ORIGINAL ARTICLE

Why we put on the sorting hat: motivations to take fan personality tests

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BACKGROUND

There is little reason to believe that fan-related personality tests, which tell fans what type of person they are based on their favorite fan content, are valid or reliable. Nevertheless, fan-related personality tests remain incredibly popular online.

PARTICIPANTS AND PROCEDURE

Building upon existing fan research, the present study tests whether fans may have other motivations for taking such personality tests, drawing upon prior research by Wann. Self-identified fans (N = 425, $M_{\rm age}$ = 26.41, SD = 8.44) completed measures regarding degree of identification with their fan interest, motivations to take fan quizzes, and frequency of taking fan personality quizzes.

RESULTS

Highly-identified fans were found to more frequently take fan-related personality tests, an association significantly

mediated by both self-esteem and escapism motivations, but not mediated by eustress, entertainment, belongingness, or family motivations.

CONCLUSIONS

The results suggest that highly identified fans participate in more fan personality quizzes to escape from the hassles of everyday life and increase positive self-worth. These results are discussed with respect to their theoretical relevance – both for research on personality testing and on fan activities – as well as for their practical implications.

KEY WORDS

fans; fanship; personality; self-esteem; escapism

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BACKGROUND

Fans are enthusiastic supporters of something - be it a particular television show, a sport team, a musician, or a hobby. How this support manifests varies from fan to fan, with expressions ranging from mundane (e.g., attending a fan-related concert or event) to unusual (e.g., spending thousands of dollars to look more like the object of one's adoration). As one might expect, these varying and somewhat unusual behaviors have led to popular perceptions of fan activities as trivial at best and deviant at worst (Reysen & Shaw, 2016). However, a growing body of research is challenging this trivialization and stigmatization of fan activities by showing how fan-related activities provide fans with refuge from stressors, allow them to foster social connections with others, and, most presently relevant, can help fans find meaning and foster a sense of identity (Chadborn, Edwards, & Reysen, 2017; Edwards, Chadborn, Plante, Reysen, & Redden, 2019; McInroy & Craig, 2018).

The present article focuses on one such seemingly trivial fan activity: taking fan-related personality tests. It begins by briefly contrasting professional personality tests with fan-related personality tests to illustrate that the latter need not be useful as scientific or professional instruments to nevertheless fulfill an important function. It then raises the question of what motivates fans to partake in fan personality tests by reviewing the literature on fan motivation more broadly and speculating on several plausible motivations. The results of a cross-sectional study of fans designed to test these various motivations is then presented alongside a discussion of the study's practical and theoretical implications.

PERSONALITY ASSESSMENTS

Before discussing whether there is any validity to fan-based personality tests, it is worth considering the practice of personality assessment in psychology more broadly. For decades psychologists have developed and validated a myriad of ways to assess personality and individual differences for use in both research and professional settings; nuanced and detailed reviews of these various procedures abound (e.g., Ihsan & Furmham, 2018; Lloyd, 2012; McCrae & Costa, 2008) and are beyond the focus of the present article. Suffice it to say, these assessments are developed to fulfill specific roles, be they to assess individual differences in a way that consolidates decades of past research (e.g., McCrae & Costa, 2008), to be employed as a teaching tool (Weersing, Padilla-Gamino, & Bruno, 2010), as a functional component of professional workshops (True Colors, n.d.), or as a means of helping employers effectively staff and manage their companies (Murray, 1990). These measures vary

considerably in their degree of empirical validation and the theoretical rationales driving them. Nevertheless, those who employ them recognize that, for their intended purpose, it may not matter; instead, it may be more important that those taking the test engage and connect with its content. Or, to put it succinctly, the utility of some personality assessments is not determined solely by their reliability, validity, or psychometric properties.

FAN-BASED PERSONALITY TESTS

Fan activities are incredibly diverse, ranging from passive consumption of one's favorite media to actively contributing new fan content, costuming, and interacting with other fans (Edwards et al., 2019; Jenkins, 1992, 2012; Plante, Reysen, Roberts, & Gerbasi, 2016). One way a fan's interest can manifest is through taking fan-related personality tests. Superficially, these assessments resemble other personality tests in that participants answer a variety of questions about themselves to discern some facet of their personality. Typically, at the end of such tests, participants are assigned a type or category - often a character or group from the fiction's canonical universe. Examples of such tests abound on social media, purporting to tell fans "Which Harry Potter house do you belong in?", "Which Disney Princess are you?", or "Which classic rock band are you?".

Despite their resemblance to personality tests, however, few - if any - of these tests have been empirically validated or developed with psychometric principles in mind. Because of this, there has been very limited research on the subject of these fan-related personality tests. What little research has been done has focused primarily on demonstrating the lack of psychometric properties or validity of such measures. Gouda and Cormican (2016), for example, tested whether fan personality tests could be used to effectively predict medical students preferred training programs. Unsurprisingly, they found that the group to which participants had been assigned by the test was unrelated to the training program the students themselves opted for.

Another article assessed the validity of the aforementioned Harry Potter house quiz as an actual measure of personality (Crysel, Cook, Schember, & Webster, 2015). Specifically, the authors assessed whether measures of big five personality factors and the dark triad were predicted by the participants' assigned "house" (from the fictional school of Hogwarts). The study revealed that participants' scores on established measures of personality only somewhat aligned with the traits assigned to their respective houses based on descriptions from the books.

In short, there have been relatively few attempts made to understand fan personality tests; those which have been conducted deem the tests as invalid or unreliable as assessments of personality. However, this research presupposes that fans take these personality measures as a means of accurately assessing their personality. It is possible that fans may take these tests for entirely different reasons, a possibility explored in the next section.

FAN MOTIVATIONS

Despite considerable differences in what people are fans of, a growing body of research suggests that virtually all fan behavior is driven by a similar set of underlying motivations. For example, insofar as the fan interest in question is media-based, uses and gratifications theory suggests that media consumption is driven by the functions that a particular piece of media fulfills for the viewer (Cantril, 1942). And while this approach has traditionally been applied to the context of classical screen media (e.g., television), contemporary research shows that Internet-based media similarly motivate consumers to satiate important needs (Ruggiero, 2000).

While uses and gratifications theory was developed primarily to explain the specific behavior of media consumption, converging evidence in the context of fan behavior more broadly comes from Daniel Wann's (1995) sport fan motivation scale. In his work. Wann found that the link between fan identity and fan behavior is driven by a combination of eight different motivational factors. These factors are eustress (feelings of positive stress such as excitement over whether one's team will win the game), self-esteem (a positive self-concept stemming from being a fan), escape (avoiding undesirable aspects of everyday life), entertainment (finding fan-based activities intrinsically enjoyable), group affiliation (fan communities provide a group to belong to), family (providing a sense of family or a context in which to interact with one's family), economic factors (gambling or other monetary gains from being a fan), and aesthetics (finding aspects of the interest artistically appealing). In short, fan-related activities among sport fans are driven by a combination of some of these eight different motivations.

In the years since initial development, many of the same motivations were found to drive fan behavior in fan groups beyond sport fans, with some researchers suggesting that fan identification itself can be a strong predictor of fan behavior (Reysen & Branscombe, 2010). For example, Schroy et al. (2016) used an adapted form of Wann's measure to assess the motivations of fans in three distinct fandoms: fantasy sport fans (people who create hypothetical sports teams and pit their teams against other fans' teams, often with the goal of winning a prize pool), anime fans (fans of Japanese animation), and

furries (fans of media featuring anthropomorphized animal characters). They found that each fandom differed somewhat with respect to which of Wann's eight fan motivations were the most strongly tied to fan identity, but all fan groups provided at least some support for the existence of each of the different motivations. Subsequent research has found that several of these motivations consistently emerge as among the strongest associated with fan behavior across fandoms, including belongingness (Reysen, Plante, Roberts, & Gerbasi, 2017), escapism (Chadborn et al., 2017), and self-esteem (Mock, Plante, Reysen, & Gerbasi, 2013).

FAN MOTIVATION TO TAKE FAN-BASED PERSONALITY TESTS

Given that fan behavior has been so strongly tied to Wann's motivational factors, and since taking a fan-based personality test is an example of a fan-related behavior, one can ask whether some of Wann's motivational factors compel fans to take fan-based personality tests. Based on existing research, we presently hypothesize that six of Wann's original eight motivations are relevant. Two factors, aesthetic and economic motivation, are not thought to be related to the use of fan personality tests based on a review of the existing literature, and so they are not discussed further.

Eustress. While they may not be as nail-bitingly exciting as watching one's favorite sport team compete against a detested rival, fan-based personality tests can be framed as a sort of gamble. For example, if a fan has a preferred outcome (e.g., House Gryffindor from Hogwarts), they may find excitement in awaiting the test's results to see if they get their desired outcome. Addressing this point, prior research shows that fans not only find the uncertainty associated with sporting events to be an enjoyable stress (Hu & Tang, 2010), but that the same uncertainty-based stress drives people to read and enjoy mystery stories (Knobloch-Westerwick & Keplinger, 2006).

Self-esteem. Professionals and researchers often use personality tests to gain knowledge about a person, often for the purpose of research, corporate decision-making, or in a clinical setting for the purpose of self-knowledge and growth. Concerning this latter point in particular, evidence suggests that people often find acts of self-discovery to be beneficial for their self-esteem (Jeongyee, Hyunjoo, & Mikyung, 2012), particularly when the feedback itself is desirable (Ickes, Wicklund, & Ferris, 1973). As such, insofar as fan-based personality tests offer fans the opportunity to learn something desirable about themselves, fans stand to gain a self-esteem boost from taking them.

Escapism. While inadvisable as a long-term means of coping with problems (e.g., Plante, Gentile,

Groves, Modlin, & Blanco-Herrera, 2019), temporarily escaping into fictional nonreality or the distractingly trivial is a powerful motivator of media use (Li, Liau, & Khoo, 2011). Given that fan-related personality tests are often discovered and shared through social media - itself an often distracting, escapist activity (Lee, Lee, Moon, & Sung, 2015) - it should follow that such tests may function as a simple, if temporary distraction from less desirable aspects of a person's life.

Entertainment. In their self-determination theory, Rigby and Ryan (2017) argue that intrinsically-motivated behaviors are enjoyable precisely because they satisfy a person's need for competence, autonomy, and belongingness. Given that a fan-based personality test is something a fan engages in of their own accord – as opposed to at the will of a professional – and given that such tests offer the promise of improved self-knowledge, there is ample reason to believe that the test itself may be enjoyable for fans by providing them with a sense of autonomy and competence. This is particularly likely to be the case if the test offers participants a chance to confirm something they already believe to be true (e.g., "I am a Gryffindor"), as studies show that people prefer to seek out activities that confirm things they already believe to be true (Swann & Read, 1981).

Group affiliation and belonging. According to selfcategorization theory and the related social identity theory, people naturally organize themselves into groups and do so to forge a distinct and positive sense of identity (Tajfel & Turner, 1979). This desire to belong to groups is so strong that people have been found to form group identities based on distinctions as trivial as the number of dots they estimated seeing projected onto a screen (Tajfel, Billig, Bundy, & Flament, 1971). Given these findings, along with findings showing the importance of fan identity to members of fan groups (e.g., Plante et al., 2015; Roberts, Plante, Gerbasi, & Reysen, 2015), it would make sense that fans taking a fan-related personality test may find the results not only personally meaningful, but may feel a sense of attachment and belonging to others who are similarly categorized.

Family. Researchers recognize that it is possible for people to form parasocial relationships - a deep and meaningful connection with media characters, celebrities, and fictional people (Cohen, 1997). And while these parasocial relationships are often discussed within the context of romantic relationships, research also finds that people turn to parasocial relationships to satisfy loneliness caused by inadequacies in their own families (Wang, Fink, & Cai, 2008). To this end, in a manner analogous to the group affiliation motivation above, fans may find considerable meaning in the results of fan-related personality tests, including forming parasocial relationships with those similar to them or, in the case of some

fan personality tests, being paired up directly with fictional characters determined by the test to be their "ideal partner". Alternatively, fans may complete fanbased personality tests with other members of their own family or discuss the results together - an act of shared self-disclosure that may bring them together.

PRESENT STUDY

There is little reason to believe that fan-based personality tests are valid or reliable for use in research, clinical, or professional contexts (e.g., Crysel et al., 2015). Nevertheless, researchers studying the psychology of fans suggest that fan behavior is strongly tied to fan identity (Reysen, Chadborn, & Plante, 2018; Wann, 1995). As such, insofar as taking a fanbased psychology test is an example of a fan behavior, one can ask whether fans may have fan-related motivations for taking such personality tests. We thus hypothesize, based on the reviewed research, that more highly-identified fans should be more likely than less-identified fans to take a fan-related personality tests (Reysen et al., 2018; Reysen & Branscombe, 2010). Moreover, based on existing research in analogous domains, we hypothesize that this link will be mediated by six of Wann's proposed motivations for engaging in fan-related behaviour: eustress (Knobloch-Westerwick & Keplinger, 2006), self-esteem (Jeongyee et al., 2012), escapism (Li et al., 2011), entertainment (Rigby & Ryan, 2017), group affiliation (Tajfel et al., 1971), and family (Wang et al., 2008).

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

Self-identified fans (N = 425, 76.2% female, 6.6% other; $M_{age} = 26.41$, SD = 8.44) were recruited from various fan-related websites, though they were predominantly from the United States. The vast majority of participants (n = 374) indicated that they were fans of various media (e.g., book, author, show, video game). Participants were recruited and informed that the study was part of a larger study regarding fan interests, personality, use of personality tests, and wellbeing. Additional items not relevant to the present hypotheses are not discussed presently.

PROCEDURE

Participants completed the survey online. First, they were prompted to state their favorite fan interest, after which they rated the level of fanship associated with that interest, indicated the extent of their motivation for taking fan personality tests, and finally reported the frequency with which they took fan personality tests regarding their favorite fan interest. Unless noted otherwise, all measures used a 7-point Likert-type response scale, from 1 (*strongly disagree*) to 7 (*strongly agree*).

MATERIALS

Fanship. Three items were adapted (e.g., "I strongly identify with being a fan of this interest") from prior research (Reysen & Branscombe, 2010) to assess participants' degree of identification with their favorite fan interest (α = .90).

Motivations. To assess motivation, six items were adapted from prior research (Schroy, Plante, Reysen, Roberts, & Gerbasi, 2016) to assess the six theoretically relevant fan motivations from Wann (1995). Following a prompt ("Taking fan personality quizzes..."), participants rated items tapping eustress ("provides me with eustress (positive stress)"), self-esteem ("gives me a sense of self-esteem"), escape ("lets me escape from everyday life"), entertainment ("is a source of entertainment"), group affiliation/belonging ("makes me feel close to, or accepted by, other people"), and family ("provides me a way to be close to my family").

Fan personality tests. Participants responded to a single item ("On average, how many fan personality quizzes about your fan interest that you listed above do you take a year?") from 0 to 10+.

RESULTS

Correlations between all assessed variables were computed and are shown in Table 1. All correlations

were positive and significant with the exception of the relationship between fanship and family motivation and the relationship between family motivation and entertainment.

We next tested a simultaneous mediator model using Preacher and Hayes' (2008) SPSS macro (bias corrected bootstrapping with 20,000 iterations), entering fanship as the independent variable, the six motivations as mediators, and frequency of taking fan personality tests as the dependent variable (see Figure 1). Fanship significantly predicted participants' frequency of taking tests (β = .28, p < .001). Fanship also predicted eustress (β = .21, p < .001), self-esteem $(\beta = .25, p < .001)$, escape $(\beta = .30, p < .001)$, entertainment (β = .38, p < .001), and belonging (β = .25, p < .001), but not family ($\beta = .04$, p = .452). Self-esteem $(\beta = .22, p < .001)$, escape $(\beta = .15, p = .007)$, and family $(\beta = .12, p = .021)$ predicted frequency of taking fan personality tests, while eustress (β = .02, p = .701), entertainment (β = .01, p = .804), and belonging $(\beta = -.06, p = .300)$ did not.

The relationship between fanship and frequency of taking fan personality tests was reduced as a result of taking into account the indirect relationships through the mediating variables, but nevertheless remained significantly different from zero as indicated by the absence of zero within the 95% confidence intervals (β = .19, p < .001; 95% CI [.094, .335]). The indirect pathways through self-esteem 95% CI [.054, .211] and escape [.030, .192] were significant, suggesting that these two variables significantly mediated the relationships. In contrast, eustress [-.038, .062], entertainment [-.077, .096], belonging [-.113, .029] and family [-.011, .053] were not found to significantly mediate the relationship between fanship and taking fan-related personality tests.

Table 1
Means, standard deviations, and correlations between assessed variables

	Variable	1	2	3	4	5	6	7	8
1.	Fanship	-	-	-	-	-	-	-	-
2.	Eustress	.21**	-	-	-	_	-	_	-
3.	Self-esteem	.25**	.42**	_	_	_	_	_	_
4.	Escape	.30**	.35**	.41**	_	_	_	_	_
5.	Entertainment	.38**	.24**	.24**	.42**	_	_	_	_
6.	Belonging	.25**	.41**	.58**	.47**	.26**	_	_	_
7.	Family	.04	.29**	.38**	.23**	.07	.45**	_	_
8.	Quiz frequency	.28**	.21**	.34**	.30**	.19**	.25**	.22**	_
	Mean	5.55	2.77	3.08	4.25	6.08	3.12	1.94	3.78
	SD	1.49	1.67	1.62	1.90	1.26	1.70	1.35	3.32

Note. $^{**}p < .01$.

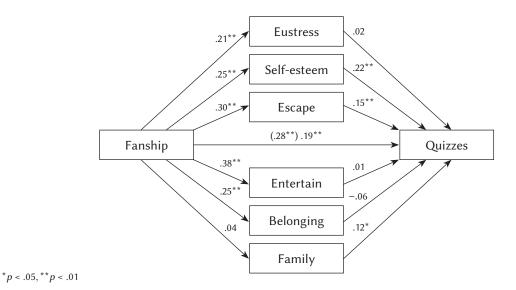


Figure 1. Mediation model of fanship predicting frequency of taking fan personality quizzes in past year through motivations to take fan personality quizzes. Standardized betas are reported.

DISCUSSION

The present research tested whether fans' taking of fan-related personality tests was a product of their fan interest and, if so, whether this link could be explained by a number of motivational factors commonly driving other fan-related behavior (Wann, 1995). The results revealed a positive correlation between fanship and the number of fan personality tests that a participant completed. More importantly, this relationship was significantly mediated by selfesteem and escape motivations, but not by eustress, entertainment, belongingness, or family.

The present results fill a gap in the field's current understanding of the utility of personality assessments. When one thinks about personality assessment, one likely thinks about assessing personality for the purpose of research (e.g., McCrae & Costa, 2008) or as a decision-making tool in professional contexts (e.g., Murray, 1990). And while, at least superficially, fan-related personality tests appear similar to their professional and scientific counterparts, they often lack the rigorous psychometric properties and validation testing of professional personality assessment tools. Nevertheless, some researchers have tried to assess the utility of these fan-related personality tests in professional contexts and found them, perhaps unsurprisingly, lacking (e.g., Gouda & Cormican, 2016). But before researchers throw the proverbial baby out with the bathwater, the present study suggests that the measures may serve important functions in non-academic, non-professional contexts. Specifically, fans may find taking the test itself to be a form of temporary escapism from hassles in their day-to-day lives and may be able to bolster their self-esteem. Of course, given that the present study only assessed the extent to which participants believed that such personality tests provide these functions for them, is it impossible to know at present whether fan-related personality tests used for these purposes actually improve users' self-esteem or the extent to which they distract participants from thinking about undesirable aspects of their day-today lives. Future research would do well to directly test these possibilities experimentally.

The present results suggest that many of the proposed motivational factors thought to explain the link between fan identity and engagement in fanrelated personality tests did not significantly account for this relationship. In particular, belongingness, entertainment, and eustress, while all being positively correlated with one's fan identification, did not predict frequency of actually doing the personality test. At present, there is no obvious reason for this disconnect between the utility of the tests for this purpose and actually engaging in the tests themselves except to suggest that there was, perhaps, some conceptual overlap and, thus, shared variance between these motivations. For example, as mentioned previously, according to social identity theory, group identification often serves an important esteem-boosting function. As such, when both self-esteem motivation and belongingness motivation are simultaneously entered as variables predicting the outcome of taking the personality test, a significant relationship between belonging and test-taking might be absorbed by their shared relation with self-esteem. Indeed the significant zero-order relationships between belongingness and frequency of taking personality tests and between belongingness and self-esteem would seem to support this possibility. If nothing else, the present results thus speak to the need to fully model all conceptually relevant fan motivations, as was done presently, to obtain a full picture of the relationships between the variables assessed – something that would not be possible if the analyses were conducted, for example, as a series of univariate regressions.

With respect to why self-esteem, in particular, should be a particularly powerful mechanism driving test-taking behavior above and beyond the other motivators, previous research finds that self-esteem is a powerful motivator of fan behavior. People are driven to maintain feelings of self-esteem, such that behaviors and identities which provide people with a sense of self-esteem tend to be more central to their identities (Vignoles, Regalia, Manzi, Gollegde, & Scabini, 2006). As such, for fans who strongly identify as fans, it should follow that at least part of the reason why their fan identity is so strong is because it serves such an important self-esteem bolstering function, which is perhaps a more salient motivator for test-taking behavior.

As to why escapism may have played such a prominent mediating role, research on fan motivation has similarly found that escapism is a fairly common motivation across a variety of fan contexts (Chadborn et al., 2017). Given that the present sample was not drawn from a single fan group but rather was a composite of people from across a variety of fan domains, it would follow that escapism may be a particularly important motivator of many fan behaviors, regardless of the specific behavior or the specific fandom under study.

The present research also has some important practical implications, perhaps the foremost of which is a need for researchers, professionals, and laypersons alike to be more aware of the potential utility of fan-related personality tests. It is unlikely that fans are getting any useful information about their personality from the test itself (Crysel et al., 2015). However, as scholars who study recreation will attest, leisure activities do not have to be productive or generative in order to confer other, less tangible benefits: an afternoon reading comic books may not help a person earn a promotion at work, but it can have invaluable, if unseen benefits for their psychological and physical well-being (Haworth & Lewis, 2005). As such, rather than disparaging fans' use of fan-related personality tests as pointless because of their lack of adherence to sound psychometric properties or their lack of any sort of validation, it may instead be worth approaching these sorts of problems laterally, asking, instead, why fans do spend time on these activities and what other benefits they may be gaining from them.

The present research is not without limitations. Data collection was done online using an online survey written in English, recruiting participants primarily from an American website (Reddit). As such,

the findings, while able to generalize across a range of possible fan groups, are limited in their generalizability to non-English speakers and to people who may not frequent American websites. Moreover, as the study was exploratory in nature, many of the conceptual variables were assessed in a very broad and non-specific sense. For example, in retrospect, it would have been informative to delve deeper into peoples' use of personality tests, including what types of tests they sought out, what made for more or less desirable personality tests, and whether there were outcomes of these tests that they would consider to be more or less desirable. Future research could also explore if and why fans might occasionally prefer to identify with groups and characters who are villainized within their respective canons (e.g., House Slytherin in Harry Potter or the Sith in Star Wars). Finally, in an effort to avoid idiosyncratic results, data were collected from a wide variety of fandoms. While this increases the generalizability of the findings to most fan groups, it should be noted that fandoms have been found to differ with respect to the dominant motivations of their respective fans (Schroy et al., 2016). As such, it may be informative in future research to look at results within and between specific fandoms, which may help to reduce the amount of variability in the measures and allow for a clearer picture of the motivations driving fans to take fan-related personality tests.

In conclusion, the present research surveyed a variety of fans to assess whether the predicted link between fan identity and taking fan-related personality tests would be mediated by a variety of theoretically relevant fan motivations. The results showed that both self-esteem and escapism mediated this relationship, a finding consistent with existing research on this subject, but surprisingly did not provide evidence for eustress, entertainment, belongingness, and family as mediators. These results were discussed with respect to their theoretical relevance, both to the study of personality tests and to the study of fans in general, as well as for their practical implications.

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