The present findings suggest that ingroup projection may play a role in expressions of ingroup favoritism, as evidenced by the significant association between ingroup projection and ingroup bias in Study 2. In prior research, the perceived legitimacy of intergroup status differences was found to mediate the relationship between ingroup projection and negative behaviors (Reese, Berthold, & Steffens, 2012) and attitudes (Weber, Mummendey, & Waldzus, 2002) toward the outgroup. Analogously, the serial mediation model tested in Study 2 found that ingroup identification and the perceived functionality of one's fursona—a plausible legitimizing factor—mediated of the relationship between ingroup projection and ingroup bias. Put another way, perceiving one's ingroup (fursona species) as prototypical of the superordinate category (the furry fandom) predicted greater connection to one's fursona species, this identification with one's fursona predicted greater belief that one's fursona provided a number of benefits, and perceiving one's fursona as providing them with benefits predicted a greater tendency to see their fursona species as being better than others. These results are in line with prior ingroup projection model research, insofar as they are analogous to models of legitimization mediating ingroup projection effects. Although prior research treats ingroup identification as a prerequisite (or antecedent) to projection or as a moderator, the present research is novel in proposing that identification may also be an outcome. Further research is needed to experimentally test this notion. Going forward, researchers should examine other mediators between projection and ingroup bias, for example justification of intergroup differences, to determine whether other mediators play a similar role in the relationship between ingroup projection and ingroup bias.

The furry fandom is often the target of significant stigmatization (see Roberts, Plante, Reysen, & Gerbasi, in press). This is partly due to the fact that furries, as a fandom, are atypical of the category "fan", for which the default representation is usually a sport fan (Reysen & Shaw, in press). Stigmatization of the furry fandom is also due, in part, to negative portrayals of the fandom in the media, which has tended to portray furries as sexual deviants (Plante et al., 2015). As a result, furries often conceal their fan identity, which predicts reduced psychological well-being (Plante et al., 2014a; Mock et al., 2013). Prior fan research (Reysen & Branscombe,

2010) suggests that fans, regardless of fan interest, are psychologically similar in terms of the processes underlying their fandom participation. The present results illustrate this point, showing that furries exhibit group processes (i.e., ingroup favoritism, ingroup identification, ingroup projection) identical to other natural real-world groups. By emphasizing the normality of the furry fandom and other stigmatized fan groups in this respect, it may be possible for psychologists to reduce the stigma experienced by furries (Roberts et al., 2015) and by members of other stigmatized fan groups.

Despite obtaining results that are in line with prior ingroup favoritism and ingroup projection research, the implications of the present research are limited in several important ways. First, the present research focused exclusively on furries as a fan group. Although we would argue that similar ingroup biases exist in most fan groups, and indeed in groups more generally, future research employing other groups is needed to test the generalizability of the present findings. Second, the present studies were correlational, not experimental, impeding our ability to draw conclusions about the direction of causation. Future research attempting to discern the direction of causation of the present effects will need to employ longitudinal or experimental designs which possess the temporal resolution needed to establish causal direction. Third, the mean ratings of ingroup species bias obtained in Study 2 were below the midpoint of the response scale. We suspect this is due to the explicitly worded items used in Study 2 compared to the more subtle measure of ingroup bias used in Study 1. Finally, the model tested in Study 2 implies a chain of causation that, to date, has proven elusive in the existing research with regard to showing the antecedents and outcomes of ingroup projection (see Kessler et al., 2010). Further research employing experimental or longitudinal designs may be better able to tease apart the causal chain of variables, and possibly include variables that were not included in the present study, to more fully understand the antecedents and outcomes of ingroup projection.

To conclude, the present research showed that furries exhibit ingroup favoritism toward their fursona species. This ingroup species bias was found to be explained by the projection of their fursona species onto the fandom in general, seeing their fursona species as more prototypical of the furry fandom than other fursona species. Identification with their species and the perception of one's fursona as functional were found to mediate the relationship between ingroup projection and ingroup species bias. The ubiquity of ingroup favoritism in groups, thus, extends to the species chosen by furries to represent themselves.

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#### References

- Aberson, C. L., Healy, M., & Romero, V. (2000). Ingroup bias and self-esteem: A meta-analysis. *Personality* and Social Psychology Review, 4, 157-173. http://dx.doi.org/10.1207/S15327957PSPR0402\_04
- Abrams, D., Rutland, A., & Cameron, L. (2003). The development of subjective group dynamics: Children's judgments of normative and deviant in-group and out-group individuals. *Child Development*, 74, 1840-1856. http://dx.doi.org/10.1046/j.1467-8624.2003.00641.x
- Adelman, J. R. (2010). *Feeling prototypical: How multiple social identities influence support for extreme tactics in intergroup conflict* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI 3445793).
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues*, 55, 429-444. http://dx.doi.org/10.1111/0022-4537.00126
- Devos, T., & Mohamed, H. (2014). Shades of American identity: Implicit relations between ethnic and national identities. *Social and Personality Psychology Compass*, 8, 739-754. http://dx.doi.org/10.1111/spc3.12149
- Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology*, 31, 410-436. http://dx.doi.org/10.1006/jesp.1995.1018
- Gaunt, R., Sindic, D., & Leyens, J.-P. (2005). Intergroup relations in soccer finals: People's forecasts of the duration of emotional reactions of in-group and out-group soccer fans. *The Journal of Social Psychology*, 145, 117-126. http://dx.doi.org/10.3200/SOCP.145.2.117-126
- Gerbasi, K. C., Paolone, N., Higner, J., Scaletta, L. L., Bernstein, P. L., Conway, S., & Privitera, A. (2008). Furries from A to Z (anthropomorphism to zoomorphism). *Society and Animals*, *16*, 197-222. http://dx.doi.org/10.1163/156853008X323376

- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford Press.
- Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, 53, 575-604. http://dx.doi.org/10.1146/annurev.psych.53.100901.135109
- Kessler, T., Mummendey, A., Funke, F., Brown, R., Binder, J., Zagefka, H., ... Maquil, A. (2010). We all live in Germany but... Ingroup projection, group-based emotions and prejudice against immigrants. *European Journal of Social Psychology*, 40, 985-997. http://dx.doi.org/10.1002/ejsp.673
- Levine, M., Prosser, A., Evans, D., & Reicher, S. (2005). Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior. *Personality and Social Psychology Bulletin*, *31*, 443-453. http://dx.doi.org/10.1177/0146167204271651
- Lonsdale, A. J., & North, A. C. (2009). Musical taste and ingroup favouritism. *Group Processes and Intergroup Relations*, *12*, 319-327. http://dx.doi.org/10.1177/1368430209102842
- Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. Advances in Experimental Social Psychology, 31, 79-121. http://dx.doi.org/10.1016/S0065-2601(08)60272-5
- Mock, S. E., Plante, C. N., Reysen, S., & Gerbasi, K. C. (2013). Deeper leisure involvement as a coping resource in a stigmatized leisure context. *Leisure/Loisir*, 37, 111-126. http://dx.doi.org/10.1080/14927713.2013.801152
- Mummendey, A., & Wenzel, M. (1999). Social discrimination and tolerance in intergroup relations: Reactions to intergroup difference. *Personality and Social Psychology Review*, 3, 158-174. http://dx.doi.org/10.1207/s15327957pspr0302\_4
- Ng Tseung-Wong, C., & Verkuyten, M. (2010). Intergroup evaluations, group indispensability and prototypicality judgments: A study in Mauritius. *Group Processes and Intergroup Relations*, 13, 621-638. http://dx.doi.org/10.1177/1368430210369345
- North, A. C., & Hargreaves, D. J. (1999). Music and adolescent identity. *Music Education Research*, *1*, 75-92. http://dx.doi.org/10.1080/1461380990010107
- Plante, C. N., Roberts, S., Reysen, S., & Gerbasi, K. (2014a). Interaction of socio structural characteristics predicts identity concealment and self-esteem in stigmatized minority group members. *Current Psychology*, 33, 3-19. http://dx.doi.org/10.1007/s12144-013-9189-y
- Plante, C. N., Roberts, S., Reysen, S., & Gerbasi, K. C. (2014b). "One of us": Engagement with fandoms and global citizenship identification. *Psychology of Popular Media Culture*, 3, 49-64. http://dx.doi.org/10.1037/ppm0000008
- Plante, C. N., Roberts, S. E., Reysen, S., & Gerbasi, K. C. (2015). "By the numbers": Comparing furries and related fandoms. In T. Howl (Ed.), *Furries among us: Essays on furries by the most prominent members of the fandom* (pp. 106-126). Nashville, TN: Thurston Howl Publications.
- Plante, C. N., Roberts, S. E., Snider, J. S., Schroy, C., Reysen, S., & Gerbasi, K. (2015). "More than skin-deep": Biological essentialism in response to a distinctiveness threat in a stigmatized fan community. *British Journal of Social Psychology*, 54, 359-370. http://dx.doi.org/10.1111/bjso.12079
- Platow, M. J., Durante, M., Williams, N., Garrett, M., Walshe, J., Cinotta, S., ... Barutchu, A. (1999). The contribution of sport fan social identity to the production of prosocial behavior. *Group Dynamics: Theory, Research, and Practice*, 3, 161-169. http://dx.doi.org/10.1037/1089-2699.3.2.161
- Reese, G., Berthold, A., & Steffens, M. C. (2012). We are the world—And they are not: Prototypicality for the world community, legitimacy, and responses to global inequality. *Political Psychology*, 33, 683-700. http://dx.doi.org/10.1111/j.1467-9221.2012.00892.x
- Reysen, S., & Branscombe, N. R. (2010). Fanship and fandom: Comparisons between sport fans and non-sport fans. *Journal of Sport Behavior*, 33, 176-193.
- 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. http://dx.doi.org/10.1002/ejsp.1973

- Reysen, S., & Levine, R. V. (2014). People, culture, and place: How place predicts helping toward strangers. In P. J. Rentfrow (Ed.), *Geographical psychology: Exploring the interaction of environment and behavior* (pp. 241-260). Washington, DC: APA. http://dx.doi.org/10.1037/14272-013
- Reysen, S., & Shaw, J. (in press). Sport fan as the default fan: Why non-sport fans are stigmatized. In *The Phoenix Papers*.
- Roberts, S. E., Plante, C. N., Gerbasi, K. C., & Reysen, S. (2015). Clinical interaction with anthropomorphic phenomenon: Notes for health professionals about interacting with clients who possess this unusual identity. *Health & Social Work*, 40, 42-50. http://dx.doi.org/10.1093/hsw/hlv020
- Roberts, S. E., Plante, C. N., Reysen, S., & Gerbasi, K. C. (in press). Not all fantasies are created equal: Fantasy sport fans' perceptions of furry, brony, and anime fans. *The Phoenix Papers*.
- Scheepers, D., Spears, R., Doosje, B., & Manstead, A. S. R. (2003). Two functions of verbal intergroup discrimination: Identity and instrumental motives as a result of group identification threat. *Personality and Social Psychology Bulletin*, 29, 568-577. http://dx.doi.org/10.1177/0146167203029005002
- Schiller, B., Baumgartner, T., & Knoch, D. (2014). Intergroup bias in third-party punishment stems from both ingroup favoritism and outgroup discrimination. *Evolution and Human Behavior*, 35, 169-175. http://dx.doi.org/10.1016/j.evolhumbehav.2013.12.006
- 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.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.
- Waldzus, S., Mummendey, A., & Wenzel, M. (2005). When "different" means "worse": In-group prototypicality in change intergroup contexts. *Journal of Experimental Social Psychology*, 41, 76-83. http://dx.doi.org/10.1016/j.jesp.2004.05.006
- Waldzus, S., Mummendey, A., Wenzel, M., & Weber, U. (2003). Towards tolerance: Representations of superordinate categories and perceived prototypicality. *Journal of Experimental Social Psychology*, 39, 31-47. http://dx.doi.org/10.1016/S0022-1031(02)00507-3
- Wann, D. L., & Grieve, F. G. (2005). Biased evaluations of in-group and out-group spectator behavior at sporting events: The importance of team identification and threats to social identity. *The Journal of Social Psychology*, 145, 531-545. http://dx.doi.org/10.3200/SOCP.145.5.531-546
- Wann, D. L., Grieve, F. G., Zapalac, R. K., Visek, A. J., Partridge, J. A., & Lanter, J. R. (2012). The importance of team identification in perceptions of trust of fellow and rival sport fans. In A. C. Earnheardt, P. Haridakis, & B. Hugenberg (Eds.), Sport fans, identity, and socialization: Exploring the fandemonium (pp. 79-90). Plymouth, UK: Lexington Books.
- Weber, U., Mummendey, A., & Waldzus, S. (2002). Perceived legitimacy of intergroup status differences: Its prediction by relative ingroup prototypicality. *European Journal of Social Psychology*, *32*, 449-470. http://dx.doi.org/10.1002/ejsp.102
- Wenzel, M., Mummendey, A., & Waldzus, S. (2007). Superordinate identities and intergroup conflict: The ingroup projection model. *European Review of Social Psychology*, 18, 331-372. http://dx.doi.org/10.1080/10463280701728302

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