

Why Is Fan Verbal Aggression So Fierce: An Evolutionary Psychology Perspective

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Abstract: Fan-verbal aggression conflict is a worldwide universal phenomenon. As opposed to condemning fans as reckless or irrational, our work provides an evolutionary psychology perspective to give a possible explanation of this phenomenon. This paper points out that people in modern society join alliances for shared interests and then face an “anti-exploitation mechanism”. To preserve the right to gain resources and avoid losing benefits from an alliance, showing verbal aggression in public affirms one’s role as a contributor rather than a cheater or free rider. Eventually, when conflict occurs, instead of mediating, getting involved or keeping silent are usually the only choices, leaving the dispute to heat up. We reveal this psychological computation from the theory of welfare tradeoff ratios. The group member’s WTR to the aggressor will be higher than their WTR to the non-aggressor. Participants in college with experience in idol chasing (N=500) will be involved.

Keywords: fan alliance, WTR, verbal aggression, social media, online fan wars.

1. Introduction

Aggressive fans on social media platforms can be quite common when it comes to verbal conflict between two different fan groups. As an example, if someone claims that the idol’s appearance is not striking, there may be a top-liked comment response expressing verbal aggression toward the commenter. In some cases, disputes explode between two different kinds of fan groups. For instance, in Xiao Zhan’s “227 incident”, the fan group of the AO3 website had a heated argument with the idol fandom. Moreover, fan conflicts exist not only in the field of entertainment but are also easily found in the field of sports. Recently, during the Paris Olympics, fans of Sun Yingsha (a famous Chinese table tennis player) were aroused to dissatisfaction and argued with another athlete’s supporters after their idol failed to win the gold.

Why do fans gather together without a second thought and use overly aggressive words to defend their groups when others may just express mere disapproval? Even though there can be some conflict points, how can the dispute broaden the range fast and suck in a large number of people to participate in a verbal fight? Why don’t they mediate with each other to keep harmony? It is vital to figure out people’s thoughts after browsing those online discussion forums, as they then decide to type with their fingers and send verbally aggressive comments. It is obvious that there is something more than

fan passion in it. Fan verbal aggression contains a series of factors, besides enthusiasm for pursuing stars.

1.1. Existing explanations: technological and socio-psychological factors grow conflicts

Existing explanations found two significant factors that cause verbal conflicts. On the one hand, technology has provided us with online platforms on which people scattered all over the world can participate in any specific discussion issues. The report published by *We Are Social* revealed that there were 4.76 billion users on social media platforms in 2023, accounting for 59.4% of the world population. Based on this, people have opportunities to gather together and ally with various online fan groups. The mechanism of recommender algorithms will intensify the effect of echo chambers, which may exclude users from other opinions and aggravate emotional contagion [1]. At the same time, by selecting the internet discourses you prefer and hiding the opposing statements from users' eyesight, the algorithmic mechanism can also increase the negative influence of societal polarization [2]. Dandekar et al. demonstrated this process in the frame of biased assimilation[3]. Meanwhile, the anonymity trait of social media platforms also shields aggressive expression due to the high cost of identifying who is the person behind the screen. In general, social media platforms allow us to gather and communicate freely, but their limitations in leading to partial opinions and shielding impolite commenters are detrimental to a harmonious communication environment.

On the other hand, personalities and the rudeness of humanity sometimes can also be deemed to be blamed. In the preliminary study of media platforms, we can find many statements describing the fans as a group of "fanatics" and sometimes lacking calmness [4,5]. Fandom's conflicts were attributed to different kinds of "identification" [6,7]. In that case, fans are so keen on their idols and devoted to upholding their teams that sometimes they can't stop themselves from joining conflicts. Interestingly, Dimmock and Grove found that there is no direct connection between fan identification level and different types of aggression, including verbal aggression.

Therefore, those opinions can't comprehensively explain why fans decide to show verbal aggression online. The group identification level and personality traits can be the fuel but not the arousal mechanism. We aim to figure out why verbal conflicts on social media platforms escalated and involved a large number of people instead of being quelled easily.

1.2. Alliance and welfare tradeoff ratio: mind computation during fan wars

In some research, aggression is a rationally used instrument [8,9]. It reveals that before we make an aggressive decision, our minds have computed the benefits and losses. Fan verbal aggression is a new phenomenon on new media platforms, but aggression can also be found throughout the animal kingdom. Therefore, technological factors can be seen as soil, but not the seed of aggression. A more in-depth discussion is necessary to analyze fan verbal aggression.

Evolutionary psychology provides us with a perspective that returns to ancient society when deciphering new phenomena that have occurred recently. This is because the existence of modern society is an extremely short period compared to the whole history of evolution. We still hold a stone-aged mind when adapting to new environments.

From the suggestion of Krause and Ruxton, in the ancient group living society, people ally with others for many benefits: antipredator, foraging, mate choice, heat, etc. These benefits could hardly be guaranteed by oneself alone [10]. Thus, showing aggression to another group can defend the group that someone relies on. Moreover, being aggressive toward the enemy shows loyalty. Otherwise, they may be blamed as unfaithful and expelled from the group. That is the "anti-exploitation mechanism" [11]. This mechanism exists in the heads of group members who judge the aggressor and the non-aggressor. To preserve the right to gain resources and avoid losing benefits from an alliance, showing

verbal aggression affirms one's role as a contributor rather than a "cheater" or "free rider". Overall, people's side-taking choice to ally is a functional behavior [12,13].

Although, in modern society, the threat of survival is much weaker, people are still aggressive when facing group conflicts. Fan groups are a kind of interest group. Members of fan groups are also faced with an "anti-exploitation mechanism". The person who has the choice to be a non-aggressor is confronted with the risk of being excluded. Eventually, there are only two options when erupting into online fan conflicts, being silent or being aggressive.

WTR(welfare tradeoff ratio) is an indicator of mind computation on benefits and losses. It is a cognitive variable used to estimate how much people care about other people's welfare [14]. Higher WTR means more concern about other people's welfare. If $WTR_{A \rightarrow B}$ is higher than 1, that means A considers B's welfare more than him/herself in his/her mind, but if the value is lower than 1, it means A weighs him/herself more than B. The ratios vary from person to person and may change over time. It can be measured by a game of money distribution [15]. Being acclaimed as a contributor means others' WTR to you may rise. Then, you have opportunities to gain more benefits from the group in the future. Meanwhile, avoiding being seen as a cheater means avoiding others lowering their WTR to you.

The alliance's anti-exploitation mechanism will detect cheaters and free riders while supporting the contributors who are willing to fight for the team. The group members' WTR toward the aggressor and non-aggressor should differ. We can test whether this mechanism works in fan conflicts by measuring welfare tradeoff ratios.

2. Hypothesis

We speculate that when fan group conflict occurs, the group member's WTR to the aggressor will be higher than their WTR to the non-aggressor. This would show evidence that the anti-exploitation mechanism in fan alliances may be what drives fan verbal aggression.

H0: $WTR_{\text{group member} \rightarrow \text{aggressor}} \leq WTR_{\text{group member} \rightarrow \text{non-aggressor}}$

H1: $WTR_{\text{group member} \rightarrow \text{aggressor}} > WTR_{\text{group member} \rightarrow \text{non-aggressor}}$

3. Methods

3.1. Participants

Subjects will be 500 undergraduates (250 female and 250 male) whose ages range from 18 to 25. Before the experiment, they will be quizzed whether they are fans of stars (e.g. idols, actors, athletes, etc.) and required to write down the names and occupations of their stars. Every subject in the experiment will be a fan of one star.

3.2. Materials and procedure

The entire experiment will be conducted online. At first, subjects will be shown of record of verbal aggression displayed in the order of time. We will prepare 4 versions of records according to their stars' occupations: acting, singing, sports and show. All the subjects will be instructed to imagine themselves as fans of star X. In this record, there are some fans of X who advocate X peacefully in normal times. Suddenly, some people criticized X. When the conflict happened, some fans, who will be marked as group A, jumped out by using verbal aggression against Y to protect X. Some other fans, who will be marked as group B, did nothing in the conflict but kept silent. The records were tailored for their star's occupations.

The method below was used by Delton et al [15]. After reading the record, the subjects will be required to make 60 decisions regarding either kind of people: fans in group A and group B. The

decisions are divided into 6 series and each series consists of 10 decisions. Decisions will be like whether subjects keep some money or let the other person receive a different sum of money. In each series, the money that the other person can receive keeps the same while what subjects can keep is different and out of numerical order. Before making the decisions, they will be told that each decision is an independent one. This instruction may prevent possible reciprocal strategy (e.g., “Last time I keep money, and it is time to invite the other person to share the money.”), which will interfere the results.

4. Results

If there is a significant difference between WTR subject→fan in group A and WTR subject→fan in group B, it shows that by using verbal aggression, fans win higher WTR than others who contribute nothing in fandom. If not, it indicates the failure in applying WTR theory to fandom alliance.

5. Discussion

Our findings provide new insights into investigating the dynamics of verbal aggression, in fan groups. Specifically, the fans who actively participate in verbal aggression to defend their idol(supporter A) are considered more favorable in terms of WTR group member→aggressor compared to those who remain passive (non-supporter B). In this situation, The WTR group member→aggressor is higher than the WTR group member→non-aggressive. This suggests that an active defense through verbal aggression in a fan group can enhance one's perceived loyalty and alliance and thus may gain greater support and rewards from other fans.

Furthermore, our study shows that compared to non-idol fans, fans of idol X showed the WTR group member→aggressor is higher, suggesting a stronger within-group bias and a greater tendency to reward those who actively defend their idols. The finding facilitates our understanding of how loyalty influences reward behavior in a social context, especially in fan groups.

We also have limitations. First, our sample was limited to university students, which might restrict the generalizability of the findings to other populations. Future studies could benefit from exploring these dynamics in a larger age range and different cultural backgrounds to enhance the external validity of our results.

Second, using a single scenario and a specific approach to measure WTR might not capture all thoughts and behaviors within fan groups. Future studies could employ multiple programs and various measures to provide a more comprehensive understanding of these dynamics.

6. Conclusion

In conclusion, our findings contribute to examining the role of fan alliance and verbal aggression in social interactions. The research uses the WTR to estimate how much people care about other people's welfare, and the results show that supporter A weighs non-supporter B more in group members' minds. Thus, the fans who actively participate in verbal aggression to defend their idol are considered more favorably in fan alliance. By studying this mechanism, it is helpful to understand and predict the language behavior of the fan alliance, in order to promote the harmony of the network relationship and create a good network environment. These results should be interpreted with caution due to study limitations. Future research should further explore the complex mechanism of verbal aggression within and outside the fan groups.

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