**Anime Fans to the Rescue: Evidence of Daniel Wann’s Team Identification-Social Psychological Health Model**

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**Abstract**

We tested Wann’s (2006) team identification-social psychological health model in a sample of self-identified anime fans. Anime fans completed measures of fanship (a construct analogous to team identification), online and face-to-face friendship, and a multi-dimensional measure of well-being (i.e., physical, psychological, and relationship). The results largely supported Wann’s model. Associations between fanship and psychological and relationship well-being were moderated by face-to-face friendships, but not by online friendships. While the model significantly predicted psychological and relationship well-being, it did not significantly predict physical well-being. We discuss possible reasons why the model is supported in the present anime fan population, but has not been supported in prior research on sport fans.

**Keywords:** anime, fan, fanship, identification, well-being

**Introduction**

In 2006, Daniel Wann, a prominent sport fan researcher, proposed the team identification-social psychological health model. Prior research (e.g., Wann, Inman, Ensor, Gates, & Caldwell, 1999; Wann & Pierce, 2005) had consistently shown that identifying with one’s favorite team – known analogously as fanship in other research (e.g., Reysen & Branscombe, 2010) – was associated with better psychological well-being. Wann proposed that the connection between team identification and well-being was caused by temporary and enduring social connections (friendships) with other fans. Specifically, Wann proposed that enduring friendships (e.g., living in a city with many other ingroup fans that are highly visible) would consistently mediate this relationship, while temporary friendships (e.g., living in a city where there are few ingroup fans) would only mediate the relationship when they were situationally salient (e.g., seeing or meeting another ingroup fan). As a final point in his model, Wann (2006) proposed that this mediation
would best predict social well-being (e.g., satisfaction with one’s social life), as compared to other types of well-being (e.g., personal well-being, physical well-being).

Working from the team identification-social psychological health model, Wann examined the relationship between team identification and other facets of well-being. For example, team identification was found to correlate with trustworthiness of others (Wann & Polk, 2007) and with a combined measure of collective self-esteem and loneliness (Wann, Brame, Clarkson, Brooks, & Waddill, 2008), participants sampled at sporting events were less lonely and more satisfied with their social life than participants sampled at home (Wann, Martin, Grieve, & Gardner, 2008), identifying with a local team (but not distant team) was associated with greater well-being (Wann & Weaver, 2009), identification with two teams was associated with a combined measure of collective self-esteem and loneliness (Wann, Keenan, & Page, 2009), and older adults’ team identification was associated with less loneliness and greater collective self-esteem (Wann, Rogers, Dooley, & Foley, 2011). Despite this abundance of evidence linking team identification to well-being, however, none of these studies measured social connections with others. In other words, the studies did not directly test whether social connections were actually mediating this relationship between team identification and well-being, raising the possibility that the relationship was spurious, caused by a mechanism other than the one proposed in Wann’s model.

In 2011, Wann, Waddill, Polk, and Weaver reported two studies that did include a measure of social connections. The results of both studies found no evidence for the mediation predicted by the model, even when different measures of social connection were used. Wann, Waddill, Brasher, and Ladd (in press) later attempted to directly test the mechanism proposed by the model, this time in a sample of high school students. However, the results again failed to support the model, and the researchers noted that, in light of this repeated failure to find evidence for their proposed mechanism, modifications to the model were necessary. In the present study, however, we re-test Wann’s (2006) team identification-social psychological health model one more time, this time using a sample of non-sport fans and distinguishing between online social connections and face-to-face social connections.

Although Wann (2006) states in his conceptualization of the model that social connections with other ingroup members need to occur in face-to-face situations, Reysen and Branscombe (2010) suggested that online interactions might substitute for face-to-face social connections in online fan communities where members are geographically disparate. The limited research comparing online and face-to-face friendships has shown mixed results. For example, Grieve, Indian, Witteveen, Tolan, and Marrington (2013) found that
Facebook friend connectedness was related to greater subjective well-being and less depression and anxiety. However, other research has suggested there is a negative relationship between interacting with others online and well-being indicators: a survey of individuals (ages 12 to 26) in the Czech Republic showed that individuals who preferred online friends (vs. face-to-face friends) scored no better on measures of self-esteem while scoring higher on measure of internet addiction (Smahel, Brown, & Blinka, 2012). Other studies suggest that individuals who use the internet to meet new people are more lonely (Shen & Williams, 2011), and a study of people residing in Hong Kong showed that communicating with others online (vs. face-to-face) was associated with lower life satisfaction (Lee, Leung, Lo, Xiong, & Wu, 2011). Taken together, the research paints a mixed picture of the possible role of online social connection on well-being, leaving open the question of whether online social connections may mediate the relationship between fan identification and well-being proposed by Wann’s model.

Current Study

The purpose of the present study was to test Wann’s (2006) model, which posits that friendships should mediate the association between identification with an interest (i.e., fanship) and well-being. Although prior research has failed to find support for this particular mechanism within the model (i.e., Wann et al., in press; Wann, Waddill et al., 2011), perhaps examining a different fan group will illuminate why prior research failed. In the present study, we examined anime fans, enthusiastic admirers of Japanese animation and comic books (manga). Anime fans show their interest through artwork, costuming (i.e., cosplay), and creating fan produced content (e.g., fan dubbing). Anime fans tend to be male, young (e.g., college students), video gamers, perceive themselves as nerds, and tend to be introverted (Reysen, Plante, Roberts, Gerbasi, & Shaw, in press). In the study, participants completed measures of fanship (a construct analogous to team identification, see Reysen & Branscombe, 2010), online and face-to-face friendships, and well-being (physical, psychological, and relationship dimensions). Based on Wann’s (2006) model, we predict that friendships, both online and face-to-face, will mediate the relationship between fanship and psychological and relationship well-being. We suggest that this mediation will also occur for psychological well-being because prior research (e.g., Wann et al., 2009) shows team identification related to a similar construct (i.e., self-esteem). As noted by Wann (2006), social well-being is the dimension of well-being most likely to be influenced by fanship and friendships. Thus, we also predicted that friendships would mediate the association between fanship and relationship well-being, as relationship well-being is the most social dimension of the measure utilized in the
present study. In line with Wann, we also did not expect friendships to mediate the association between fanship and physical well-being, since physical well-being would not fall under the umbrella of social well-being.

**Methods**

**Participants and Procedure**

Participants ($N = 967$, 55% male (4.5% non-binary/other); $M_{age} = 25.95$, $SD = 7.78$) included self-identified anime fans recruited at A-Kon 2015 (an anime convention in Dallas, TX) and through anime fan websites. As part of a longer questionnaire, participants completed measures of identification with anime, face-to-face and online friends, and well-being.

**Measures**

Identification with anime was assessed with three items (“I am emotionally connected to being an anime fan,” “I strongly identify with being an anime fan,” and “Being an anime fan is part of me”) adapted from prior research (Reysen & Branscombe, 2010) ($\alpha = .91$). We adapted three items from Wann, Waddill, Polk, and Weaver (2011) and modified them to assess both face-to-face friendships (“Being an anime fan helps me establish new friendships face-to-face,” “Being an anime fan helps me maintain friendships face-to-face,” “Being an anime fan provides me the opportunity to maintain meaningful social relationships face-to-face,” $\alpha = .91$) and online friendships (“Being an anime fan helps me establish new friendships online,” “Being an anime fan helps me maintain friendships online,” “Being an anime fan provides me the opportunity to maintain meaningful social relationships online,” $\alpha = .94$).

To assess well-being, we used Kinderman, Schwannauer, Pontin, and Tai’s (2011) BBC well-being scale. The measure contains 24 items that assess physical (7 items, $\alpha = .83$; e.g., “I am satisfied with my physical health,” “I am satisfied with the quality of my sleep), psychological (12 items, $\alpha = .92$; e.g., “I feel that I am able to enjoy life,” “I feel optimistic about the future”), and relationship (5 items, $\alpha = .79$; e.g., “I am satisfied with my friendships and personal relationships,” “I am comfortable about the way in which I relate to and connect with others”) dimensions of well-being. All measures used a 7-point Likert-type response scale, from $1 = strongly disagree$ to $7 = strongly agree$.

**Results**

As a preliminary analysis, we first examined all correlations between the assessed variables (see Table 1 for correlations, means, and standard deviations). Fanship was positively related to establishing and maintaining face-to-face and online friends, psychological well-being, and marginally ($p = .054$) associated with relationship well-being. Establishing and
maintaining face-to-face friendships was related to all of the well-being dimensions, while online friendships was not. To examine whether establishing and maintaining friendships (face-to-face and online) mediates the relationship between fanship and dimensions of well-being, we conducted a series of mediation analyses using Preacher and Hayes’ (2008) SPSS macro (bootstrapping with 5,000 iterations).

Fanship did not significantly predict physical well-being ($\beta = .05, p = .141$), but did significantly predict face-to-face ($\beta = .43, p < .001$) and online ($\beta = .35, p < .001$) friendships (see Figure 1). Face-to-face ($\beta = .07, p = .052$) and online ($\beta = -.01, p = .831$) friends did not significantly predict physical well-being. Inclusion of the mediators did not significantly influence the association between fanship and physical well-being ($\beta = .02, p = .611$) as indicated by the presence of zero in the 95% confidence interval (CI) ($CI_{\text{INDIRECT}} = -.005$ to $.047$; $CI_{\text{FACE}} = -.001$ to $.049$; $CI_{\text{ONLINE}} = -.023$ to $.019$).

As shown in Figure 2, unlike physical well-being, fanship did significantly predict psychological well-being ($\beta = .09, p = .008$). Face-to-face friendships ($\beta = .17, p < .001$) significantly predicted psychological well-being, while online friendships ($\beta = -.05, p = .203$) did not. The inclusion of the mediators reduced the association between fanship and psychological well-being ($\beta = .03, p = .446$), showing mediation as indicated by the absence of zero in the confidence interval (CI $= .016$ to $.070$). In particular, face-to-face friendship (CI $= .031$ to $.080$) was a significant mediator, while online friendship (CI $= -.031$ to $.007$) was not.

Finally, as shown in Figure 3, we found evidence that fanship marginally significantly predicted relationship well-being ($\beta = .06, p = .054$). Face-to-face friendships ($\beta = .19, p < .001$) significantly predicted relationship well-being, while online friendships ($\beta = -.05, p = .202$) did not. The inclusion of the mediators reduced the association between fanship and relationship well-being ($\beta = -.01, p = .878$), showing mediation as indicated by the absence of zero in the confidence interval (CI $= .026$ to $.082$). In particular, face-to-face friendship (CI $= .041$ to $.093$) was a significant mediator, while online friendship (CI $= -.031$ to $.007$) was not.

**Discussion**

The purpose of the present study was to test Wann’s (2006) identification and well-being model in a sample of anime fans. We predicted that friendships (online and face-to-face) would mediate the relationship between fanship and psychological and relationship well-being, but not physical well-being. The results provided partial support for our predictions, albeit in an unexpected way: face-to-face friendships did mediate the association between fanship and psychological and relationship well-being, however, online friendships did not. Taken together, the results support Wann’s (2006) model of identification.
and well-being, particularly the mediator proposed by Wann that, to date, there has been little empirical evidence for.  

After repeated failures to find support for the team identification-social psychological health model (i.e., Wann et al., in press; Wann, Waddill et al., 2011) with sport fans, the present study finds evidence for the model and its proposed mechanism in the context of anime fans. Fans’ degree of fanship predicted greater online and face-to-face friendships, yet only face-to-face friendships mediated the relationship between fanship and psychological and relationship well-being. This result supports Wann’s (2006) claim that the relationships formed through being a fan need to be in-person for fans to reap the psychological benefits. The results did not support Reysen and Bransombe’s (2010) suggestion that fans may gain the same well-being benefits through online associations with others. The lack of mediation by online friendships also supports prior research (e.g., Lee et al., 2011; Smahel et al, 2012) showing that online friendships (vs. face-to-face) may not contribute or even lessen well-being. Furthermore, supporting Wann’s (2006) model, psychological and relationship well-being mediations were significant, while physical well-being was not. Despite finding support for the model, the lingering question of why support for the model was not found in various samples of sport fans, but was found for anime fans, remains.

Anime fans are distinct from sport fans; indeed, anime fans do not particularly like sports (Reysen et al., in press). Sport fans are commonly viewed as the default or prototypical ‘fan’ and, as such, face less stigmatization than other, less common or non-mainstream fans, including anime (Reysen & Shaw, in press). Marginalized fan group members can experience reduced well-being, which can be attenuated through involvement with others in the fan group (see Mock, Plante, Reysen, & Gerbasi, 2013). As members of a marginalized group, friendships with other anime fans may be more meaningful and necessary to contribute to fan well-being. Speaking to this point, “belongingness” has been shown to be one of the main motivations underlying anime fan identification (Schroy, Plante, Reysen, Roberts, & Gerbasi, in press). In contrast, feelings of achievement (such as when a team wins) and vicarious achievement through one’s team are the most strongly related predictors of team identification in baseball fans (Fink, Trail, & Anderson, 2002; Trail & James, 2001). As the main motivation to be a fan differs between sport and anime, anime fans’ need to belong may reflect the importance of friends for their well-being.

The present research is limited by a number of factors. First, this study was correlational and, as such, we cannot make causal claims about the direction of the observed results. Second, only self-identified anime fans were included as participants. Further research is needed to examine if Wann’s (2006) model is supported in other fan groups, or if the obtained results are unique to
anime fans. For example, directly comparing fan groups in which members are motivated by a need to belong with fan groups motivated by other factors (e.g., vicarious achievement) may improve our understanding of why prior research has not found support for the mechanisms of Wann’s model. Third, the present sample consisted of mainly individuals in Western cultural spaces. It is entirely possible that the results may differ in other cultures. For example, the observed pattern of findings may not be observed in participants sampled in Japan, where anime is prevalent and mainstream and fans are in a space where the group may not be marginalized.

To conclude, we tested Daniel Wann’s (2006) team identification-social psychological health model in a sample of anime fans. Overall, the results obtained supported the model. The association between fanship and psychological and relationship well-being was mediated by face-to-face friendships, but not online friendships. Moreover, no relationship was found between fanship and physical well-being. Together, the results show that although there has been little evidence for the mechanism underlying Wann’s model in samples of sport fans, those same mechanisms have been found in anime fans, and may work for other non-sport fan groups. It remains for future research to examine why this may be the case.

References


**Author Note**

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Table 1

*Correlations and Means (Standard Deviation)*

<table>
<thead>
<tr>
<th>Variable</th>
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<th>3</th>
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<td>1. Fanship</td>
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<td>2. Face-to-Face Friends</td>
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<td>3. Online Friends</td>
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<td>.41**</td>
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<tr>
<td>4. Physical Well-Being</td>
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<td>.08*</td>
<td>.03</td>
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<tr>
<td>5. Psychological Well-Being</td>
<td>.09**</td>
<td>.16**</td>
<td>.04</td>
<td>.68**</td>
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<tr>
<td>6. Relationship Well-Being</td>
<td>.06</td>
<td>.17**</td>
<td>.03</td>
<td>.52**</td>
<td>.71**</td>
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Mean  
4.75  2.53  2.53  4.54  4.89  4.74  
SD    
1.70  1.08  1.14  1.26  1.25  1.33

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

*Figure 1.* Online and face-to-face friendships as mediators of fanship and physical well-being.
Figure 2. Online and face-to-face friendships as mediators of fanship and psychological well-being.

Figure 3. Online and face-to-face friendships as mediators of fanship and relationship well-being.