A CONSISTENT INCONSISTENCY: A CULTURAL STUDY OF ATTRIBUTIONS OF FANS IN THE UNITED STATES

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ABSTRACT

Literature explores cultural orientation in cross-cultural settings but fails to look at the diversity that exists in the U.S. population. I collected data from a liberal arts university in California. I examine the role cultural orientation plays in how sport fans may attribute the performance of their sport team. Correlations and hierarchical regression analyses were used to test the hypotheses of this study. Results revealed unique findings for the attribution process. The interaction of collectivism and fan identification was negatively associated with internal attributions across wins (p < .05). Asian Americans had lower levels of internal attributions across wins (p < .01). Recommendations for future research are provided.

Keywords: sport fan, culture, spectator, cultural orientation, fan identification, attribution, self-serving bias

INTRODUCTION

The sport industry generates over 100 billion dollars annually from revenues from consumers who can be classified as sport fans who identify with their sport team at various levels. Sport fans in the student population identify in various ways with their sport teams, which impacts how they attribute their team's performance contributing to their reactions and behaviors (Behrens & Uhrich, 2020; Branscombe & Wann, 1994; Chan-Olmsted & Xiao, 2019; Lianopoulos et al., 2020; Wann & Branscombe, 1993; Wann & Dolan, 1994a; Wilson et al., 2013; Zillman et al., 1989). How they attribute their performance (i.e., successes, failures, etc.) also impacts their personal connection with the team or athlete, which may have an economic impact on how the fans may behave in terms of the level of investment in their team. Moreover, these attribution processes also have a personal impact, which may affect the individual's self-esteem, self-identity, and emotional state, leading to behavioral responses and actions that can be deemed concerning or severe. Furthermore, studies documenting how fans attribute their team's success and failure may also

reflect their cultural orientation (Parry et al., 2014; Theodorakis et al., 2017). Literature shows that individualistic fans are prone to make more internal attributions about their team when compared to fans who are collectivists (Al-Zahrani & Kaplowitz, 1993; Gau & Kim, 2011). Moreover, collectivistic fans are prone to making more external attributions about their team when compared to individualistic fans (Al-Zahrani & Kaplowitz, 1993; Gau & Kim, 2011). While there is an abundance of cultural studies comparing various countries and people groups, studies that examine the cultural orientation of sport fans, specifically in the U.S. population, are lacking (Melnick & Wann, 2011; Parry et al., 2014; Theodorakis et al., 2017; Wann et al., 2001). This study seeks to contribute to the literature by investigating cultural differences in the attribution process, focusing solely on the U.S. population.

FAN IDENTIFICATION

Fan identification (FI) is a social phenomenon where an individual identifies with a team or athlete and becomes part of their team's performance and outcome. This is also referred to a fan's loyalty to the team or athlete (Gau & Kim, 2011; Mann, 1974; Russell, 1993; Theodorakis et al., 2017; Van Driel et al., 2019; Vinney et al., 2019; Wann & Branscombe, 1993). Furthermore, FI is a dynamic process where the fan identifies with the characteristics and attributes of the team: the geographic location, the success (i.e., wins or losses), the performance of the players, and other team/athlete characteristics (Choi et al., 2019; Hyatt, 2007; Kim et al., 2019; Mastromartino et al., 2022; Mastromartino & Zhang, 2020; Melnick, 1989; Wann et al., 1998; Weimar et al., 2022). These factors may influence how the fan perceives the team, reacts to competitive events that involve the team/ athlete, and shape how they interact with other fans, including opposing fans (Aiken et al., 2021; Choi, 2019; Hilliard & Johnson, 2018; Lianopoulos et al., 2020; Wann et al., 2021; Xu et al., 2021;

Yim et al., 2021). Wann and Dolan (1994b) notes the varying levels of FI. When their team performs poorly or loses a game, fans with low team identification experience only a minor consequence on their self-concept and do not engage in the loss as they are identified at low levels. Highly identified fans may display strong effects such as anger, greater distress, sadness, aggressive behavior, and stronger emotions, which are reflective of their identity with the team/athlete (Branscombe & Wann, 1994; Cushen et al., 2019; Havard & Eddy, 2019; Hilliard & Johnson, 2018; Johnson, 2020; Larkin & Fink, 2019; Oh et al., 2022; Paek et al., 2021; Wann & Dolan, 1994b).

ATTRIBUTION PROCESS OF FANS

The attributions of sport fans were initially investigated by Mann (1974), who examined the

Demographic Information for Study Participants (N = 60)

	N	%	Mean	SD	Range
Age	60	100.0	21.3	6.7	18-46
Gender					
Male	23	38.3			
Female	36	60.0			
Missing	1	1.7			
Race/Ethnicity					
White/Caucasian	13	21.7			
Latino/Hispanic	17	28.3			
Black/African American	8	13.3			
Asian/Asian American/PI	16	26.7			
Other	5	8.3			
Missing	1	1.7			
Birthplace					
USA	48	80.0			
Other Country of Origin	12	20.0			
Education					
Completed High School	9	15.0			
Some College	49	81.7			
Completed College	1	1.7			
Higher Education	1	1.7			
Outcome					
Win	42	70.0			
Loss	18	30.0			
	-				

Note. PI = Pacific Islander. Other = Racial/ethnic background not represented by given choices. All participants of the study were enrolled in college.

fans' reactions following the outcome of their team. Studies note the variations of attributions based on the level of fan identification. Highly identified fans, when compared to low-identified fans, are more likely to make positive attributions about their team regardless of the outcome or performance of their team in order to preserve their self-esteem and protect their identity, which is also known as the self-serving bias (Choi, 2019; Grove at al., 1991; Huettermann et al., 2022; Katz et al., 2019; Lau, 1984; Mahmoudian et al., 2021; Mastromartino et al., 2019; Miller & Ross, 1975; Wann et al., 2021; Weiner, 1986). The self-serving bias has been inconsistent in social research as researchers note that social environment, group attitudes, media influence, and the competitive nature of the sporting event may affect the attribution process (Allison & Knoester, 2021; Gau & Kim, 2011; Wann & Dolan, 1994b).

In this study, I examined cultural orientation, specifically collectivism and individualism, and its role in the attribution process of sport fans. Studies have highlighted how Western, individualistic societies have the general tendency to make more internal attributions across success and failure outcomes compared to non-western, collectivistic societies because individualists are more likely to enhance and protect one's selfesteem (Al-Zahrani & Kaplowitz, 1993; Cha & Nam, 1985; Hallahan et al., 1997; Kashima & Triandis, 1986; Theodorakis et al., 2017). Collectivistic societies have demonstrated the likelihood to make more external attributions across success and failure outcomes compared to individualistic societies, as their goals are related to interdependent values (Al-Zahrani & Kaplowitz, 1993; Cha & Nam, 1985; Cho et al., 2012; Kashima & Triandis, 1986). Moreover, these attributional patterns have been consistent in collectivistic and individualistic cultures across different sport settings, social situations, and countries (e.g., the United States, England, India, Taiwan, China, the Middle East, and Korea). Unique findings have been found in a cross-cultural comparison among subjects in various countries (Delvin et al., 2020; Markus & Kitiyama, 1991; Si et al., 1995). These researchers found that participants who identify as collectivists perceived the causes of success and failure in sport as more internal and controllable than their individualistic participants.

The hypotheses of this study focus on how FI and cultural orientation may affect the attribution process of sport fans. This study seeks to contribute to the literature by examining how FI and cultural orientation play a role in the selfserving bias of fans. The following hypotheses are identified:

Fan Identification.

1. Fan identification will be positively related to attributions for the outcomes of wins and losses.

Collectivism.

- 2a. Collectivism will be positively related to external attributions in both win and loss situation.
- 2b. The interaction of collectivism and FI will also be positively related to external attributions in each win and loss situation after controlling for age, gender, and ethnicity.

Individualism.

- 3a. Individualism will be positively related with external attributions in loss situations and
- 3b. Will also be positively related with internal attributions in win situations.
- 3c. After controlling for age, gender, and ethnicity, the interaction of individualism and fan identification will also be positively related with external attributions in loss situations and positively related with internal attributions in win situations enhancing the self-serving bias.

METHOD

Participants

In a collaborative effort with a faculty member of La Sierra University (LSU), I recruited undergraduate student participants (N = 60) in the Department of Psychology at LSU, a liberal arts university in southern California. Through this faculty relationship and support, I had the opportunity to present my study to the undergraduate students, and I was able to efficiently collect data, which would not have been possible at other educational institutions. Advertisements were developed using flyers that were posted in the psychology department. Table 1 provides the comprehensive demographic statistics of the participants.

Measures

An online questionnaire was constructed to measure sport FI, cultural orientation, and the attribution process of the fan. The instrument was composed of the following sections: demographic information, The Sport Spectatorship Identification Scale (SSIS), The Individualism and Collectivism Scale (I/C Scale), and the Revised Causal Dimension Scale II for Sport Fans (RCDS-II).

Demographic Information. The student participants were asked to provide general information such as age, gender, ethnicity, religion, marital status, education level, interests, and citizenship. The subject's identification number was required to grant credit for their participation.

Sport Spectatorship Identification Scale. The Sport Spectatorship Identification Scale (SSIS) by Wann and Branscombe (1993) measures the participant's level of fan identification (FI) with their sport team. Developed for the accurate assessment of FI, the SSIS is comprised of seven items, with response items ranging from one to eight. Scores under 18 indicate low FI, while scores above 35 suggest high FI. Moderate FI was identified as scores ranging from 18 to 35. Wann and Branscombe (1993) note that Cronbach's reliability coefficient was .91. All the items were significantly inter-correlated, and the average item-total correlation was reported at .59 and .61 (Wann & Branscombe, 1993). It was also reported that the test-retest reliability for the one-year period was statistically significant, r(49) = .60, p < .001 (Wann & Branscombe, 1993). Moreover, according to the reliability analyses and factor

Table 2

Correlation Matrices of the Scales of Interest for Both Wins/Losses, Wins, and Losses: FI, Collectivism, Individualism, External Control, and Internal Control

	FI	Collectivism	Individualism	External Control	Internal Control
Both Wins/Losses FI					
Collectivism	.21				
Individualism	.27*	.17			
External Control	.13	.00	.09		
Internal Control	03	.20	.02	18	
Wins FI					
Collectivism	.21				
Individualism	.26	.19			
External Control	.10	19	06		
Internal Control	17	.27	.07	30*	
Losses FI					
Collectivism	.20				
Individualism	.27	.17			
External Control	.20	.33	.35		
Internal Control	.26	.06	10	.02	

Note. *Correlation is significant at the 0.05 level (2-tailed).

analyses of previous studies, the SSIS scale demonstrated internal consistency and validity (End et al., 2003; Madrigal, 2003).

Individualism-Collectivism Scale. Triandis et al. (1993) Individualism-Collectivism Scale (I/C Scale) measures the level of individualism and collectivism (I/C). It is composed of 32 items based on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Triandis et al. (1993) notes that the subscales of I/C were developed with the consideration of individualism and collectivism as separate and unique cultural orientation constructs. Collectivism was measured using 16 of the 32 items, assessing group harmony, family loyalty, and interdependence. Individualism was measured on 16 items. assessing independence, uniqueness, and self-reliance. The Cronbach's alpha reliability coefficient for the 32 items was .81. For the Individualism subscale, it was .82, and for the Collectivism subscale, it was .81 (Triandis et al., 1993). In a study by Singelis et al. (1995), the factor analysis showed similar internal consistency and reliability as Triandis et al. (1993) reported.

Revised Causal Dimension Scale II for Sport Fans (RCDS-II). Russell's Revised Causal Dimension Scale II (1982) measures the causal perceptions of locus of causality, stability, and controllability. Items were contextualized within the sporting event setting to measure the participants' attributions of the event of their team's success or failure. The questionnaire identifies two main causes of attributions for sport fans in the outcome of a win or loss: internal and external control. The external, indirect, and uncontrollable factors are attributes such as stability, variability,

Table 3

Model Summary for Hierarchical Regression of Internal Attributions Across Wins (N = 42)

Level	R	R²	Adj. R²	Std. Error of Estimate	Sum of Squares	F	Sig.
1	.19	.04	.01	1.38	2.61	1.38	.25
2	.46	.21	.09	1.32	15.43	1.78	.14
3	.70	.49	.34	1.12	39.32	3.23	.01

and changeability. For the purposes of this study, only the internal and external dimensions of controllability were used for the statistical analysis.

Procedures

Approval was received for data collection through the Institutional Review Board of Loma Linda University (IRB # 5100030). Agreement was made through LLU as the guarantor for the IRB of La Sierra University (LSU). One academic quarter was allotted for participation in the online questionnaire over six months. Through an agreement with the psychology department of LSU, undergraduate students were recruited to participate by the investigator, who introduced the study in the classroom of the respective university. The investigator was allotted a 10-minute time slot to share the study's background, purpose, and goals. During this time, students were provided a link to complete the online survey (which took approximately 30 minutes) during a designated period. The participants could complete the online survey at school or the convenience of their home or dormitory. The participants had the option not to complete the survey without any penalty. With the agreement of the class instructor, students were provided participation credit for their involvement in the study for the respective class.

Data Analyses

Data analyses were performed using the SPSS version 27.0 Statistics Program. The hypotheses were tested using the hierarchical regression model, and the correlation coefficients were used to examine the relationship of the variables of interest. Hierarchical regressions were performed on the study variables to test for the effects of FI, cultural orientation, and the covariates of age, gender, and ethnicity on the attribution process. Bivariate correlations among the study variables were examined to analyze the relationships of the variables.

RESULTS

Preliminary Analyses

Data was screened prior to analysis to check for missing data and outliers. No outliers were identified in the data set. In order to account for missing data, the missing value analysis was conducted for the variables of interest using the Expectation Maximization (EM) Algorithm based on the principle of maximum likelihood (Cohen et al., 2003). The EM algorithm uses the maximum likelihood parameters and data observations to formulate the unobserved data. Data was tested for the assumptions of normality, linearity, homogeneity of variance, and homogeneity of regression for the variables of interest: FI, cultural orientation, and attributions. Skewness and kurtosis were assessed for the study variables, which were within the normal range. The analysis showed normal distribution for the following variables: FI, age, gender, ethnicity, and the external and internal attribution dimensions. Levene's test of equality of variance did not show significance (p = .42), suggesting homogeneity of variance. For sample size estimation, a power analysis was conducted using G*Power version 3.1 (Faul et al., 2007). With the significance criteria (power =.80, p < .05), the minimum sample size needed was estimated at N = 64. The obtained sample for this study was reported at N = 60.

Correlations

To analyze the relationship among the variables, correlation matrices (see Table 2) were constructed for the outcome of wins, losses, and the combined outcome of wins/losses, comparing the variables of interest: FI, Collectivism, Individualism, External Control, and Internal Control. A statistically significant positive correlation with a moderate effect size was found between individualism and FI, r = .29, p < .05, for the combined wins/losses outcomes. A statistically significant negative correlation with moderate effect size was found between external control and internal control for the wins outcome, r = .30, p = .05.

Hierarchical Regression

Hierarchical regression was conducted to determine the effects of FI and cultural orientation on the attribution process of the sport fans while controlling for age, gender, and ethnicity. There were three levels of the design: (1) the main effect of FI on attributions, (2) the main effect of cultural orientation and the interaction effect between cultural orientation and FI on attribution, and (3) the effect of the variables of age, gender, and ethnicity on the attribution process.

Table 4

Regression Coefficients and Partial Correlation Coefficients for Internal Attributions Across Wins (N = 42)

		Unstandardized Coefficients		Standardized Coefficient	Partial Correlations	
evel		В	SE	Beta	r	t
1	Constant	7.38	.66			11.27**
	SSIS Score	02	.02	19	19	-1.17
2	Constant	1.27	7.71			.17
	SSIS Score	04	.20	27	28	-1.67
	COL Score	03	.02	.24	.26	1.55
	IND Score	.02	.03	.10	.10	.61
	Interaction of IND and SSIS	.23	.24	.15	.16	.95
	Interaction of COL and SSIS	41	.00	28	29	-1.80
3	Constant	2.47	6.87			.59
	SSIS	04	.02	42	46	-2.87
	COL Score	.12	.05	.19	.41	2.47
	IND Score	03	.07	.23	08	43
	Interaction of IND and SSIS	.20	.21	.13	.17	.96
	Interaction of COL and SSIS	40	.20	27	35	-2.05*
	Age	10	.04	35	43	-2.57*
	Gender	.20	.44	.07	.09	.47
	White/Caucasian	78	.56	22	25	-1.40
	Asian-American	-1.22	.44	42	46	-2.81**

Note. **Correlation is significant at .01 level (2-tailed). *Significance at 0.05 level (2-tailed). IND = individualism; COL = collectivism.

Level	R	R ²	Adj. R ²	Std. Error of Estimate	Sum of Squares	F	Sig.
1	.26	.07	.02	1.49	2.67	1.20	.29
2	.42	.18	17	1.62	6.81	.52	.76
3	.63	.40	29	1.71	15.16	.58	.78

Table 5 Model Summary for Hierarchical Regression of Internal Attributions Across Losses (N = 18)

Fan Identification. Significant differences were not found for hypothesis 1. Fan identification was not significantly related to attributions for either outcome of win or loss. An insignificant and positive correlation was found between FI and external attribution, r = .13, p = .33. An insignificant and negative correlation was found between FI and internal attribution, r = -.03, p = .83.

Collectivism: Hypothesis 2a did not reveal significance. Collectivism was not significantly related with external attributions, partial correlation r = .00, p = .99. Fans who identified with high levels of collectivism did not exhibit higher levels of external attributions. Moreover, external attributions were not significantly related to FI, nor were there significant differences between highly identified and low identified fans in the attribution process. External attributions were not significantly related to collectivism, nor was there a significant relationship to individualism.

Table 6

Regression Coefficients and Partial Correlation Coefficients for Internal Attributions Across Losses (N = 18)

		Unstandardized Coefficients		Standardized Coefficient	Partial Correlation	
Level		В	SE	Beta	r	t
1	Constant	5.53	1.16	20		4.78**
	5515	03	.03	.26	.26	1.10
2	Constant	-8.76	18.86			46
	SSIS	.39	.40	.28	.27	.97
	COL Score	.17	.17	.29	.28	1.01
	IND Score	01	.20	15	14	05w
	Interaction of IND and SSIS	05	.47	03	03	10
	Interaction of COL and SSIS	57	.56	38	28	-1.01
3	Constant	14.04	9.17			1.53
	SSIS	.03	.04	.23	.25	.72
	COL Score	.02	.06	.18	.13	.38
	IND Score	10	.08	55	40	-1.22
	Interaction of IND and SSIS	.34	.59	.23	.20	.57
	Interaction of COL and SSIS	94	.81	63	38	-1.16
	Age	05	.05	26	30	87
	Gender	92	1.31	31	24	70
	White/Caucasian	-1.09	1.17	35	39	93
	Asian-American	.93	1.54	.24	.21	.61

Note. **Correlation is significant at the 0.01 level (2-tailed). IND is abbreviated for individualism. COL is abbreviated for collectivism.w

Figure 1 Line Graph of Interaction of FI Park



Figure 2 Bar Graph for Ethnicity Across Park



Hypothesis 2b was not confirmed. The interaction of collectivism and FI did not significantly predict external attributions after controlling for age, gender, and ethnicity. Moreover, the interaction of collectivism and FI did not predict higher levels of external attributions compared to fans that identified lower levels of collectivism.

Individualism. Significance was not found for hypotheses 3a and 3b. Significance was not found between individualism and external attribution, partial correlation r = .09, p = .52, nor was significance found between individualism and internal attribution, partial correlation r = .02, p= .89. Furthermore, a correlation matrix revealed that individualism did not significantly relate with external attributions in loss situations, partial correlation r = .36, p = .16, nor did it correlate with internal attributions in outcomes of wins, partial correlation r = .07, p = .67. Individualism did not predict higher levels of internal attributions, nor could the self-serving bias be confirmed. Table 3 displays the model summary for the regression analysis with internal attributions across wins. Table 4 displays the regression coefficients for internal attributions across wins. Table 5 displays the model summary for the regression analysis for internal attributions across losses. Table 6 displays the regression coefficients for internal attributions across losses. The interaction of individualism and FI did not show significance with external attributions in loss situations, nor was there significance with internal attributions in win situations after controlling for age, gender, and ethnicity.

Contrary to the original hypothesis, the interaction of collectivism and FI showed a significant negative relationship with internal attributions across wins (p < .05). A line graph (Figure 1) illustrates the interaction effect of FI and collectivism for internal attributions across wins. To account for the small sample size, FI was dichotomized into two groups based on the SSIS Scale: low/moderate FI and high FI. Collectivism was dichotomized through the median split into low and high groups at the cutoff score of 86.5. Figure 1 shows that a unique dynamic occurs between the low/moderately identified fans and the highly identified fans, as previously mentioned. The low/moderately identified fans (M = 7.8, SD = 1.43) showed an increase in internal attributions at higher levels of collectivism compared to highly identified fans (M = 6.4, SD = 1.62). The highly identified fans maintained a relatively constant level of internal attributions as the level of collectivism increased.

Age was negatively and significantly (p < .05) correlated with internal attributions for wins. That is, older fans were less likely to make internal attributions when their teams won. Fans in the age range of 18 to 21 years made more internal attributions (M = 6.75, SD = 1.39) than the fans in the age range of 22 and above (M = 5.33, SD = .94). Asian Americans also were negatively and significantly correlated with internal attributions (p < .01). As shown in Figure 2, Asian Americans demonstrated the lowest level of internal attributions when compared to other racial/ethnic groups.

Ancillary Analysis

Analysis of the combined outcomes of wins and losses revealed a similar pattern of significance in the internal attributions compared to the outcomes of wins. The pattern of negative relationships was found to be significant for internal attributions and the following: the interaction of collectivism and FI (p < .05), age (p < .05), and Asian-Americans (p < .05). At high levels of collectivism (86.5 and above), highly identified fans (M = 6.57, SD = 1.46) made less internal attributions when compared to low/moderately identified fans (M = 7.22, SD = 1.91). Age was a significant predictor because older fans made fewer internal attributions than younger fans. Fans aged 18 to 21 years (M = 6.78, SD = 1.38) made more internal attributions when compared to fans who were above 21 years of age (M = 6.1, SD = 1.46). The ethnic group Asian Americans made fewer internal attributions than other racial/ethnic groups.

DISCUSSION

This exploratory study investigated the effects of FI and cultural orientation on sport fans' attribution process has not been explored in the U.S. population. Contrary to our expectations, the main hypotheses for this study were not supported. However, I elaborate upon the unique findings that our study revealed.

FAN IDENTIFICATION

Regarding the first hypothesis, our study did not confirm that highly identified fans were likely to form more attributions when compared to lowly identified fans. Significance was not found for fan identification and attributions for either outcome of win or loss. This applied to both internal and external attributions. Sport fan studies demonstrate the strong investment that highly identified fans have with their teams, which lead to these fans making more attributions for their teams' performance. However, our study did not demonstrate such findings due to possible challenges and limitations, which will be elaborated further in subsequent sections.

COLLECTIVISM AND INDIVIDUALISM

The second and third hypotheses represented the inconsistent findings of the self-serving bias (Shepperd et al., 2008; Wann & Grieve, 2005). Significance was not found between the cultural orientations and the attribution process. I believe these "insignificant yet significant findings" demonstrate a cultural phenomenon in the U.S. student population that has not been sufficiently explored.

Unique findings of the examination are noted. A significant negative relationship was found for the interaction of collectivism and FI with internal attributions across wins. Highly identified fans with high levels of collectivism made less internal attributions than low identified fans across wins. It may be that highly identified fans possess more knowledge of their team and can make more internal attributions based on this information. Age also showed a significant negative relationship in the internal attribution process after the wins. As the age of the fan increased, there was a decrease in the internal attributions. Triandis et al. (1993) note that younger and more urbanized individuals tend to reflect more achievement-oriented values related to competitiveness. Thus, older fans may be able to understand the many aspects of their team and their performance and attribute the team's performance to more external factors compared to younger fans. Furthermore, from a developmental standpoint, younger individuals may be more likely to view the world and the environment from an egotistical viewpoint (Erikson, 1993).

CULTURAL ORIENTATION

Upon closer examination of cultural orientation, the participants of our study identified with varying levels of collectivism and individualism on the Individualism-Collectivism Scale, which is not sufficiently addressed in the literature. Interestingly, it is important to note that many participants identified with similar levels of both collectivism and individualism. This may have contributed to the insignificant findings where the variables of interest cannot be clearly and precisely analyzed due to the intertwine of the cultural orientations. This finding was unique and not expected in our study as we expected our study sample to identify with one or the other cultural orientation. Thus, the "inconsistent" results can be attributed to the participants who identify with diverse cultural values and backgrounds that are representative of the U.S. population (Triandis et al., 1993; Weinreich & Saunderson, 2003; Williams, 1996). Even though our findings showed many insignificant results among the variables of interest, I ponder whether significance may be shown in these findings. It may also demonstrate the unique challenges of conducting cultural studies in a culturally diverse population such as the United States. Further and more detailed explanations and recommendations for future research are offered.

RACIAL ETHNIC BACKGROUND

A "consistent inconsistency" has been demonstrated in different ethnic groups regarding the perceived causes of success and failure (Chandler et al., 1983; Mark et al., 1984; Triandis et al., 1993). It is widely accepted that the United States has the most culturally diverse population in the world. However, researchers have not examined the multicultural component sufficiently in the scientific literature when conducting studies in this population. Variations in the findings of the attribution process have been extensively studied in crosscultural studies, but not within the U.S. population, which I believe neglects a unique characteristic of the U.S. population.

The ethnic group, Asian and/or Asian Americans, demonstrated the lowest level of internal attributions when compared to the other ethnicity groups across wins. Asians and/or Asian Americans have been known to adhere to Eastern philosophical values, whereas people in America have been shown to have the highest level of individualism compared to other people groups (Gau & Kim, 2011; Hofstede, 2001). It may be of importance to note that Asian Americans may differ from Asians in that they are instilled with collectivistic values as well as being acculturated with Westernized, individualistic values. Asian Americans, as well as other ethnic groups, experience cultural and psychological changes due to the acculturation process (Sam & Berry, 2010). Thus, based on their high contextual orientation, it is likely that Asian Americans will exhibit high levels of external attributions and low levels of internal attributions. This may have played a role in the attribution process for Asian Americans.

Significance was not found for the "other" ethnic groups for the attribution process. Thus, as previous studies have shown, ethnicity was an inaccurate predictor of cultural orientation (Cooper & David, 1986; Triandis et al., 1993; Williams,

1996). Furthermore, Triandis and colleagues (1993) note that ethnicity or country of origin does not determine one's cultural orientation; instead, one's environment, social relationships, and background should be considered when examining cultural orientation further.

It is documented that the diverse, heterogeneous study sample is comparable to the current demographic trends of Southern California. According to the latest U.S. census data (U.S. Census Bureau, 2023), racial and ethnic minorities (REM) currently account for approximately 25% of the United States population. This trend suggests that the REMs in the United States further necessitate a more thorough and comprehensive evaluation of cultural diversity that reflects the United States.

This study comprised a majority of racialethnic minority students (47/60) at a small liberal arts university. This study only measured the fundamental cultural values related to individualism and collectivism. It did not account for the diverse groups' cultural and sub-cultural variations and backgrounds (i.e., socioeconomic status, family structure, urbanization, industrialization, to name a few). This may have taken away the impact of cultural diversity and hidden the importance of the different components of cultural orientation from the study. Furthermore, accurately measuring cultural orientation may take more precision and attention to cultural orientation than initially thought.

LIMITATIONS

Limitations are noted in this study. The correlational design was used in this study, and a causal relationship cannot be established. The subjects were recruited from a small liberal arts university, which may not be generalizable to the broader U.S. population. The subjects identified as undergraduate students at a small liberal arts Christian university may not reflect the general student population in the United States. This study did not account for the socioenvironmental factors that may have influenced the sport fan, such as media influence, the socialization of fans, or other interactions that may have influenced the fans' attribution-making process. For example, the fans' immediate, visceral reactions and responses to their team's performance have been shown to differ when compared to their response when time has elapsed. This has been noted in the majority of sport literature as an uncontrollable variable. This study does not have the advantage of examining sport fans' attributions in the field setting, which may reveal the immediate, visceral attribution processing that may more fully represent the subject. In addition, the study participants chose their sport team, and this variable was not controlled for. Because of the lack of statistical power, there was an increased likelihood of a Type II error. The estimated sample size (N = 64) was not fully met in this pilot study, as I obtained a sample of N = 60. This study comprised of a relatively modest number of winning fans (N = 42) and a small number of losing fans (N = 18). The unequal distribution of sample size may have also contributed to the discrepant findings of the groups for wins/loss and FI.

CONCLUSION

This study sought to contribute to cultural studies about sport fans by exploring the cultural differences in the U.S. population. Many sport fan studies explore variations by comparing fan behavior in different countries. However, there is a lack of literature that examines cultural orientation and sport fans behaviors in the U.S. population. This study sought to explore the role of cultural orientation and FI on the attribution process of sport fans in the United States. This study provides a glimpse of the diversity of the U.S. sport fans. The "consistent inconsistent" findings in this study warrant further cultural examination with a greater sensitivity and awareness of cultural diversity as well as the influence of globalization (Cho et al., 2012; Kim et al., 1994; Triandis et al., 1993).

There are significant implications of this study that are worth noting. First, the commonly accepted method of evaluating cultural orientation (i.e., collectivism and individualism) may not be sufficient when examining culture in the U.S. population. There may be a need to consider and account for the various cultural dimensions, as well as the many diversity factors that may contribute to the varying levels of cultural orientation. Second, the current cross-cultural studies on sport fans may provide a glimpse of the diversity that comprises the U.S. sport fans. Analyzing and evaluating cross-cultural studies on sport fans may provide methodological guidance on further examining the fans in the U.S. population, which has a substantial population of people groups from the international community.

The relevance of this study can be seen particularly in social and economic perspectives. Sport and sport spectatorship is a common social event where people from various backgrounds interact in unique ways. When the sporting event elicits strong reactions from sport fans, whether due to their team losing or performing poorly, this can lead to potential arguments, dissension, and even aggressive actions against the opposing fans or team. I believe such aggressions can be mitigated and even prevented when fans themselves have more awareness and insight into their identity as a sport fan, as well as their cultural background, which may influence how they attribute the performance of their team. This can lead to a more harmonious experience for sport fans who may gather at sporting events such as the ballpark, stadiums, or any gatherings.

From an economic perspective, sports are a multibillion-dollar industry dependent on fans who not only watch sports but are invested in their team and athletes. This drives the sales of merchandise, attending games, and other behaviors related to the sport team. The sporting industry, whether it is the team, athlete, or the sport company, may find it relevant to understand their fan base, which may help to identify various ways to increase fan identification with their team. This process may provide the sport industry with further financial incentives.

FUTURE RESEARCH

Attributional research in cultural exploration is lacking, specifically in the U.S. population. This exploratory study on sport fans' attribution process provides some insight into the cultural variations that exist in the U.S. population. Future research may shed light on cultural diversity in the United States and its impact on sport fans' behaviors. Clarifying the unique differences and similarities of various cultural orientations may help to understand the values and belief systems of individuals that may help to explain the attribution process of sport fans in the United States. Moreover, exploring cultural values and beliefs in an identified population may shed light on the impact of globalization and technological advances in communication on various groups of people. This may help cultural researchers to understand the

dynamics of acculturation and cultural assimilation in different people groups. Further investigation with a more representative sample size and a comprehensive evaluation of cultural orientation may provide insight into the role of cultural orientation and fans' attribution process in the United States. Additional studies may explore sub-cultural variations in various people groups and the dimensions of the attribution process using a more comprehensive evaluation of cultural orientation. Specific demographic information of the sample may be beneficial in examining culture, such as education, family background, religion, and socioeconomic level, to name a few. Further cultural studies in sport settings may provide a unique perspective into the intricacies of the cultural backgrounds of sport fans in the United States and worldwide.

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