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The psychosocial effects of Native American mascots: a comprehensive review of empirical research findings

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ABSTRACT

Approximately 2,000 teams in the U.S. utilize Native American mascots, the majority of which are associated with schools. Across the nation there continue to be many intense conflicts over these mascots. Most conflicts focus on differences in opinion, rather than on the effects of these mascots. The purpose of this article is to provide educational decision-makers with a comprehensive review of research on the psychosocial effects of Native American mascots. This body of research suggests that these mascots generate undesirable effects. First, they are psychologically detrimental to Native American students. Second, for non-Native persons, they are associated with negative stereotypes of Native Americans. Third, these mascots undermine intergroup relations by increasing negative stereotyping of Native Americans. Lastly, supporters of these mascots are more apt to believe prejudicial ideas. We discuss these findings relative to broader societal contexts.

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In the U.S., for more than half a century, local, regional, and national conflicts have persisted over Native American¹ nicknames, logos, and mascots in sport (hereinafter ‘mascots,’ except when using these terms more precisely). On both sides of this conflict, emotions run high. While many schools have eliminated Native American mascots, many other schools (and professional teams) have not followed suit. Activists continue to call for elimination of these mascots, while many non-Native people continue to be baffled by such calls, as they believe that these mascots convey positive ideas about Native American people.

Most of the discussion and debate regarding these mascots focuses on attitudes and opinion. On one side, mascot supporters argue that these mascots represent important traditions and honor Native Americans. On the other side, mascot opponents contend that these mascots reflect and reinforce stereotypes, involve offensive appropriation and mimicry, and harm Native American people (e.g., Davis 1993; Gone 2002; Steinfeldt et al. 2010). Often missing from this discussion are published research findings. In fact, research evidence enables us to determine the accuracy of common statements made by both mascot supporters and opponents, such as: (a) ‘These mascots honor Native Americans,’ (b) ‘These mascots convey positive ideas about Native Americans,’ (c) ‘These mascots

reinforce stereotypes of Native Americans,' and (d) 'These mascots harm Native Americans.' The goal of this article is to provide educators, educational administrators, school board members, legislators, and other associated decision-makers (hereinafter 'educational decision-makers'), as well as other community members involved in struggles over Native American mascots, with a comprehensive review of research findings on the effects of these mascots. There are two reasons why it is critical for educational decision-makers to understand these findings.

First, research findings shed light on the effects of Native American mascots in the context of considerably higher rates of a wide range of social problems and the significant obstacles Native people face when engaged in efforts to reduce these problems. For example, compared to the overall U.S. population, Native Americans experience higher rates of poverty, health inequities, and educational disadvantage (e.g., de Brey et al. 2019; United States Census Bureau 2016; United States Department of Health & Human Services 2015). With respect to education, Native Americans report relatively high secondary education dropout rates (11% versus 5.8% overall) and relatively low college graduation rates (15% hold a bachelor's degree compared to 31% overall) (de Brey et al. 2019). Furthermore, Native Americans experience considerable discrimination in the U.S. education system (e.g., Johnston-Goodstar and Roholt 2017; Makomenaw 2012; Walters et al. 2019).

More specifically, qualitative studies reveal various forms of injustice that Native American students face in schools, including: racial slurs, stereotyping, microassaults, and culturally insensitive, delegitimizing, and assimilative school policies and practices (e.g., discrimination in disciplinary practices; problematic academic labeling and tracking that assumes Native families and students are deficient; and a curriculum that largely excludes, romanticizes, and stereotypes Native peoples and sanitizes history) (e.g., Cech, Smith, and Metz 2019; Freng, Freng, and Moore 2007; Johnston-Goodstar and Roholt 2017). In order to alleviate these forms of injustice, educational decision-makers in U.S. society need to understand the causes of Native American educational problems, including (but certainly not limited to) how representations of Native Americans – such as those in fictional media, news media, education curriculum, consumer products and mascots – may impact these problems. Unless there is an accurate understanding of the causes of these problems derived from research, we cannot work in effective ways to reduce these problems or, at the very least, avoid contributing to them.

The second reason educational decision-makers need to understand research findings on the effects of Native American mascots is that the vast majority of these mascots are associated with educational institutions. In 2014, Munguia (2014) searched the MascotDB website, which covers over 47,000 team nicknames in the U.S. (<http://mascotdb.com/>) and found that 2,129 nicknames were associated with Native Americans, including 780 Warriors, 493 Indians, 343 Raiders, 147 Braves, 123 Chiefs/Chieftains, 118 specific tribal names, and 75 Redskins.² Ninety-two percent of these nicknames were associated with high schools, which constitutes 8.2% of high schools. Thus, many students play for and against teams with Native American mascots, and many others who are sport fans watch teams that feature these mascots. Further, students who are neither athletes nor sport fans are also exposed to these mascots (e.g., in media, on clothing). Given the presence of these mascots in educational settings and the important principle that educational decision-makers rely on research when making decisions that shape policies and practices in their schools, in this article we offer decision-makers tools

that will better enable them to focus on research findings, rather than public opinion, when determining whether to support or tolerate these mascots.

Method

Although researchers explore many different questions about Native American mascots, such as their history, opinions in the controversy, and intergroup struggles regarding their use (e.g., Billings and Black 2018; Davis-Delano 2007; Williams 2006), we focus our review on one fundamental research question: What are the psychosocial effects of these mascots for Native Americans, whether directly on Native individuals or indirectly via their effects on non-Native persons? We believe that valid research in response to this crucial question, rather than intentions or opinions, should guide the decisions that educators make in their schools.

To ensure a complete review of this research, the first author consulted with a college reference librarian in May of 2019 to discuss strategies to search the scholarly literature and to minimize the chances of missing relevant studies. The reference librarian made suggestions pertaining to selection of databases, use of thesauri, adoption of search terms, and specific search strategies. Based on these strategies, a search was first conducted in May of 2019, and most recently updated in October of 2019,³ in the following bibliographic databases: Academic Search Complete, Business Source Complete, Communication & Mass Media Complete, Diversity Studies Collection, ERIC, MLA International Bibliography, ProQuest Dissertations & Theses Global, PsycINFO, PubMed, Social Work Abstracts, SocINDEX, SPORTDiscus, and Web of Science. Terms searched included Native American(s), American Indian(s) and Indigenous People(s), in combination with mascot(s), logo(s), nickname(s), team name(s), and sport name(s). All academic research that investigated psychosocial effects of Native American mascots was included in this review, with the exception of two journal articles in which the authors quote a small number of Native students who stated that they were negatively affected by Native mascots (Castagno and Lee 2007; Endres 2015). Other studies excluded from this review were those not focused on Native American mascots, those not reporting original academic research, and those reporting research not focused on psychosocial effects.

Results

In this section, we describe the currently existing academic research findings on the psychosocial effects of Native American mascots. Because this research is disparate in terms of research questions, measures, and findings, we are unable to present results organized by themes. Instead, we organize our presentation of results based on methodology and quality control. This structure enables us to emphasize two important points. First, experimentation is the only method that enables examination of causal effects. This is not to dismiss other research methods, whether quantitative or qualitative, which certainly generate valuable findings, but rather to point out that experiments are the most valid way to study causal effects, which is the focus of this article. Second, educational decision-makers should place more trust in studies published in peer-reviewed academic journals, as these studies have withstood scientific review by other scholars. Thus, we first

discuss experimental studies ($n = 9$), then studies that utilize other methodologies ($n = 5$), and lastly unpublished master's theses ($n = 5$). In our discussion we pull these disparate findings together, situate these findings in context, and draw conclusions.

Some studies that we discuss examine explicit attitudes, which directly ask participants questions about their attitudes, while others involve examination of implicit attitudes (e.g., Implicit Attitudes Tests), which require people to rapidly categorize words and images, oftentimes without awareness of the purpose behind the task. One limitation of explicit attitudes is that people are motivated to perceive and present themselves as persons without bias, so explicit attitudes by themselves may not be accurate indicators of attitudes, whereas implicit attitudes examine those about which one is not consciously aware. The value of implicit measures is that they do not allow participants to exercise as much conscious control over self-perception and self-presentation.

Experimental studies

The most robust research focused on psychosocial effects of Native American mascots utilized an experimental methodology, which involves controlled manipulation of stimuli to assess their causal impact on research participants. We split our discussion of nine experimental studies into those which examine direct effects on Native Americans ($n = 2$) and those which test effects on non-Native persons ($n = 7$).

Direct effects on Native Americans

The two most important experimental studies focused on the direct effects of these mascots on Native American participants.

Fryberg et al. (2008). Fryberg et al. conducted four studies to determine if Native American youth are affected by exposure to Native mascots.

In the first study, participants included 48 Native American students from a reservation high school in Arizona. These participants were randomly assigned to read a short text that referred to either Native mascots (i.e., Chief Wahoo, Braves, Redskins, and the tomahawk chop), movies that reflect romantic stereotypes of Native Americans (i.e., *Dances with Wolves*, *Indian in the Cupboard*, and *Pocahontas*), or stereotypical negative outcomes (i.e., high rates of alcoholism, depression, high school drop-out, and suicide among Native Americans). This was followed by a corresponding image of Chief Wahoo, image of Disney's *Pocahontas*, or a short bullet list of rates of Native American suicide, alcoholism, and dropping out of high school. After viewing these representations, participants were told to write down 'the first five words that came to mind' (p. 211). These words were coded as positive or negative by research assistants who were unaware of the study hypotheses. Results revealed that the mascot and movie conditions yielded mostly positive associations compared to the stereotypical negative outcomes condition. Although this finding suggests that Native mascots may have a positive influence on Native American youth, further evidence, discussed below, countered this premise.

In the second study, Fryberg et al. (2008) recruited 71 Native participants from a different reservation high school in Arizona. The researchers employed the same text and images used in study one, but added a 'no exposure' control condition. After

exposure to the randomly assigned conditions, participants completed a state self-esteem measure. The researchers found that, compared to the control condition, the mascots, romantic movies, and negative outcomes conditions depressed self-esteem. Notably, the mascot and romantic movies condition depressed self-esteem *more* than the negative outcome condition.

In the third study, Fryberg et al. (2008) recruited 150 Native high school students from yet another reservation in Arizona. The procedure for this study was the same as the second study except the researchers used a measure of community worth (i.e., the belief that their communities have the ability to improve their situations) rather than self-esteem. Findings revealed that all three conditions lowered community worth relative to the control condition. No differences were found among the experimental conditions.

In the final study, participants included 179 Native students from a predominantly Native American college that draws from more than 150 Native tribal nations in 38 different states. The procedure included the same control condition and Chief Wahoo image as the two prior studies, however three other conditions were included: (a) a White person dressed as the 'Chief' mascot from University of Illinois, (b) the Haskell Indian Nations University (a 4-year Native college) logo, which is a common chief image, and (c) an advertisement for the American Indian College Fund, which featured an image of a Native woman in front of microscopes and the words 'Have you ever seen a real Indian?' (p. 214). The participants were randomly exposed to one of the conditions and then were asked to answer questions about the image they viewed. Then they completed a measure of possible selves, which asked participants to 'Write down at least 4 ways of describing yourself that will probably be true of you next year' (p. 215). Possible selves measured motivation by assessing individuals' future goals. Two coders who were unaware of the hypotheses analyzed what participants wrote based on whether it was related to achievement in school or work. Results from this study revealed that, compared to both the control and American Indian College Fund conditions, all three mascot conditions depressed the number of achievement-related possible selves mentioned by the participants.

Considering the findings from all four studies, Fryberg et al. (2008) concluded that Native mascots, regardless of type, and regardless of whether they are perceived positively by Native youth, are harmful to the psychological well-being of these youth. These findings provide the strongest evidence of the negative effects of Native mascots contained in this review.

LaRocque et al. (2011). Focused on the University of North Dakota Fighting Sioux mascot, LaRocque et al. also studied psychological consequences for Native American students.

LaRocque et al. (2011) used information from a preliminary study to construct two same-length slide shows with 19 images each, which they referred to as their 'neutral' and 'controversial' slide shows. Neutral images included the official university logo of a Native American profile accompanied by the words 'University North Dakota,' and controversial images included an image of a Native profile with a big nose and distinctly red lips accompanied by the words 'A Century of Sucking.'

LaRocque et al. (2011) recruited a sample of 33 Native American and 36 non-Native students at the University of North Dakota. The procedure began with only the Native

participants completing a measure that indicated the degree to which they were assimilated into European American culture. Then, all participants completed the Multiple Affect Adjective Checklist-Revised (MAACL-R) as a baseline measure. This was followed by exposure to one of the slide shows, then taking the MAACL-R a second time, and then exposure to the second slide show, and taking the MAACL-R a third time. The slide shows were counterbalanced in order of presentation. The last measure, the Nickname Logo Distress Scale, inquired about whether participants experienced distress from attending the university due to the mascot and associated controversy.

LaRocque et al. (2011) found that although baseline scores on the MAACL-R for Native and non-Native students were similar, Native students experienced increased negative feelings after viewing both the neutral and controversial slide show, while non-Native students only experienced increased negative feelings after the controversial show. In particular, compared to baseline scores, Native students had significantly higher scores (than non-Native students) on dysphoria and depression after seeing both slide shows, significantly higher scores on hostility after seeing the neutral show, and significantly lower scores on positive affect after seeing the neutral show. Only scores on anxiety did not differ between Native and non-Native students after exposure to the slide shows.

Native students also had higher scores (than non-Native students) on the Nickname Logo Distress Scale and their scores on this scale were correlated with MAACL-R scores after – but not before – the slide shows. There were no significant differences between Native students based on degree to which they were assimilated into European American culture. With respect to distress, for non-Native students, the longer they attended the university and the higher their grade level (i.e., year in university), the higher their scores on the Nickname Logo Distress Scale. For Native students, the older they were and the longer they attended the university, the higher their scores on an item focused on stress due to the mascot and controversy. These findings suggest that distress associated with Native mascots may increase over time.

Overall, LaRocque et al. (2011) concluded that even ostensibly ‘neutral’ Native American mascots may have negative psychological effects on Native students. Many of the representations participants were exposed to during the slide shows could be seen around campus every day, which suggests that Native students may be adversely impacted by representations readily available on their campus. Notably, it is possible that the results of this study were influenced by the ongoing mascot controversy (e.g., resistance to retiring the mascot).

Summary of findings on direct effects on Native Americans. Considering both of the studies discussed above, it appears that Native American mascots yield negative psychological effects (e.g., depressed self-esteem, community worth, and future achievement-related goals, and increased negative feelings of stress, distress, depression, dysphoria, and hostility) for Native American students.

Effects on non-native persons

Although research demonstrating negative direct effects on Native Americans is arguably the most important evidence that Native mascots produce undesirable outcomes, these mascots also have indirect effects on Native Americans via their impact on non-Native

persons. Here we discuss seven experimental studies that explored how these mascots affect non-Native persons.

Angle et al. (2017). Angle et al. examined the impact of a Native sport logo on non-Native participants. They predicted that politically liberal participants would be adversely affected more than politically conservative participants because liberals' views are more malleable than conservatives' views.

In the first study, 81 undergraduate students were randomly exposed to either a kangaroo or an unfamiliar Native sport logo. This exposure was immediately followed by an Implicit Association Test (IAT), which the researchers used to examine reaction times to words representing 'warlike' (i.e., vicious, savage, barbaric, and warlike) following the presentation of pictures of five Native American and five White people. Next, participants answered questions about: degree of (dis)agreement with the explicit statement that 'American Indians are warlike' (p. 86), whether they found Native mascots to be offensive, and whether they identified as politically liberal, moderate, or conservative. After controlling for whether participants believed that Native mascots are offensive, the researchers found that exposure to the Native logo increased liberal participants' implicit stereotyping of Native Americans as warlike, while not having this effect on conservative participants. People who report being conservative also report more racially prejudicial attitudes than do liberals (e.g., Sparkman and Eidelman 2016; Tomer 2017). This study suggests that their views are also more fixed, which means changing their attitudes about Native mascots is more difficult. Overall, these findings indicate that exposure to Native sport logos increases stereotyping of Native Americans, particularly among liberal people. Exposure to the Native logo did not increase scores on the explicit statement that Native Americans are warlike, likely because participants do not want to appear to stereotype Native Americans and are better able to control their responses to explicit measures of stereotyping.

In the second study, 411 participants were recruited through an online crowd-sourced platform. Angle et al. (2017) repeated the same process used in their first study, except that half of the participants viewed just the same two logos (as in their first study) and half viewed these logos accompanied by the slogan 'We are Noble, We are Peaceful, We Compete with Honor!' (p. 87). Further, the researchers modified their IAT to measure the implicit 'positive' stereotype of Native Americans as noble (rather than as warlike) by replacing the words that conveyed 'warlike' with words that conveyed 'nobility' (i.e., noble, grace, dignity, and honorable). Their explicit measure of stereotyping was modified to ask participants if Native Americans were 'honorable.' In this study, researchers found that when controlling for whether participants found Native mascots offensive, liberal participants exposed to the Native logo along with the slogan were more likely to implicitly stereotype Native American people as noble. Yet, when liberal participants were exposed to the Native logo without the slogan, the degree to which they implicitly stereotyped Native Americans as noble decreased. There were no effects of logo exposure on conservative participants, who across conditions were less apt to view Native Americans as noble. Additionally, there were no effects of logo exposure on responses to the explicit statement that Native Americans are honorable.

Overall, the findings from this study demonstrate that exposure to a Native sport logo, in the absence of positive slogans, decreased perceptions that Native Americans were noble among liberal participants, and did not increase stereotyping of Native Americans as noble among conservative participants. When the Native logo was accompanied by a positive slogan, this increased stereotyping of Native Americans as noble only among liberal participants. These researchers concluded that exposure to Native logos (by themselves) does not increase positive perceptions of Native Americans.

Prior to the third study, Angle et al. (2017) conducted a preliminary study to determine the degree to which sport logos were perceived as stereotypical/offensive/derogatory. Then, they secured 399 undergraduate participants from universities near Cleveland, where the Native logo was perceived as most offensive (i.e., Chief Wahoo), Atlanta, where the Native logo was perceived as less offensive (i.e., the Braves tomahawk logo), Detroit, with the Tigers logo, and Miami, with the Marlins logo. They gave these students an IAT similar to the one used in their first study. They found that, after exposure to the Native logo, liberal (but not conservative) students attending the university near Cleveland, compared to liberal students attending the university near Detroit, engaged in more implicit stereotyping of Native Americans as warlike. They found no difference in effects in their comparison between students attending universities near Atlanta and Miami.⁴ Similar to their second study, they found no effects of logo exposure on explicit stereotyping.

Overall, Angle et al. (2017) concluded that, regardless of participant opinion about Native mascots, in most cases exposure to a Native sport logo increased negative implicit stereotyping of Native Americans among liberal participants. Conservative participants were not significantly affected by exposure to the Native logo, likely because their views are more fixed and they are more supportive of negative racial stereotypes in general.

Burkley et al. (2017). Similar to the prior study, Burkley et al. explored whether exposure to Native sport logos increased stereotyping of Native Americans as aggressive.

Participants were 132 students from a university in southwestern U.S., who were randomly assigned to view either eight neutral images that were not mascots (e.g., carrots), eight White logos (e.g., Pittsburgh Pirates), or eight Native American logos (i.e., Atlanta Braves, Chicago Blackhawks, Cleveland Indians, Florida State Seminoles, San Diego State Aztecs, University of Illinois Illini, University of North Dakota Fighting Sioux, and Washington Redskins). Then, participants were told to read a diary entry in which the author, who was a male student, described his behavior in a manner that was ambiguous in terms of indicating aggression. Participants were randomly assigned to a condition in which they were told that this diary belonged to an African American, Native American, or White American. After reading the diary, participants were asked to assess the traits possessed by this fictitious student, including the trait of aggression. This was followed by a filler task, and then an assessment using feeling thermometers that was designed to measure prejudice felt toward five different racial groups.

Burkley et al. (2017) found that when participants who held prejudicial attitudes toward Native Americans were exposed to the Native sport logos, they rated the Native American fictitious student, but not the fictitious White or African American students, as more aggressive than participants without a prejudiced attitude. Yet, those with a prejudiced attitude toward Native Americans who were exposed to the neutral images

or images of White logos did not rate the fictitious Native American student as more aggressive than those without a prejudiced attitude. These findings suggest that one negative consequence of Native mascots is that they adversely impact attitudes toward Native Americans among non-Native people who already hold more prejudicial attitudes toward Native Americans.

Chaney, Burke, and Burkley (2011). Chaney et al. conducted two studies to examine implicit attitudes toward Native American mascots and Native American people.

The purpose of the first study was to determine if there were implicit positive or negative associations with Native and White American sport nicknames and group names. Included in their first IAT was six of each of the following: Native American group names (i.e., Apache, Cherokee, Comanche, Iroquois, Navajo, and Sioux), White American group names (i.e., Dutch, English, French, German, Irish, and Scottish), White mascot nicknames (i.e., Celtics, Fighting Irish, Mountaineers, Pirates, Rebels, and Vikings), Native mascot nicknames (i.e., Chiefs, Braves, Indians, Redskins, Fighting Sioux, and Warriors), positive words (i.e., beauty, miracle, pleasure, happy, love, and relief) and negative words (i.e., poison, rotten, tragedy, grief, hurt, and hatred). Study participants were 22 White students from a southwestern U.S. university. Results revealed that the participants were more apt to associate both the Native sport nicknames and group names with negative words than they were to associate the White sport nicknames and group names with these words. Further, implicit bias toward Native sport nicknames was positively associated with implicit bias toward Native group names, which the authors suggested may mean that the participants do not distinguish between how they feel toward Native American mascots and Native American people themselves.

The IAT used in the second study featured the same White and Native sport nicknames as the first study, along with six negative stereotypes of Native Americans (i.e., dirty, fat, freeloader, lazy, poor and worthless) and six positive characteristics rarely associated with Native Americans (i.e., clean, educated, healthy, responsible, smart and successful). In the first phase of this study, 42 White students from the same university completed both (in counterbalanced order) the IAT and a survey about attitudes toward social issues which included a single question about whether they thought Native mascots were offensive. Results from the first phase of the study indicated that participants were more likely to associate Native sport nicknames with the negative stereotypes than they were to associate White sport nicknames with these stereotypes.

The second phase of this study occurred two weeks later and included 27 of the same students, none of whom believed that Native mascots were offensive. These participants were told that they would be interacting with a Native American student to complete verbal and mathematical academic knowledge tasks (i.e., tasks that are not associated with stereotypes of Native Americans) and cultural and environmental nonacademic knowledge tasks (i.e., tasks that are associated with stereotypes of Native Americans). Each participant was instructed to decide which tasks they and their partner would do that would result in the best combined score, and rated their partner's expected enjoyment of the tasks. Results indicated that higher levels of implicit stereotype bias associated with Native sport nicknames (derived from the first phase of the study) was associated with belief that their (fictional) Native American partner would be more apt to enjoy the stereotypical tasks focused on culture and the environment than the verbal

and mathematical academic knowledge tasks. Implicit stereotype bias toward Native sport nicknames was not, however, associated with the degree to which participants stereotyped the fictional Native partner when predicting performance on the tasks, stereotyped the fictional Native partner when assigning tasks, or created physical distance from the fictional Native partner (as measured by where the participant placed their chair relative to where the fictional partner would be seated) (Burke, 2009).

Overall, Chaney, Burke, and Burkley (2011) concluded that, although their White participants tended to hold favorable explicit views of Native mascots, at an implicit level they associated more negative thoughts and stereotypes with these mascots than they did with White mascots. Further, higher scores on this implicit negative stereotyping were associated with belief that a fictional Native partner would enjoy stereotypical tasks focused on culture and the environment rather than academic tasks, which suggests that these participants may, as a result of stereotypes, be undervaluing Native peoples' academic interests and potential.

Freng and Willis-Esqueda (2011). In another study focused on implicit bias, Freng and Willis-Esqueda examined the effects of exposure to the Cleveland Chief Wahoo logo.

Freng and Willis-Esqueda (2011) recruited a sample of 112 predominantly White students from a university in the Great Plains region of the U.S. First, these participants took an IAT that included the logos of the Cleveland Indians, Pittsburgh Pirates, and New York Yankees, as well as six words associated with each of the following four categories: negative stereotypes of Native Americans (i.e., savages, primitive, dirty, drunk, lazy, and suspicious), positive stereotypes of Native Americans (i.e., generous, noble, faithful, nature, proud, and artistic), terms related to baseball (e.g., shortstop), and control words (e.g., nestle). Then, the participants took surveys that included filler items, and measures of motivation to control prejudice, explicit prejudice against Native Americans, and engagement with baseball. Regardless of participants' motivation to control prejudice, level of explicit prejudice, and engagement with baseball, exposure to the Cleveland logo (compared to the other two conditions) activated negative, but not positive, stereotypes associated with Native Americans. Freng and Willis-Esqueda (2011) concluded that this logo was implicitly associated with negative stereotypes of Native Americans.

Gonzalez (2005). An unpublished doctoral dissertation by Gonzalez examined the question of whether White supporters of a Native mascot were prejudiced against and would discriminate against Native Americans.

Gonzalez recruited 252 White students from the University of North Dakota (UND) as participants: 77.4% supported keeping the 'Fighting Sioux' mascot at UND, 13.5% were neutral, and 4% favored changing the mascot. All participants read the same description of an imaginary student, but were randomly assigned to see a picture of this student that varied in terms of race (White or Native American) and opinion about the university's mascot (i.e., the student was wearing a shirt with this logo, opposing this logo, or no logo). The participants then answered questions about the imaginary student (i.e., overall reaction, desire to meet the student, willingness to hire the student, and likelihood of giving the student a scholarship). Gonzalez found that when the imaginary student was depicted as Native, as opposed to White, the student faced more prejudice

and discrimination. The prejudice and discrimination was even greater when the imaginary student was represented as Native and opposing the mascot. This was particularly true if the participant followed more university sports. Overall, this study revealed that the participants, most of whom supported a Native mascot, were more apt to exhibit prejudice and discrimination against Native than White people, and this was particularly true when the Native person displayed opposition to Native mascots and when participants were fans of university sports.

Kim-Prieto et al. (2010). While the research discussed thus far has examined the effects of Native mascots on attitudes toward Native Americans, Kim-Prieto et al. examined the lateral effects of Native mascots on attitudes toward Asian Americans.

Their first study took place at the University of Illinois, where there was conflict over their Native mascot. The experimenters approached potential participants at various locations on the campus and asked them to complete a short survey for a psychology class. The 79 students who agreed to participate completed a measure of negative stereotypes of Asian Americans, which was randomly given to them in one of three folders adorned with: stickers of the university's Native logo, stickers of the university's 'I' logo, and no stickers. The researchers found that participants who received their surveys in the folder with the Native logo were more likely to endorse stereotypes of Asian Americans than the other participants.

The second study took place at The College of New Jersey, where students who were taking a psychology class completed a survey. Participants were randomly assigned to read either a non-controversial and complimentary same-length paragraph about the University of Illinois mascot or about the art center before taking the same measure of stereotypes used in the first study. After excluding those who were familiar with the controversy surrounding this mascot, the final sample consisted of 161 students. Kim-Prieto et al. (2010) found that participants who read the passage about the Native mascot were more apt to stereotype Asian Americans than participants who read about the art center.

In sum, Kim-Prieto et al. (2010) concluded that exposure to a Native mascot can increase stereotyping of other minority groups.

Kraus, Brown, and Swoboda (2019). The last experimental research project consisted of four studies conducted by Kraus, Brown, and Swoboda, who examined the effects of the continued presence, despite official elimination, of a Native mascot at a Midwestern U.S. university (hereafter 'the focal university').

In the first study, Kraus, Brown, and Swoboda (2019) observed 1,506 students in varied locations at the focal university and at two universities that never had a Native mascot. They also used athletic-related search terms to secure the first 100 online images that came up at the focal university and at four other universities that eliminated their Native mascots at the same time as the focal university. They coded the observed students and images with 100% inter-coder reliability. The authors reported that there was significantly more display of a Native logo at the focal university than at the other universities.

In the second study, participants were 201 students from the focal university who were drawn from the psychology department subject pool. The researchers measured: implicit

prejudice against Native Americans, explicit prejudice against Native Americans, explicit prejudice against African Americans, attitudes toward the focal university mascot, and degree of belonging felt toward the focal university. Results revealed that those with lower explicit prejudice against Native Americans had more negative attitudes about the mascot and experienced less belonging to the university. Further, negative attitudes about the mascot were more common among participants with lower implicit prejudice against Native Americans and lower explicit prejudice against African Americans.

Studies three and four involved online surveys, purportedly about perceptions of university advertisements, on a crowdsourced employment site ($n = 301$, from throughout the United States) and Qualtrics Panels ($n = 582$, all from the state where the focal university was located). In both studies, participants were exposed to descriptions and photographs of the focal university, and in the experimental condition some students in the photographs wore the Native logo. In the third study, participants also saw descriptions and photographs from three other universities in the same U.S. state as the focal university. In the fourth study, participants were randomly assigned to images of the focal university either with or without students wearing Native logos, and they were asked about their sense of belonging before, during, and after the exposure to images of the focal university. In both studies, participants were required to allocate two dollars to the four universities as they saw fit, and then they responded to a measure of explicit prejudice against Native Americans. Results from these two studies revealed that, although exposure to the Native logos increased belonging among those with more explicit prejudice against Native Americans, participants with less explicit prejudice felt less belonging during and after exposure to the logos, and this lower level of belonging was associated with reduced donations to the focal university.

Overall, Kraus, Brown, and Swoboda (2019) revealed that Native mascot supporters were more apt to believe prejudicial ideas about Native Americans than mascot opponents. Further, they found that exposure to a Native mascot can reduce sense of belonging and rates of donation among non-Native persons who are less prejudiced against Native Americans, and thus less prejudiced non-Native people can be negatively affected by Native mascots.

Summary of findings on effects on non-Native people. The seven experimental studies discussed here focused on the effects of exposure to Native mascots on non-Native people. The first five studies collectively demonstrated that, for some non-Native persons, exposure to and support for Native mascots was associated with and increased negative stereotyping of, prejudiced attitudes toward, and tendency to discriminate against Native Americans. The last two studies suggested that these mascots can generate negative effects on some non-Native persons (e.g., increased stereotyping of Asian Americans, lower feelings of belonging among less prejudiced non-Native persons).

Other studies

Thus far we have reviewed experimental research. In this section, we briefly describe five research projects in which scholars used other methods, namely, surveys, observation, and content analysis. While these studies do not demonstrate that Native mascots

actually cause specific outcomes, they importantly contribute to a broader understanding of the effects of Native mascots.

Two studies demonstrated that non-Native people who are less critical of Native mascots are more apt to minimize the extent to which people in general experience racism in society (as measured by the Color-Blind Racial Attitudes Scale). First, Neville et al. (2011), based on a survey of 389 students from the University of Illinois, found that students who opposed the decision of the university to eliminate its Native mascot were more likely to minimize societal racial discrimination than those who supported the decision. Second, Steinfeldt and Wong (2010), based on a sample of 43 master's degree students, discovered that participants who were less aware that Native Americans were offended by Native mascots were more apt (compared to those with greater awareness) to minimize societal racism.

Two studies examined online comments in response to news suggesting that Native mascots at large state universities may be discontinued. Both studies revealed that some mascot supporters reacted to this news by expressing stereotypical and prejudicial attitudes about Native Americans. First, Steinfeldt et al. (2010) analyzed 1,009 online comments from supporters of the University of North Dakota's Native mascot in response to articles in two newspapers. These researchers concluded that a critical mass of comments evidenced ignorance of, stereotyping about, and disdain toward Native Americans. Similarly, Clark et al. (2011) analyzed comments on 10 weblogs from supporters of the University of Illinois Native mascot. They found that mascot supporters engaged in stereotype attacks, alleged that anti-mascot constituents are oversensitive, denied that Native Americans experienced racism, advocated for majority group dominance, suggested that the mascot was the last remaining source of information about Native Americans, expressed adoration for the mascot, and conveyed grief about elimination of the mascot. Both of these studies highlight that some mascot supporters direct overt and more subtle forms of microaggression toward Native Americans in defense of Native mascots.

Lastly, Jacobs (2014) spent five years engaged in and observing events and activities that were sponsored or attended by members of two Native American communities in northeastern Ohio. In addition, she interviewed 38 members of these communities. Jacobs reported that some fans of the Cleveland Indians directed verbal and physical abuse at Native protestors that reflected stereotypes about and prejudice toward Native Americans.

Although the studies discussed in this section do not directly investigate causal effects of Native American mascots, they make important contributions by revealing stereotypical and prejudicial biases held by mascot supporters.

Unpublished master's theses

Here we briefly discuss five master's theses focused on psychosocial effects of Native American mascots. Most notably, LaRocque (2001) surveyed 60 Native and 61 non-Native students at the University of North Dakota about how they were personally affected by the university's Fighting Sioux mascot. Results revealed that Native students were more likely than non-Native students to indicate that the mascot contributed to observing tension in their classes, experiencing stress, avoiding university athletic events,

and feeling threats to their personal safety. These findings correspond with those discussed earlier that Native mascots engender direct psychological harm for Native students.

With respect to research on non-Native persons that demonstrates an association between Native mascots and indirect harm to Native Americans, another master's thesis involved samples of 179 students from the University of Maine and 270 participants from a crowdsourcing site. In this study, Tomer (2017) found that participants with higher scores on modern prejudice toward Native Americans (and, in one study, higher scores on prejudice toward African Americans) were less critical of Native American mascots.

Three master's theses have demonstrated negative effects of Native mascots on non-Native persons. Burke (2003) reported that 56 White students were more likely to associate negative words with Native than White mascot nicknames. Cross (2018) recruited samples of 140, 66 and 256 students from the University of Oklahoma. This author found that after participants who are high in Right-Wing Authoritarianism were exposed to Native sport logos (compared to those exposed to other logos), they were more apt to endorse negative stereotypes of Native Americans, with high scores on this measure being associated with greater prejudice against Native Americans. Parallel findings were not evident when participants were exposed to non-stereotypical pictures of contemporary Native American people, suggesting that it is exposure to Native mascots, not exposure to Native people that generates more negative attitudes toward Native Americans. Cross (2018) also found that Native mascot supporters were more apt than Native mascot opponents to believe that these mascots convey positive attitudes about Native Americans and to simultaneously hold prejudicial beliefs about Native Americans. The scores on these two measures were correlated. Lastly, Hornyik (2010) studied physiological reactions to Native American mascots among 20 mostly White students from a university in the southwestern U.S. Although there were no significant differences in explicit reactions to Native and White logos, startle reflexes indicated more negative affect after exposure to Native logos. Further, the speed of identifying guns was somewhat quicker following an image of a Native logo than a White logo, which may indicate that Native logos generate more anxiety.

Collectively, the findings from the latter three master's theses reinforce the results already described: For some non-Native people, Native mascots are associated with and generate negative attitudes, including negative attitudes toward Native Americans themselves.

Discussion

In this discussion, we begin by summarizing the research findings reviewed in this article. Second, we consider possible implications of these findings. Third, we elaborate on the findings by providing additional contextual information. Fourth, we describe limitations of the research and suggestions for future research. Lastly, we discuss practical considerations for educational decision-makers.

Summary of the research findings

The findings from academic research on the effects of Native American mascots suggest that regardless of the stated intent of those who support Native mascots (i.e., to 'honor' Native Americans) and regardless of opinions about them, these mascots induce or correlate with negative psychosocial outcomes. More specifically, three studies demonstrated that Native mascots generate negative psychological effects for Native students, in particular lower self-esteem, lower community worth, less capacity to generate achievement-related possible selves, and greater levels of negative affect. These findings make sense in the context of other studies that revealed negative psychosocial effects of Native mascots on non-Native persons. In particular, this research reveals that Native mascots are associated with negative thoughts and stereotypes about Native Americans and that exposure to Native mascots increases negative stereotyping. Studies have also revealed that some mascot supporters hold stereotypical and prejudicial attitudes toward Native Americans and that supporters are more apt to hold these attitudes than mascot opponents. Two studies even suggested that Native mascots are associated with a tendency to discriminate against Native Americans. There was no evidence from any study that Native American mascots foster positive or beneficial psychosocial effects for Native Americans.

Implications of the research findings

Some of the research discussed in this article suggests that negative effects of Native American mascots extend beyond students who attend schools with these mascots. This includes students who: attend schools that compete against schools with Native mascots, interact with persons wearing clothing featuring Native mascots, and see media coverage of teams with Native mascots. Thus, Native American mascots can be perceived as a pervasive cultural phenomenon that envelopes students to varying degrees, depending on various factors, most especially where the students reside and the degree to which they are involved in sports.

The negative effects of Native mascots likely extend beyond feelings and attitudes to impact other aspects of Native lives, such as decreasing educational performance or increasing discrimination. Scholars found some associations that support such possibilities. For example, researchers demonstrated associations between lower scores on measures of self-esteem and possible selves (which Fryberg et al. 2008 found are affected by Native mascot exposure), on the one hand, and negative health outcomes, lower educational performance, and more disruptive school behaviors, on the other hand (e.g., Aloise-Young, Hennigan, and Leong 2001; Cvencek et al. 2018; Stevenson 2012). In addition, more stressful life events (which LaRocque 2001; LaRocque et al. 2011 demonstrated are related to Native mascot exposure) are associated with physical health problems among Native Americans (De Coteau, Hope, and Anderson 2003). Moreover, Harrington et al. (2012) found that Native Americans with higher levels of psychological problems, worse physical health, and lower levels of education are less likely to be employed. Although no studies have (yet) demonstrated connections between Native mascots and higher rates of social problems experienced by Native Americans, research findings suggest that these connections are plausible.

Understanding the research findings

To comprehend why Native mascots have negative effects, one must understand the ways these mascots constitute and convey stereotypes of Native Americans (Gone 2002). First, these mascots are associated with the stereotype of Native Americans as brave, aggressive (male) warriors. Second, they are associated with Native Americans from the past, and this aligns with the stereotype of Native Americans as primitive and pre-modern rather than as contemporary people who negotiate the challenges of modernity like other people. Third, they employ a homogeneous 'Hollywood' image of Native Americans, which obscures differences between Native tribes/nations and individuals within these nations (e.g., Davis 1993; Leavitt et al. 2015; Coombe 1998). Although Native American mascots are believed by many to convey positive attributes of Native Americans, it is not surprising that these mascots generate negative effects because they convey an extremely limited and misleading picture of a diverse category of people.

Given these stereotypes, along with the fact that Native mascots involve non-Native control of representations of Native Americans (Coombe 1998; Davis 1993), it is not surprising that the majority of Native Americans – especially those who are most embedded in their Native cultures and those whose Native identity is more central to their sense of self – are critical of, and thus opposed to, these mascots (Fryberg et al. 2020). These critical attitudes likely help to explain why Native mascots negatively impact Native American students, as such critiques are manifested in negative emotional effects (LaRocque et al. 2011). Related to Native American opinions about Native mascots, it is important for readers to be aware that supporters of Native mascots often cite invalid and misleading polls on Native opinion about these mascots (e.g., Fryberg et al. 2020). Further, Native mascots have a negative impact on Native students even when they are not critical of these mascots (Fryberg 2002; Fryberg et al. 2008), which is why we encourage educational decision-makers to proactively intervene in the best interests of their students.

Limitations and directions for future research

Like all research, the studies we reviewed possess both strengths and weaknesses. For example, the experimental studies tend to have small sample sizes, and the samples for some studies were specific to one university. Further, some other data collection techniques may reveal contextual factors that impact real world effects (e.g., effects on Native Americans may be influenced by social support or forms of discrimination that interact with mascot exposure). Yet, by isolating and manipulating mascot exposure, experimentation is the only method that enables valid causal inference. The experimental studies reviewed in this article utilized a range of different variables and samples, while all demonstrating negative effects.

There is a need for more scholarship focused on the effects of Native mascots. Scholars could explore a wider range of possible effects for Native students, such as: Do Native mascots affect the academic performance or social lives of Native students? Or, do Native families avoid schools with Native mascots? Scholars may wish to examine the relevance of cultivation theory⁵ by studying students with high and low exposure to Native mascots (e.g., attending a school with a Native mascot versus attending a school with a different

mascot; living in a region that includes teams with Native mascots versus living in a region without any such teams). Levels of exposure may be associated with phenomenon such as intensity of stress experienced by Native students and extent of stereotyping of Native Americans among non-Native students. Finally, experiments could be conducted to determine which factors increase or decrease support for Native mascots (e.g., Does exposure to portrayals of contemporary Native Americans decrease support for these mascots?).

One of the most important areas for future study is further exploration of the mechanisms that generate the negative effects reviewed in this article. For instance, are the negative effects on Native Americans driven by limited portrayals of their group? Do Whites hold onto these mascots because they believe they are positive portrayals? Or is there a deeper story? Many Native Americans may be (consciously or unconsciously) aware that these mascots portray Native Americans in a narrow manner associated with the past. Perhaps such awareness generates harmful stress associated with the invisibility of contemporary Native persons and the misinformed perceptions of non-Native persons who have limited understanding of Native peoples. Perhaps many Whites associate these mascots with White military victory over Native Americans that resulted in the founding of the U.S., thereby associating these mascots with nationalism (Davis 1993) and belonging, which in turn may enhance self-esteem or collective-esteem for White Americans (Fryberg et al., 2008). Thus, although many White Americans may consciously believe that Native mascots are positive portrayals of Native Americans, they may, in fact, be unconsciously celebrating White U.S. nationalism that is ultimately built on unconscious negative attitudes toward Native Americans.

Practical considerations for educational decision-makers

Native mascots are part of a much larger web of phenomena that contribute to oppression faced by Native Americans and thus it seems clear that these mascots should be eliminated. Unfortunately, activists and educational decision-makers face many obstacles when making efforts to do so. First, public opinion favors retention of these mascots, and second, mascot opponents often possess less power than supporters (e.g., Davis-Delano 2007; Billings and Black 2018; Bresnahan and Flowers 2008). Third, attachment to Native mascots may be especially strong due to a boost in self-esteem for Whites that is sometimes associated with stereotyping others (Fein and Spencer 1997), including via Native mascots (Fryberg 2002). Finally, many believe that language and imagery have little-to-no effects, despite the fact that language and imagery impact how we perceive ourselves, how we perceive and treat people from other social categories, and how we organize various aspects of society that can generate inequities (e.g., Mastro 2009, 2015; Mastro and Seate 2012; Roskos-Ewoldsen and Roskos-Ewoldsen 2009).

One of the most difficult challenges for educational decision-makers and others who work to eliminate Native American mascots is facilitating comprehension of Native American stereotypes. There are several barriers to this comprehension. First, many non-Native people have little contact with Native people, who constitute perhaps two percent of the U.S. population and are concentrated in particular geographical areas (e.g., Logan, Minca, and Adar 2012; Lichter et al. 2007; Wilkes 2003). Second, Native Americans are both severely underrepresented and routinely stereotyped in mainstream U.S. popular culture (e.g., Leavitt et al. 2015; Chaudhri and Schau 2016), contributing to widespread

belief in historical myths about Native Americans and limited awareness and knowledge of contemporary Native people (e.g., Connor, Fryar, and Johnson 2017; Coombe 1998; Lee et al. 2009). Third, many people learn to define racism as only intentional and overtly negative (Czopp, Kay, and Cheryan 2015), and thus do not realize that stereotypes and corresponding behaviors that are perceived as positive often contribute to inequality (e.g., Czopp, Kay, and Cheryan 2015; Glick et al. 2000; Son and Shelton 2011).

Given these obstacles to change, it is critical that educational decision-makers focus on the research findings that consistently demonstrate negative psychosocial effects of Native American mascots. In this regard, we urge educational decision-makers to follow the lead of organizations composed of scholars who undertake research investigations such as those discussed in this article. For example, three of the largest bodies of social scientists in the U.S. – the American Anthropological Association, American Psychological Association, and American Sociological Association – recommend elimination of these mascots. Further, a large number of Native American professional and advocacy organizations also recommend elimination, including the National Indian Education Association and the National Congress of American Indians.

Conclusion

Given the documented educational inequities for Native Americans in comparison to U.S. averages, it is crucial that educational institutions take immediate actions to facilitate the success of Native American students. Although most people in the U.S. do not perceive Native American mascots as problematic, all of the academic studies undertaken to study the psychosocial effects of these mascots demonstrate either direct negative effects on Native Americans or that these mascots activate, reflect, and/or reinforce stereotyping and prejudice among non-Native persons. Based on this concise, but consistent, body of research evidence, we conclude that it is past time to eliminate Native American mascots in educational (and other) settings throughout the United States.

Notes

1. Throughout this paper, we use the term 'Native American' to emphasize two points. First, the term 'Native' specifies indigeneity. Second, the term 'American' enables us to emphasize that the indigeneity to which we refer is situated within the current boundaries of the United States of America.
2. We believe that it is problematic to use the epithet 'Redskins' outside of academic writings, and urge people to modify this word when using it in other contexts to indicate that this word is problematic (e.g., 'R-skins').
3. The first author continues to receive alerts about new publications on this topic.
4. Although there are no major professional sport teams with Native mascots in the state of Florida, Florida State University uses a Native mascot, and the presence of this mascot may have affected the authors' findings.
5. Cultivation theory is focused on long-term exposure to media, and posits that people who have more contact with this media are more apt to hold beliefs that are aligned with media content.

Disclosure statement

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