Rooting for the Underdog: Exploring Motivations of Utility, Justice, and

Moral Judgement in Side-Taking

Beste Karapirinler

A Thesis

Presented to School of Social and Behavioral Sciences of

Tilburg University

Tilburg, Netherlands

In Partial Fulfillment

Of the Requirements for the

Research Master's Degree

February, 2020

Supervisor: Florian van Leeuwen

Second Reader: Rima Rahal

Table of Contents

Abstract

People are often drawn to figures that are seen at a disadvantage or unlikely to prevail. The present research asks "Why do people tend to support the underdog?" and introduces three theoretical approaches: justice theory, utilitarian motives, and moral judgement theory. An experiment was conducted to test the predictions derived from these theories. Participants (N = 221) were presented with hypothetical sporting events where one of the teams was described as the underdog. Disparity between the teams' budget was manipulated in order to test the predictions of justice motives. Moreover, the underdog was introduced as the "spoiler", a team that can potentially harm their competitor, to test the predictions of moral judgement theory. Participants expressed more support for the underdog across all conditions, especially when there was high disparity between the teams' budget. The results of the study suggest that people's support for the underdogs are likely to be derived from justice-related motivations.

Rooting for the Underdog: Exploring Motivations of Fairness, Utility, and

Moral Judgement in Competitive Side-Taking

Some of the most inspiring figures in literature, history, and cinema have been those who are disadvantaged and appeared hopeless. These figures represent the underdog, which is defined as an individual or a group that is at a disadvantage and is expected to lose in a contest or struggle. Some examples of underdogs in the movie industry include Daniel Larusso in "The Karate Kid", a boy who gets bullied many times and yet thrives in the tournament; Frodo in "The Lord of the Rings" franchise, a carefree hobbit who shows great bravery, and the beloved boxer Rocky. People have a tendency to support the disadvantaged party as opposed to an advantaged one in competitions where the aim is to accomplish a difficult task (Kim et al., 2008). This is defined as the underdog effect.

People are quick to identify the underdog in sports, business, and political settings. In a study about two rival sports teams, 97 percent of the participants identified the team with lower expectations of winning and fewer resources as the underdog (Goldschmied, 2005). Moreover, 68 percent of the observers expressed support for the underdog when they were asked which team they would root for in an upcoming match (Goldschmied, 2005). Additionally, people expressed that they would be happier and more pleased if the underdog succeeds (Goldschmied, 2005). In another series of experiments, participants were asked to read a set of scenarios featuring underdogs, half of which included two basketball teams playing against each other in an upcoming game, and the other half included two construction companies competing for the same bid. In both scenarios, the top dog had a win-loss record of 20-5 and the underdog had a win-loss record of 6-21. Participants were asked how much they rooted for the teams or the businesses to win the game or the bid. In support of the underdog effect, the results showed that participants are more likely to root for the underdog and sympathize with the underdog in both scenarios (Kim et al., 2008).

Underdogs were also perceived as warmer political candidates (Goldschmied & Vandello, 2009) and the appeal of the underdog served as a catalyst affecting a significant vote change during elections in earlier studies (Fleitas, 1971), however more recent results have been mixed (for example see Dahlgaard, Hansen, Hansen & Larsen, 2016). In another study examining the influence of polling information on voting preference during the 1980 U.S. Presidential elections, participants were presented with fake polls. People expressed greater support for the underdog, where 62 percent of the participants changed their allegiance after they were informed about the underdog status of the candidates. The shift was almost always towards the underdog and away from the favorite. This effect was especially pronounced for originally undecided participants (Ceci & Kain, 1982). A more recent real-life example of a similar event can be observed in Turkey's 2019 Municipality elections where the favored candidate had a strong financial backup and more resources to run his campaign as well as a strong connection with the ruling government, whereas the underdog candidate was fairly new to the political scene and lack of resources forced him to do a door-to-door campaign in an effort to meet the voters. People showed greater support for the underdog during the political campaign and some even donated money to increase the candidate's campaign budget. However, the support for the underdog especially increased when the elections got cancelled for superficial reasons after the votes had been cast. The re-elections were held three months later and the support for the underdog was overwhelming; the electoral turnout increased during the re-elections and the originally undecided participants expressed support for the underdog (Hurriyet Daily News, 2019). These events suggest that non-affiliated observers tend to express support for the underdog rather than the dominant party.

In addition to electoral choices, the underdog effect emerges in consumption behavior. Researchers speculated that consumers might support underdog businesses more because they are associated with hard work (Shirai, 2017). Studies showed that people

reacted more positively to advertisements with an underdog brand story (Nagar, 2019) and an underdog brand story lead to greater purchase intentions (Nyugen, 2017).

The appeal of the underdog seems to exist across various domains, making it almost independent of the context. In one experiment, participants watched animated clips of two circles. First, they watched a black circle proceed at a horizontal line at a steady pace. This circle came across a hill and maintained its pace of speed as it traversed the hill. Second, they watched a gray circle travelling across the same line but its speed declined noticeably as it traversed over the hill. In the third clip, participants saw the gray circle travel the line and approach the hill. At the same time, the black circle appeared on the screen and started moving along the line with faster pace. It did not lose the pace while climbing over the hill, and it overtook the gray circle, while the gray circle slowed down as it traversed. In the final clip, the circles moved exactly as the previous clip, however, this time the black circle reversed course and bumped the gray circle backward, actively causing it to move back down the hill. After that, the black circle resumed its original course up the hill in its former speed. Conceptually, the gray circle represents the underdog and the black circle represents the top dog. Participants easily identified the gray circle as the underdog and rooted for the gray circle in all of the conditions, especially when it was forced to move backwards (Kim et al., 2008). These findings suggested that even the more inanimate objects can elicit sympathy and support for the underdog.

Previous research demonstrated that people react positively to underdogs across many domains. There should be certain motivations that account for the wide-ranging tendency to support the underdogs. However, the underlying motivations of the underdog effect have received little attention from researchers. I was able to locate two papers that explicitly focused on theoretical explanations of these motivations (Frazier, Snyder, 1991; Goldschmied, 2005). The current study aims to closely examine and test the theoretical explanations of the underdog effect in an effort to discover the underlying mechanisms that

influence side-taking in competitions. In addition to previously proposed theories, I introduce victim perception as a possible explanation for the support the underdog receives. Other factors that might relate to the underdog support are also discussed.

Utilitarian Mechanisms

Deciding which side to support in competitions might be guided by utilitarian mechanisms. According to Frazier and Snyder (1991), observers choose sides by calculating the emotional payoffs of the event. For the unattached hedonistic observer, rooting for the favorite is a poor emotional investment (Frazier & Snyder, 1991). This is because winning is the expected outcome for the top dogs. Decision Affect Theory suggests that the expectedness or unexpectedness of an outcome plays an important role in emotional payoff (Shepperd & McNulty, 2002). For example, in a previous study, gamblers reported that they were overjoyed after an unexpected win (compared to an expected win) and very disappointed after an unexpected loss (compared to an expected loss) (Mellers, Schwartz, Ho & Ritov, 1997). Thus, the victory of the top dog offers smaller emotional benefits, whereas the defeat of the top dog would be disastrous (Goldschmied, 2005). On the other hand, since losing is the expected outcome for the underdogs, the negative emotional consequences are much easier to cope with. Similarly, the victory of the underdog will have larger positive emotional benefits simply because this is an unexpected outcome. In other words, rooting for the underdog is emotionally less costly when the underdog loses and more beneficial when the underdog wins. This theory claims that people choose whom to support through strategic monitoring and expectation management and support the entity that is likely to generate the best emotional outcome. The underdog's victory is more satisfying and its defeat is less unpleasant (Fraizer & Synder, 1991), thus, people are more likely to root for the underdog.

Justice, Fairness, and Deservingness

Vandello, Goldschmied, and Richards (2007) hypothesized that competitive scenarios which include inequality may especially arouse the sense of fairness and justice. In the

context of competitions, the outcomes are unequal – one party will win while the others will lose. The inequality of outcomes (an expected win for the top dog and an expected loss for the underdog) may be perceived as unfair, especially when one party suffers from disadvantages (e.g. lack of money). When disadvantages are perceived as unfair, justice concerns are activated. Third-party observers may asses the justness of the situation by implication and consider resource allocation when they are choosing which side to support. According to the contingency model of resource allocation (Skitka & Tetlock, 1992), decision-makers evaluate the attributions of the involved parties, such as their relative need and deservingness. They might ask: Do either of the parties need my support more than the other? If one of the competitors is unfairly disadvantaged, decision-makers may support the disadvantaged party (the underdog) due to principles of equality, reasoning that the underdog is needier than its opponent, since the underdog has fewer resources and lower chances of winning.

Moreover, in cases where the observers cannot directly affect the outcomes, supporting the underdog may be a way to restore people's sense of fairness and maintain meaning. The meaning maintenance model (Heine, Proulx & Vohs, 2006) claims that meaning revolves around mental representations of expected relationships that include both physical elements and more abstract elements such as self. According to this model, meaning is maintained through four domains, namely, self-esteem, certainty, belongingness, and symbolic immortality. The ability to find predictable relations between the events of the world provides people with certainty and the sense of meaning is threatened when an individual is presented with unfairness (Zhu, Martens & Aquino, 2012). This is in line with the claims of belief in a just world theory (Lerner, 1980), which suggest that people have a coherent meaning framework organized around ideas about justice.

Researchers speculated that when these motivated perceptions are threatened by unfair disadvantages, justice motive is activated (Lerner, 2002) and cognitive processes of

rationalizing the injustice are stimulated (Hafer, 2000). Thus, people tend to make favorable character judgements about disadvantaged groups as a way of rationalizing inequalities and achieving balance, such as seeing poor people as more honest (Kay & Jost, 2003). In like manner, previous research showed that people tend to believe the underdogs put more effort into their work to rectify their unfair disadvantages (Vandello, Goldschmied & Richards, 2007). Leventhal (1976) argues that decision-makers consider the contributions, need, equality, and other distributive norms when they are allocating resources. If people believe that underdogs put more effort into their work, they will be more likely to believe that they deserve to win more, which will in turn promote the support for the underdog.

In summary, justice theories suggest that supporting the underdog is a symbolic way of eliminating disadvantages and achieving balance.

Moral Judgement

Another strategy people use when choosing sides in competitions might be moral judgement mechanisms. It has been argued that morality directs the unaffiliated observers' side-taking decisions in disputes (DeScioli & Kurzban, 2013). Simply put, observers may judge each competitor through the lens of morality and choose to side against the morally wrong party. Theories of moral judgement underline that people understand the concept of morality through a cognitive template (Murphy, 2004), that is interpersonal harm. The dyadic template of morality claims that people are categorized as either moral agents or moral patients according to interpersonal harm – a process called moral typecasting (Gray, Waytz & Young, 2012a). Interpersonal harm is a matter of perception (Gray, Young & Waytz, 2012b).

This theory suggests that individuals might support the underdog because the underdog is more likely to be perceived as the victim since they suffer from unfair disadvantages. According to this argument, the underdog effect might be a byproduct of victim perception. If the top dog is harmed, on the other hand, the top dog might receive

more support than the underdog because this time the top dog will be more likely to be perceived as the victim.

Alternative Explanations

Identification.

Researchers demonstrated that people who self-identify as underdogs showed greater support for brands with underdog biographies (Paharia, Keinan, Avery & Schor, 2010; Li & Zhao, 2018). Self-congruency theory claims that people choose brands that reflect their actual or desired self-concept (Sirgy, 1982), therefore, people who self-identify as underdogs were more likely to purchase from brands that had an underdog backstory (Paharia et al., 2010). This finding, however, does not explain why so many third-party observers choose to side with the underdogs. One explanation could be that most people identify themselves as underdogs. Identity might be partially formed by similarities that people see between themselves and others (Owens, Robinson & Smith-Lovin, 2010). If we consider the personal struggles in individuals' lives, we see that many of them can relate to the stories of underdogs, most likely because they had somewhat similar experiences themselves. On the other hand, one might argue that according to social identity theory (Tajfel & Turner, 1986), individuals are motivated to gain positive self-esteem through their group membership and affiliating with a team or group can influence self-evaluations. Specifically, this theory claims that individuals strive to achieve or maintain positive social identity, and positive social identity is enhanced when individuals compare their group favorably to other groups (Tajfel & Turner, 1986). Therefore, social identity theory suggests that when people are faced with an imbalanced competitive scenario, they should identify with the group that is more likely to succeed in order to gain positive self-esteem, that is the top dog. Given these points, theories about identification make different predictions about which group people are more likely to identify with. Thus, this will be explored first. After that, the role identification plays on the support for the underdog will be discussed.

Conformity.

Research on social influence demonstrated that people are heavily influenced by the actions of others (Asch, 1956; Cialdini, Reno & Kallgren, 1990). Conformity can be identified as the change in one's behavior to match or imitate the beliefs, behaviors or responses of others. The motivations behind this tendency can come from a desire to accurately interpret the reality and behave appropriately or from the desire to achieve social approval and fit in with the others (Cialdini & Trost, 1998). Individuals might be under the impression that the majority will support the disadvantaged party and choose to follow them following the principles of conformity.

Overall, theories of social influence suggest that people's actions are usually in line with others' beliefs. Nevertheless, this theory does not make a direct prediction regarding the support for the underdog. This is because whether supporting the underdog is a norm or not is yet to be discovered, and conformity depends on people's perceptions of others' beliefs.

Current Study and Predictions

The current study explores the tendencies and motivations underlying the underdog effect. In other words, this study aims to discover to what extent the proposed theories explain the underdog effect. Building on previous theories of side-taking and resource allocation, I reason that when observers are asked to choose sides in competitive situations, they might be motivated by justice, moral judgement, and utilitarian mechanisms. Additionally, people might have individual beliefs that affect their level of their support, such as their beliefs about justice, their level of identification and their beliefs about the majority's support. The key predictions are summarized in Table 1.

Table 1

Summary of Relevant Theories and Corresponding Key Predictions

Theory	Mechanism	Key Predictions
Utilitarian theories (Frazier & Snyder, 1991)	Emotional outcomes	Utilitarian hypothesis: People will support the team that offers better emotional outcomes, that is the underdog.
Justice theories (Skitka & Tetlock, 1992)	Inequality reduction	Inequality hypothesis: People will support the disadvantaged team to eliminate inequality and unfair disadvantages.
Justice theories (Hafer, 2000)	Rationalization	Rationalization hypothesis: People will believe the disadvantaged party deserves to win more as a way of rationalizing inequalities, thus, support the underdog team.
Justice theories (Lerner, 1980)	Belief in a just world	Belief in a just world hypothesis: People who are more likely to believe that the world is fair and orderly will support the underdog team more.
Moral judgement theories (Gray, Waytz & Young, 2012a)	Victim perception	Moral judgement hypothesis: People will support the team that they perceive as the victim.
Identification theories (Sirgy, 1982)	Self-congruency	Identification hypothesis: People will support the team they identify with. There are no clear predictions about whether people will identify with the underdog more.
Social influence theories (Cialdini & Trost, 1998)	Conformity	Conformity Hypothesis: People will support the team they think is likely to be supported by others.

An experiment was designed in order to test these predictions. The experiment comprised of sports vignettes where participants read about an upcoming football game between two teams, one described as the underdog and the other as the top dog. The top dog had a higher budget and higher chances of winning the upcoming game.

First, in all conditions, a general tendency to support the underdog compared to the top dog (as defined by history of success and resources) is expected on the basis of utilitarian mechanisms.

Second, based on justice motivations, it is expected that individuals will express more support for the underdog when there is a high disparity between the competitors' resources (compared to low disparity). High disparity is likely to make inequality more salient, leading the participants to believe that the underdog is the needier claimant and

facilitate support for the underdog. In the current experiment, the underdog had a lower budget than the top dog in both conditions, however, the difference between the teams' budget was greater in the high disparity condition.

Moreover, justice theories suggest that people are more likely to believe the underdog deserves to win the game because in the presence of unfair inequalities, justification mechanisms get activated and people make favorable character judgements about the disadvantaged party. For this reason, perceiving the underdog team as more deserving of a win would be in line with the claims of the justice theories.

Furthermore, justice theories suggest that people have a consistent framework that revolves around ideas about justice. According to the belief in a just world theory (Lerner, 1980), individuals might differ in the degree to which they believe the world is just and orderly. The sense of meaning is believed to be more reliant on justice for individuals who strongly accept this belief (Lerner, 1980; Zhu et al., 2012). Therefore, people who are more likely to perceive the world as just and orderly may be especially motivated by justice and express more support for the underdog.

Next, based on moral judgement theories, it is expected that individuals will support the victim in situations in which they perceive harm. In the current experiment, harm is operationalized as 'spoiling'. In the world of sports, a spoiler is a team that cannot gain anything by winning a game (beyond the spirit of sport) but can determine the fate of its competitor, such as preventing it from making to the playoffs. The study introduced the underdog as the spoiler in some conditions. If people take interpersonal harm into consideration in side-taking, the top dog should receive more support when the underdog is the spoiler, since the underdog's win can potentially harm their competitor.

If individuals are only motivated by utilitarian concerns, the disparity of resources and spoiling should not affect the support underdogs receive, as the expectations of winning and

losing do not vary between conditions and the emotional payoff derived from the unexpectedness of an event remain the same.

Then, identification with the underdog will be examined. Identification theories do not make a clear prediction about which team people would be more likely to identify. Thus, this question will be answered first.

Finally, it is believed that people are often influenced by others' opinions. Conformity underlines people's tendency to imitate the beliefs and behaviors of others. Thus, whether people believe the majority will support the top dog or the underdog will be discovered. In other words, whether supporting the underdog is a norm or not will be uncovered. If, in fact, people believe the majority will support the underdog, conformity might be considered as another motivation underlying side-taking and rooting for the disadvantaged team.

Method

Participants

229 undergraduate psychology students from Tilburg University (28 male, 201 female) with an average age of 20 ($M = 19.66$, $SD = 2.11$) completed an online survey in exchange for experimental hour credits. The survey was translated to Dutch. Participants were randomly assigned to one of the four conditions described below.

Procedure

Participants read the information about the study and gave consent prior to participation. They were informed that the online questionnaire will explore people's attitudes and beliefs about competitions. Each participant was presented with a short paragraph about two football teams competing in an upcoming match. The top dog team (the Thundercats) had many wins under their belt and have won the local cup six times in the last ten years whereas the underdog team (the Black Eagles) came off a year in which they did not win many games and they won the local cup only once in the last ten years. Moreover, the top dog had a higher sports budget than the underdog. The study followed a two

(disparity: high versus low) by two (spoiling: spoiler versus no spoiler) between-subjects design.

Resources were explicit in all conditions. The Thundercats had a payroll of 20 million dollars in all conditions and the Black Eagles had a payroll of 6 million dollars in the high disparity condition, and 14 million dollars in the low disparity condition, respectively. In the no spoiler condition, it was mentioned that the game will take place at the beginning of the season and a defeat would have similar consequences for both of the teams. In the spoiler condition, on the other hand, participants read that another win for the Thundercats would get them closer to the division title but a loss might prevent them from making to the higher league, while the result of the game would not influence the Black Eagles as much since they will remain in the same league either way (see Appendix A for all materials).

Measures

After each participant read the short paragraph, they answered questions about the teams and the competition. First, comprehension checks were included: "According to the information given above, which team has a success rate?" and "Which team has a higher sports budget?" (1: The Thundercats, 2: The Black Eagles). The comprehension checks were included in order to ensure that each participant read and understood the information correctly.

Participants then chose which team they liked better and which team they would probably root for. First, participants used a bi-polar scale to answer these questions, where they moved a slider to either one of the ends (each end representing one of the teams). However, bi-polar measures that follow a forced-choice layout might have some disadvantages such as loss of information and problems with acquiescence (Ray, 1990). In order to examine whether the support ratings are sensitive to the measurement style, balanced Likert-type questions were also added to the survey. Participants also answered how much they liked a team and how much they would support a team in the upcoming match for each

team on a 6-point scale (1: Not at all, 6: Very much). That is to say, the current study included both bi-polar outcome measures and unipolar outcome measures.

The participants then answered how much they identified with each team and how much they thought each team deserved to win the game (1: Not at all, 6: Very much). Then, they completed measures related to others' behavior by answering to what extent they thought the majority would support either of the teams on a 7-point scale. For exploratory reasons, participants were also asked to write down why they thought others would support a specific team if they thought so. Moreover, they completed the manipulation checks that asked how much a team was perceived as the underdog and as the victim on a 7-point scale (see Appendix B for all the measures).

Finally, they completed the Belief in a Just World Scale, developed by Lucas, Zhdanova & Alexander (2011). The full scale consists of 16 items: the first eight items pertain to perceptions of fairness concerning others and the following eight items are about people's perceptions of fairness with respect to themselves. Since the main interest of this study is about unaffiliated observers' perceptions of fairness with respect to football teams, only the first eight items of the scale were included in the survey. The items included statements such as "People usually receive the outcomes they deserve" or "Regardless of the specific outcomes they receive, people are subjected to fair procedures." Each item was rated on a 7-point scale (1: Strongly disagree, 7: Strongly agree).

Results

Comprehension Checks

Team Thundercats was portrayed as the top dog and team Black Eagles represented the underdog in the study. Eight participants failed to identify the Thundercats as the team with higher success rate and the team with the higher sports budget. These participants were excluded, leaving 221 participants to be included into the analysis.

Coding of the Variables

First, participants answered which team they would support and which team they liked better using a bi-polar format. The responses of these questions varied between zero and 100. Here, a score of 100 meant that the participant supported the Black Eagles (underdog) completely and a score of zero meant the participant supported the Thundercats (top dog) completely. The bi-polar questions "Which team would you probably root for?" and "Which team do you like better?" were combined into a single variable to reflect overall (bi-polar) support. This scale had a reliability of 0.84, ($M = 59.45$, $SD = 20.44$).

Unipolar items that asked to what extent participants rooted for the underdog and how much they liked the underdog team were combined together to form a single scale measure of underdog support (Cronbach's $\alpha = 0.80$). Similarly, variables about how much participants rooted for the top dog and how much they liked the top dog team were combined, which measured the support for the top dog (Cronbach's $\alpha = 0.78$).

Prior to testing any models, the unipolar variables were rescaled to vary between zero and 100 in order to ensure all the variables were on the same scale. Following the recommendations of Cohen, Cohen, Aiken & West (1999), the unipolar variables were rescaled using percent of maximum possible (POMP) scoring. This procedure included measures of support, deservingness, identification, majority support, and manipulation checks.

Finally, eight items that measure belief in a just world with respect to others were combined to form a single scale measure ($\alpha = 0.85$), which was then rescaled using POMP scoring ($M = 46.96$, $SD = 14.97$).

Underdog versus Top dog

As expected, participants thought the underdog team ($M = 71.76$, $SD = 23.10$) deserved to win the upcoming game more than the top dog team ($M = 51.13$, $SD = 26.65$), $t(220) = 8.74$, $p < .001$, $d = 0.58$.

Moreover, participants identified with the underdog more (M = 47.69, SD = 26.29) than they identified with the top dog (M = 31.57, SD = 23.75), $t(220)$ = 7.08, p < .001, d = 0.41.

Mean comparisons revealed that participants thought the top dogs (M = 63.72, SD = 23.57) will receive more support by the majority compared to the underdogs (M = 40.27, SD = 23.44), $t(220)$ = 7.95, p < .000 , d = 0.41. Participants believed the majority will support the top dog for various reasons. Twenty-three percent of the participants thought that people like being on the winning side and because the top dog is more likely to win, most people will support this team. Sixteen percent of the participants thought that the top dog's past success will attract the support of the majority and 12% of the participants reported that the top dog already had a lot of fans because they are the bigger club so they must have bigger marketing campaigns and more money for marketing purposes. Finally, 3% of the participants noted that people will support the top dog because the stakes are higher for them. These participants were in the spoiler condition.

Nine percent of the participants thought that the majority will support the underdog because they evoke sympathy while 9% of the participants believed that an underdog's win is more special and 3% of the participants thought that the majority would support the underdog because they work harder. The remaining 25% of the participants did not provide an answer to the open-ended question.

Manipulation Checks

The first manipulation check asked the participants to what extent they perceived either of the teams as the underdog. Participants in the high disparity condition (M = 71.69, SD = 25.65) were more likely to perceive the Black Eagles as the underdog compared to those in the low disparity condition (M = 63.01, SD = 16.17), $F(1, 219)$ = 4.30, p = .039, η^2= .019. This suggested that manipulation of disparity was successful. The Black Eagles were

more likely to be identified as the underdog when there was greater inequality between the two teams' budget.

The second manipulation check asked the participants to what extent they perceived either of the teams as the victim. Perceiving the top dog as the victim did not differ by spoiling, $F(1, 219) = 0.16$, $p = .690$, $\eta^2 = .001$. This suggested that spoiling manipulation did not work as expected, since presenting the underdog as the spoiler did not have an effect on the top dog's victim status. It is also important to note that half of the participants were indecisive and did not perceive either of the teams as the victim.

Hypothesis Testing

Unipolar Measures.

The aim of this analysis was to determine which team people were more likely to support and whether manipulations of disparity and spoiling had an effect on the support for the teams. The main dependent variable of interest was how much participants rooted for the teams.

The support ratings for the top dog and the underdog were not negatively correlated with each other, $r(221) = -.015$, $p = .089$. This was unexpected. This finding signaled that unipolar items might be less reliable measures of the underdog effect. Since the ratings were not correlated with each other, unipolar items for the underdog could not be combined with corresponding (reversed) items for the top dog, thus, support ratings for the teams were included in the analysis as repeated measures.

A two (disparity: high vs. low) by two (harm: spoiler vs. no spoiler) by two (teams: top dog vs. underdog) ANOVA was performed where the support for the teams were entered as a repeated measures factor. Deservingness, identification, majority support, and belief in a just world interacted with the within-subjects factor. Since this violated the homogeneity of slopes assumption, they were not included in this model. Participants' mean support across conditions are presented in Figures 1 and 2.
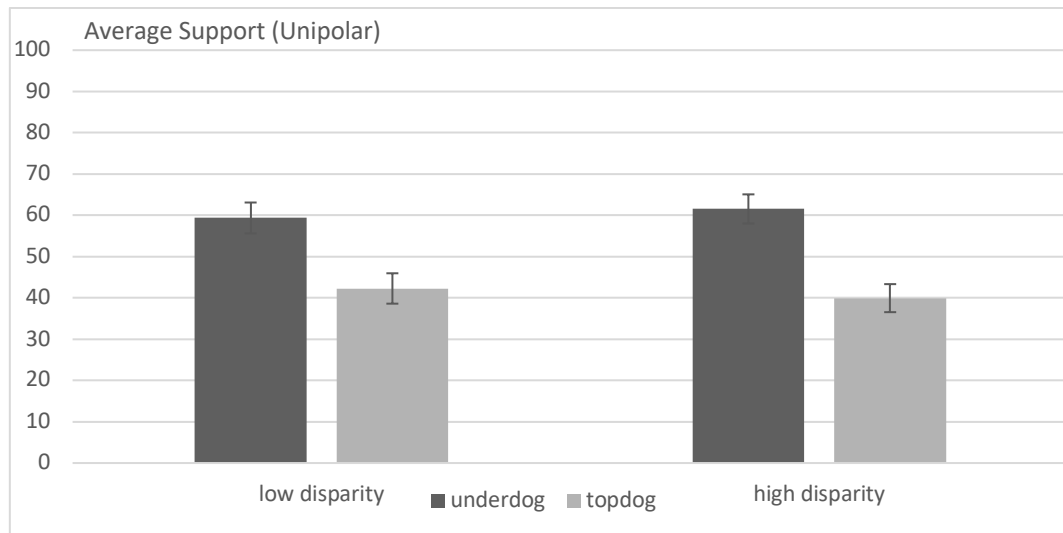
The analysis revealed a main effect of teams, $F(1, 217) = 85.792$, $p < .001$, $\eta^2 = .283$. On average, the underdog ($M = 59.90$, $SD = 20.29$) received more support than the top dog ($M = 40.81$, $SD = 20.45$).
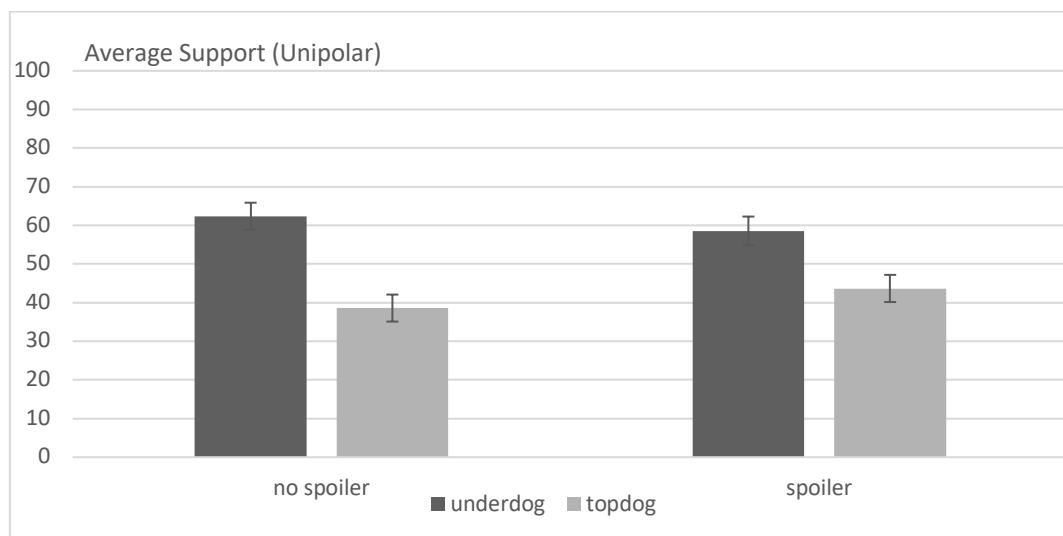
Figure 1

Support for the Teams Across Disparity Conditions

Note. Error bars represent 95% confidence intervals.

Figure 2

Support for the Teams Across Spoiling Conditions

Note. Error bars represent 95% confidence intervals.

The support each team received was expected to differ by disparity. This was not the case. The analysis did not show a significant interaction between team support and disparity, $F(1, 217) = 1.62$, $p = .216$, $\eta^2 = .005$. Moreover, pairwise comparisons revealed that the underdog did not receive significantly more support in the high disparity condition ($M = 61.68$, $SD = 19.40$) compared to the low disparity condition ($M = 59.04$, $SD = 21.19$), $t(219) = 0.60$, $p = 0.549$.

Next, it was expected that the top dog would receive more support than the underdog when the underdog was described as the spoiler. This was not the case. The underdog received more support than the top dog both in the spoiler condition ($M = 62.33$, $SD = 20.14$) and in the no spoiler condition ($M = 58.56$, $SD = 20.36$), $F(1, 217) = 3.28$, $p = .071$, $\eta^2 = .015$. The interaction between spoiling and disparity was not significant, $F(1, 217) = 1.39$, $p = .239$, $\eta^2 = .006$.

Bi-polar Measures.

The aim of this analysis was to investigate whether disparity and spoiling had an effect on the bi-polar support measure. Moreover, I was interested in whether perceiving the underdog as more deserving, identifying with the underdog, believing that the majority would support the underdog, and belief in a just world scores would affect the support.

A two-way ANCOVA was performed where the bi-polar support ($M = 59.45$, $SD = 20.44$) was entered as the dependent variable whereas disparity and spoiling were entered as the independent variables and deservingness, belief in a just world, identification, and beliefs about majority support were entered as continuous predictor variables. These variables did not differ by levels of disparity or spoiling. This model had an R^2 of .196.

In line with the justice hypotheses, it was expected that disparity will have an effect on the team the participants support. This hypothesis was supported. Disparity of resources, $F(1, 212) = 4.30$, $p = .039$, $\eta^2 = .020$ did have an effect on the bi-polar support measure. Participants in the high disparity condition ($M = 61.26$, $SD = 18.47$) supported the underdog

more than those in the low disparity condition ($M = 57.33$, $SD = 22.36$). This is illustrated in Figure 3.

Spoiling did not have an effect on the bi-polar support measure, $F(1, 212) = 3.51$, $p = .062$, $\eta^2 = .016$. Participants supported the underdog both in the spoiler condition ($M = 56.16$, $SD = 21.44$) and in the no spoiler condition ($M = 62.43$, $SD = 19.10$). The interaction between spoiling and disparity was not significant, $F(1, 212) = 1.88$, $p = .172$, $\eta^2 = .009$.

Figure 3

Estimated Marginal Means of the Bi-polar Support Measure
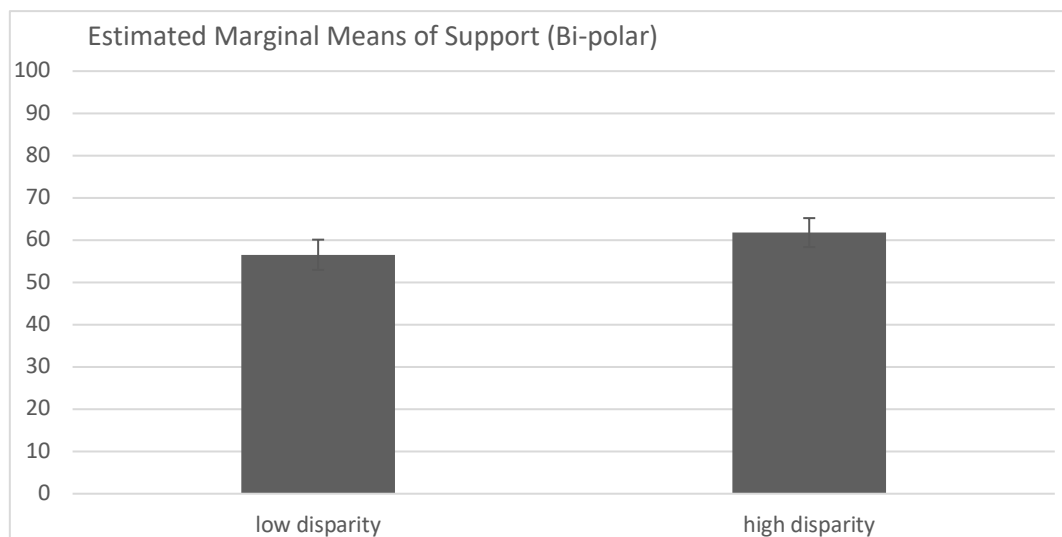
Note. Error bars represent 95% confidence intervals.

As expected, the results showed that deservingness contributed to the support ratings, $F(1, 212) = 7.27$, $p = .008$, $\eta^2 = .033$. A similar result was obtained for identification, $F(1, 212) = 23.91$, $p < .001$, $\eta^2 = .101$. Participants who identified with the underdog and those who thought the underdog team deserves to win more expressed higher levels of support for the underdog.

Belief in a just world scores ($M = 46.96$, $SD = 14.97$) did not have an effect on the support, $F(1, 212) = 2.38$, $p = .124$, $\eta^2 = .011$.

Finally, people's perceptions about the majority's support did not affect their support for the underdog, $F(1, 212) = 0.21$, $p = .649$, $\eta^2 = .001$. That is to say, believing that the underdog will support the underdog did not explain significant variances in the support the underdog received. Therefore, no traces of conformity were found.

The data did not violate the assumptions of ANCOVA and Levene's test of homogeneity of variance was not violated $F(3, 216) = 2.52$, $p = .559$.

The results that were obtained through this analysis were not in line with the observations for the unipolar measures. A significant effect of disparity was observed for the bi-polar measure whereas this effect was not significant when participants were asked to report their level of support for both of the teams. It is important to note that the unipolar measures for the top dog support and underdog support were not negatively correlated. Since these items were designed to measure support for two opposing teams, lack of a negative correlation made the reliability of the unipolar rating measures questionable. Thus, I reason that the bi-polar measure appears to be a more reliable measure of demonstrating the effects.

Discussion

The current study was conducted to discover the underlying motivations of the tendency to support the underdogs. The experiment included manipulations of disparity and spoiling in order to examine the theoretical explanations of this tendency. Moreover, measures of individual variables namely deservingness, belief in a just world, identification, and majority support were introduced. As expected, a general tendency to support the underdog team was observed, confirming the existence of the underdog effect. Three main theoretical approaches were introduced to stipulate on the motivations of this effect: utilitarian motives, justice theory, and victim perception. The findings of the study are summarized in Table 2.

Table 2

Summary of Key Predictions and Observations

Hypotheses	Key Predictions	Results
Utilitarian hypothesis	People will support the team that offers better emotional outcomes, that is the underdog.	Supported.
Inequality hypothesis	People will support the disadvantaged team to eliminate inequality and unfair disadvantages.	Supported.
Rationalization hypothesis	People will believe the disadvantaged party deserves to win more, thus support the underdog.	Supported.
Belief in a just world hypothesis	People who are more likely to believe that the world is fair and orderly will support the underdog team more.	Not supported.
Moral judgement hypothesis	People will support the team that they perceive as the victim.	Not supported.
Identification hypothesis	People will support the team they identify with. There are no clear predictions about whether people will identify with the underdog more.	Supported. Participants were more likely to identify with the underdog.
Conformity hypothesis	People will support the team they think is likely to be supported by others.	Not supported.

The manipulation checks suggested that when there was a greater disparity between the teams' sports budget, participants were more likely to perceive the team with fewer resources and lower chances of winning as the underdog. According to the model with bi-polar outcome measures, participants supported the underdog team more when there was larger disparity between the teams' sports budgets. This is in line with the predictions of justice theory, which suggests that sense of injustice will grow as inequality becomes more salient so participants will be more likely to support the team with disadvantages in order to restore symbolic equality.

Relative deservingness contributed to the support the underdog received and most people thought that the underdog deserved to win the upcoming game more than the top dog. This is also in line with the predictions of justice theory. It appears that people make

favorable character judgements about disadvantaged groups as a way of rationalizing inequalities and believe that the underdogs deserve to win more. In fact, previous research found that when disadvantage is perceived as unfair, underdogs become more attractive and desirable in the eyes of the others (Michniewicz & Vandello, 2013).

No relationship was detected between belief in a just world scores and underdog support. This finding does not support the belief in a just world hypothesis, which suggests that people who are more likely to perceive the world as just and orderly would support the underdog even more in order to restore their sense of fairness and maintain meaning.

Spoiling was introduced in order to manipulate victim perception. The aim of this manipulation was to portray the underdog as an agent and the top dog as the victim in some conditions. However, this manipulation did not work as expected. Victim perception did not differ by the spoiling manipulation. Moreover, spoiling did not have an effect on support. Participants rooted for the underdog more than the top dog even when the underdog was the spoiler. This finding does not accord with the predictions of moral judgement theory. Furthermore, more than half of the participants did not perceive either of the teams as the victim, suggesting that the manipulation of spoiling was rather weak. Therefore, the study failed to demonstrate an association between victim perception and side-taking in competitions. Based on the results of the manipulation check, it is difficult to draw conclusions about theories of moral judgement and the underdog effect. Still, it might be that victim perception is not a mechanism people immediately use in sporting scenarios.

As expected, identifying with a team contributed to the support that team received; those who identified more with the underdog expressed support for the underdog team. This is in line with self-congruency theory (Sirgy, 1982). Overall, participants showed higher levels of identification with the underdog. It will be recalled that this is not predicted by the social identity theory (Tajfel & Turner, 1986). When there is no prior affiliation, identifying with the group that has higher chances of winning is more likely to provide individuals with

positive self-esteem. Yet, participants were more likely to identify with the underdog, the team with lower chances of success. One explanation for this outcome might be that when there is no prior affiliation, people identify with groups based on similarities they see between themselves and others (Owens, Robinson & Smith-Lovin, 2010). In that sense, gaining positive self-esteem does not appear to be the only motivation behind identification and focusing on the similarities between the self and a certain group leads to higher levels of identification.

Most of the participants believed that the majority would support the top dog. Yet, more participants, on average, expressed support for the underdog. In other words, people's perceptions of the majority's support were not in line with what was observed. Moreover, believing that the majority will support the underdog did not have an effect on the support underdog received. This result suggests that conformity might be irrelevant in such side-taking decisions. Nevertheless, it is important to note that the data was collected through an online survey, where each participant answered the questions anonymously and privately. The role conformity plays in side-taking decisions may be affected by social desirability, which was minimal in the current study. That is to say, conformity might affect side-taking decisions to a certain extent if people are surrounded by other individuals in a public environment.

Limitations and Future Research

There are a few limitations of this study. First, the manipulation of victim perception was rather weak. More than half of the participants did not perceive either of the teams as the victim and the spoiler manipulation did not have an effect on victim perception. Future studies should assure that one team is presented as the victim before drawing conclusions about the relationship between victim perception and the underdog effect. For example, changing the wording in the spoiler vignettes to "The Black Eagles might destroy the

Thundercats" or "Black Eagles might tarnish the Thundercats' streak" might make interpersonal harm more salient and strengthen the manipulation of victim perception.

Second, 87 percent of the participants were female, therefore, the results might not be generalizable to males.

Furthermore, one should act with caution when generalizing the results of this study to different domains. In the sports domain, supporting the underdog does not directly affect the outcome of the match and self-relevance is low. The results might be different for political domains. When the competition's outcomes are relevant to the people (such as choosing a leader) other mechanisms might take center stage.

A question remains regarding the better type of measurement style for investigating the underdog effect. According to the results of this study, bi-polar items appear to be more reliable measures of the underdog effect. However, replications are necessary to come up with a final verdict.

As the underdog effect seems to be a phenomenon that is exhibited by the majority of the participants, it may be worthwhile to further explore to what extent the reactions towards the underdog are derived from the team on the bottom and from the team on the top. Research on schadenfreude (Leach, Spears, Branscombe, & Doosje, 2003) has demonstrated that people might take pleasure in seeing high achievers fail under some circumstances. That is to say, people might root against the dominant entities and express support for the underdog because they are the default opponent of the dominant team. In the current study, participants rooted for the underdog team even when their opponent had something to lose, which may be interpreted as a signal of rooting against the top dog. People might resent the top dog since they have unfair advantages (i.e., they have more money). This speculation awaits further testing.

Conclusions

Understanding non-affiliated observers' judgments about competitions have important implications for understanding public opinion and individual behavior. The aim of this study was to closely examine the theoretical explanations of the underdog effect in an effort to discover the underlying mechanisms that are used in side-taking. The experiment included manipulations of disparity in order to examine whether support for the underdog is motivated by justice. Moreover, the underdog was introduced as the spoiler in some conditions to see whether victim perception explains the underdog effect.

In conclusion, it appears that utilitarian motivations are not the only mechanism that can explain the support for the underdog. Claims of the justice theory are supported. The experiment demonstrated that when inequality is more salient, participants are more likely to support the underdog. Another claim of the justice theory found support, that is about deservingness. Participants thought the underdog team deserves to win more and perceived deservingness contributed to the support the underdog received.

This study has added another body of information about the existence of the underdog effect. Given these points, it appears that people choose to support the underdog because they think the underdog deserves to win, because they identify with the underdog more, and most importantly because supporting the underdog is a symbolic way of eliminating inequalities.

References

Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a
    unanimous majority. *Psychological monographs: General and applied*, *70*(9), 1 - 70.

Ceci, S. J., & Kain, E. L. (1982). Jumping on the bandwagon with the underdog: The impact
    of attitude polls on polling behavior. *Public opinion quarterly*, *46*(2), 228-242. doi:
    10.1086/268715

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and
    compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of
    social psychology* (p. 151–192). New York: McGraw-Hill.

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct:
    recycling the concept of norms to reduce littering in public places. *Journal of
    personality and social psychology*, *58*(6), 1015-1026.

Cohen, P., Cohen, J., Aiken, L. S., & West, S. G. (1999). The problem of units and the
    circumstance for POMP. *Multivariate behavioral research*, *34*(3), 315-346. doi:
    10.1207/S15327906MBR3403_2

Dahlgaard, J. O., Hansen, J. H., Hansen, K. M., & Larsen, M. V. (2016). How are voters
    influenced by opinion polls? The effect of polls on voting behavior and party
    sympathy. *World Political Science*, *12*(2), 283-300. doi: 10.1515/wps-2016-0012

DeScioli, P., & Kurzban, R. (2013). A solution to the mysteries of morality. *Psychological
    bulletin*, *139*(2), 477. doi: 10.1037/a0029065

Fleitas, D. W. (1971). Bandwagon and underdog effects in minimal-information
    elections. *American Political Science Review*, *65*(2), 434-438. Retrieved from:
    https://www.jstor.org/stable/1954459

Frazier, J. A., & Snyder, E. E. (1991). The underdog concept in sport. *Sociology of Sport
    Journal*, *8*(4), 380-388. doi: 10.1123/ssj.8.4.380

Goldschmied, N. (2005). The underdog effect: Definition, limitations, and motivations. why do we support those at a competitive disadvantage? (Unpublished master's thesis). University of South Florida, Tampa.

Goldschmied, N., & Vandello, J. A. (2009). The advantage of disadvantage: Underdogs in the political arena. *Basic and Applied Social Psychology*, *31*(1), 24-31. doi: 10.1080/01973530802659810

Gray, K., Waytz, A., & Young, L. (2012a). The moral dyad: A fundamental template unifying moral judgment. *Psychological Inquiry*, *23*(2), 206-215. doi: 10.1080/1047840X.2012.686247

Gray, K., Young, L., & Waytz, A. (2012b). Mind perception is the essence of morality. *Psychological inquiry*, *23*(2), 101-124. doi:10.1080/1047840X.2012.651387

Hafer, C. L. (2000). Do innocent victims threaten the belief in a just world? Evidence from a modified Stroop task. *Journal of Personality and Social Psychology, 79,* 165–173. doi: 10.1037/AW22-3514.79.2.165

Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and social psychology review*, *10*(2), 88-110. doi: org/10.1207/s15327957pspr1002_1

Hurriyet Daily News. (2019, June 22). *Istanbul residents head to polls again to choose mayor.* Retrieved December 5, 2019 from https://www.hurriyetdailynews.com/istanbul-residents-to-head-to-polls-again-on-sunday-to-choose-mayor-144379

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British journal of social psychology*, *33*(1), 1-27. doi: 10.1111/j.2044-8309.1994.tb01008.x

Kay, A. C., & Jost, J. T. (2003). Complementary justice: effects of" poor but happy" and" poor but honest" stereotype exemplars on system justification and implicit activation

of the justice motive. *Journal of personality and social psychology*, *85*(5), 823. doi: 10.1037/0022-3514.85.5.823

Kim, J., Allison, S. T., Eylon, D., Goethals, G. R., Markus, M. J., Hindle, S. M., & McGuire, H. A. (2008). Rooting for (and then abandoning) the underdog. *Journal of Applied Social Psychology*, *38*(10), 2550-2573. doi: 10.1111/j.1559-1816

Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: Schadenfreude at the suffering of another group. *Journal of personality and social psychology*, *84*(5), 932. doi: 10.1037/0022-3514.84.5.932

Lerner, M. J. (1980) *The belief in a just word: A fundamental delusion.* (pp. 9-30) New York: Planum Press.

Lerner, M. J. (2002). Pursuing the justice motive. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 10–37). Cambridge: Cambridge University Press.

Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In *Advances in experimental social psychology*, *9*, 91-131. doi: 10.1016/S0065-2601(08)60059-3

Li, Y., & Zhao, M. (2018). Must the underdog win? The moderation effect of product type in the underdog effect of brand stories. *Asian Journal of Social Psychology*, *21*(4), 237-245. doi: 10.1111/ajsp.12326

Lucas, T., Zhdanova, L., & Alexander, S (2011). Procedural and distributive justice beliefs for self and others: Assessment of a four-factor individual differences model. *Journal of Individual Differences, 32,* 14-25. doi: 10.1027/1614-0001/a000032

Mellers, B. A., Schwartz, A., Ho, K., & Ritov, I. (1997). Decision affect theory: Emotional reactions to the outcomes of risky options. *Psychological Science*, *8*(6), 423-429. doi: 10.1111/j.1467-9280.1997

Michniewicz, K. S., & Vandello, J. A. (2013). The attractive underdog: When disadvantage bolsters attractiveness. *Journal of Social and Personal Relationships*, *30*(7), 942-952. doi: 10.1177/0265407513477629

Murphy, G. L. (2004). *The big book of concepts*. Cambridge, MA: MIT Press.

Nagar, K. (2019). Support for the underdog brand biography: Effects on consumer attitude and behavior. *Journal of Marketing Communications*, *25*(5), 477-493. doi: 10.1080/13527266.2017.1356349

Nguyen, T. T. (2017). *Underdog brand biographies and their influence on consumers' post-message engagement* (Unpublished doctoral dissertation). Concordia University, Montreal.

Owens, T. J., Robinson, D. T., & Smith-Lovin, L. (2010). Three faces of identity. *Annual Review of Sociology*, *36*. 477- 496 doi: 10.1146/annurev.soc.34.040507.134725

Paharia, N., Keinan, A., Avery, J., & Schor, J. B. (2010). The underdog effect: The marketing of disadvantage and determination through brand biography. *Journal of Consumer Research*, *37*(5), 775-790. doi: 10.1086/656219

Ray, J, J. (1990) Acquiescence and Problems with Forced-Choice Scales, *The Journal of Social Psychology, 130*(3), 397-399, doi: 10.1080/00224545.1990.9924595

Shepperd, J. A., & McNulty, J. K. (2002). The affective consequences of expected and unexpected outcomes. *Psychological Science*, *13*(1), 85-88. doi: 10.1111/1467-9280.00416

Shirai, M. (2017). Underdog effects: the role of consumption domain and retail crowding. *Journal of Consumer Marketing*, *34*(5), 384-392. doi: 10.1108/JCM-07-2016-1872

Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, *9*(3), 287-300. Retrieved from: https://www.jstor.org/stable/2488624

Skitka, L. J., & Tetlock, P. E. (1992). Allocating scarce resources: A contingency model of distributive justice. *Journal of Experimental Social Psychology*, *28*(6), 491-522. doi: 10.1016/0022-1031(92)90043-J

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. *Psychology of Intergroup Relations, 5*(1)*,* 7-24.

Vandello, J. A., Goldschmied, N. P., & Richards, D. A. (2007). The appeal of the underdog. *Personality and Social Psychology Bulletin*, *33*(12), 1603-1616. doi: 10.1177/0146167207307488

Zhu, L., Martens, J. P., & Aquino, K. (2012). Third party responses to justice failure: An identity-based meaning maintenance model. *Organizational Psychology Review*, *2*(2), 129-151. doi: 10.1177/2041386611434655

Appendix A: Study Materials

Appendix A (continued)

Social Competition

Thank you for agreeing to participate in this study!

In the following pages, you will read a short story about an upcoming football game. After reading the story, you will be asked a number of questions pertaining to the nature of the competition and your feelings about it.

Please note that there are no right or wrong answers here; we are simply interested in people's opinions. Feel free to take as much time as you need when you read the story and answer the questions.

Please move on to the next page to start the questionnaire.

Appendix A (continued)

High disparity no spoiler

Two sports teams are about to play an important match this week: the Thundercats and the Black Eagles. They have been participating in the local soccer competition for some time now.

The Thundercats are known for their top scorers and they have won several prizes. They dominate the local league and they have won the local cup six times in the last ten years. They also enjoy the highest sports budget in the league (estimated at 20 million dollars). They are looking forward to proving themselves one more time in the upcoming match.

The Black Eagles are coming off a year in which they did not win many games. The won the local cup once in the last ten years. Their budget is estimated at 6 million dollars. They are also determined to fight hard in the upcoming match.

This match is important for both teams. The game will take place at the beginning of the season and a defeat will have the same consequences for both the Thundercats and the Black Eagles.

Appendix A (continued)

High disparity with spoiler

Two sports teams are about to play an important game this week: the Thundercats and the Black Eagles. They have been participating in the local soccer competition for some time now.

The Thundercats are known for their top scorers and they have won several prizes. They dominate the local league and have won the local cup six times in the last ten years. They also enjoy the highest budget in the league (estimated at 20 million euros). They are looking forward to prove themselves again in the upcoming competition.

The Black Eagles come from a year in which they have not won many matches. They won the local cup only once in the last ten years. Their budget is estimated at 6 million euros. They are also determined to fight hard in the upcoming match.

The result of this upcoming match will have less impact on the Black Eagles, because regardless of whether they win or lose, they will stay in the same league. They will not be promoted or relegated. On the other hand, for the Thundercats, a victory will bring them very close to the title which would allow them to promote. But if they lose, the Thundercats won't be able to promote to a higher division.

Appendix A (continued)

Low disparity no spoiler

Two sports teams are about to play an important game this week: the Thundercats and the Black Eagles. They have been participating in the local soccer competition for some time now.

The Thundercats are known for their top scorers and they have won several prizes. They dominate the local league and have won the local cup six times in the last ten years. They also enjoy the highest budget in the league (estimated at 20 million euros). They are looking forward to prove themselves again in the upcoming competition.

The Black Eagles come from a year in which they have not won many matches. They won the local cup only once in the last ten years. Their budget is estimated at 14 million euros. They are also determined to fight hard in the upcoming match.

This match is important for both teams. The game will take place at the beginning of the season and a defeat will have the same consequences for both the Thundercats and the Black Eagles.

Appendix A (continued)

Low disparity with spoiler

Two sports teams are about to play an important game this week: the Thundercats and the Black Eagles. They have been participating in the local soccer competition for some time now.

The Thundercats are known for their top scorers and they have won several prizes. They dominate the local league and have won the local cup six times in the last ten years. They also enjoy the highest budget in the league (estimated at 20 million euros). They are looking forward to prove themselves again in the upcoming competition.

The Black Eagles come from a year in which they have not won many matches. They won the local cup only once in the last ten years. Their budget is estimated at 14 million euros. They are also determined to fight hard in the upcoming match.

The result of this upcoming match will have less impact on the Black Eagles, because regardless of whether they win or lose, they will stay in the same league. They will not be promoted or relegated. On the other hand, for the Thundercats, a victory will bring them very close to the title which would allow them to promote. But if they lose, the Thundercats won't be able to promote to a higher division.

Appendix B: Measures

Appendix B (continued)

Comprehension Checks

1. According to the information given above, which team has a better success rate?

○ The Thundercats

○ The Black Eagles

2. According to the information given above, which team has a higher payroll?

○ The Thundercats

○ The Black Eagles

Appendix B (continued)

Bi-polar Measures

 The following questions are about your assessment of the competition. Please read the

questions carefully and move the slider to the side closest to you answer.

For example, if you fully support the Black Eagles completely, move the slider all the way to

the right. If you fully support the Thundercats, move the slider all the way to the left.

	The Thundercats	Neutral	The Black Eagles
	(completely)		(completely)

1. Which team would you probably root for?	
2. Which team do you like better?	

Appendix B (continued)

Unipolar Measures

The following questions relate to how you feel about the teams.

Read the questions carefully and choose the option that best describes you.

1 (not at all)   2   3   4   5   6 (very much)

1. ___How much do you like team Thundercats?

2. ___How much do you like team Black Eagles?

3. ___How much would you support the Thundercats in the upcoming game?

4. ___How much would you support the Black Eagles in the upcoming game?

5. ___ How much do you identify with the Thundercats?

6. ___How much do you identify with the Black Eagles?

7. ___How much do you think the Thundercats deserve to win?

8. ___How much do you think the Black Eagles deserve to win?

Appendix B (continued)

Manipulation Checks

The following statements are about your perception of the teams.

Read the statements carefully and indicate to what extent you agree or disagree.

1 (strongly disagree)	2	3	4	5	6	7 (strongly agree)

1. ___ Between the two teams, the Black Eagles are the underdog.

2. ___ Between two teams, the Thundercats are the underdog.

3. ___ Between the two teams, the Black Eagles are the victim.

4. ___ Between the two teams, the Thundercats are the victim.

Appendix B (continued)

Majority Support Measures

The following statements are about your perception of the teams.

Read the statements carefully and indicate to what extent you agree or disagree.

| 1 (strongly | 2 | 3 | 4 | 5 | 6 | 7 (strongly |
| disagree) | | | | | | agree) |

5. ___ I think most other people will support the Black Eagles.

6. ___ I think most other people will support the Thundercats.

7. ___ If you think most people will support one of these two teams, explain in a few words why you think this will be the case.

_____