

**Gender Policy Feedback: Perceptions of Sex Equity, Title IX,
and Political Mobilization Among College Athletes**

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Version: November 28, 2017

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ABSTRACT

Public policies invariably confer or deny benefits to particular citizens. How citizens respond to relevant policies has fundamental implications for democratic responsiveness. The researchers study the beliefs of a core constituency of one of the most celebrated sex non-discrimination policies in United States history: Title IX of the Education Amendments of 1972. Using a novel survey of college student-athletes, they find strong support for the spirit of the policy, with the vast majority of respondents reporting the opinion that there “should” be equity. Yet, student-athletes also perceive mal-distribution among status quo resources and opportunities, and believe that redistribution is needed. Further, they are willing to take political action to improve equality. Consistent with the researchers' expectations, these beliefs are particularly salient for women and those who perceive persistent sex discrimination in society. The results reveal “positive policy feedback” among policy beneficiaries of Title IX who mobilize to seek equity in athletics. The dissatisfaction among policy beneficiaries raises questions about democratic responsiveness (e.g., to whom are policymakers and leaders in college athletics responding?), and highlights the political nature of college athletics.

What do citizens think about public policies that affect them? Political scientists have addressed this foundational question when it comes to an array of policies including Social Security (Campbell 2003), the Affordable Care Act (Jacobs and Mettler n.d.; Lerman and McCabe 2017), welfare reform (Soss and Schram 2007), and the G.I. Bill (Mettler 2002). Yet, virtually no work explores citizens' reactions to one of the most discussed pieces of sex non-discrimination policy in United States history – Title IX of the Education Amendments of 1972. We extend work on “policy feedback” into this domain of U.S. civil rights policy. We offer a theory about perceptions of sex inequities among one of Title IX's most impacted populations: college student-athletes. We assess our hypotheses with a survey of student-athletes from a major athletic conference.

We find that college student-athletes – particularly women and those who believe sex discrimination in society persists – perceive significant gender biases in college athletics. These student-athletes also support redistribution of athletic resources to address extant inequalities, and are willing to take political action (i.e., writing letters, signing petitions, or attending protests) to address the issue. The results reveal that, from the perspective of student-athletes, the implementation of Title IX has not yet produced the policy's aim of eliminating sex-based discrimination. The Act may have established expectations of equality for women and men in educational institutions but its implementation has inculcated perceptions of gender inequality within college athletics. The findings accentuate a possible representation conundrum inherent to the contemporary politics of Title IX such that those most affected by the policy are *not* the constituents to whom policymakers and college leaders fully respond.¹

¹ Such “feedback” between citizens and policymakers is posited as evidence of responsive governance (i.e., Campbell 2003); its absence raises serious questions about inequalities in citizen voice (Campbell 2012).

Title IX, Opinions About Sex Inequities, and Policy Feedback

Passed by the U.S. Congress on June 23, 1972, in an omnibus bill to amend the Civil Rights Act of 1964, Title IX states: “No person shall, on the basis of sex, be excluded from participation in, denied benefits of, or be subjected to *discrimination* under any educational program or activity receiving Federal financial assistance” (20 U.S.C. §1681) (emphasis added). The law applies to all educational institutions that receive federal funds and has notably impacted the lives of faculty, staff, and students.

While the initial impetus for the law focused on graduate school admissions, faculty hiring, and sex-bias in teaching materials (Rose 2015), the vast gender inequities in sports quickly drew policymakers’ attention (Edwards 2010; Sharrow 2017). At the time of Title IX’s passage, athletic opportunities for women were extremely limited (Acosta and Carpenter 2014; Cahn 1995). How to address these inequities led to significant debate which culminated in the 1979 policy guidelines on intercollegiate athletics (OCR 1979). These guidelines put forth the expectation of sex equity in college sports (see the appendix for the details of policy requirements).

Title IX substantially enhanced athletic opportunities for women (NCAA 2017). At the collegiate level, women now enjoy twelve times as many athletic opportunities as they did before Title IX (Acosta and Carpenter 2014). In American high schools, half of girls experience substantial athletic experience during their high school careers (NFSHSA 2017; Stevenson 2007), up from one in twelve in 1971 (NFSHSA 2015). Public opinion toward Title IX remains overwhelmingly supportive of the law’s aims (Connelly 2011; YouGov 2017) and journalistic coverage of Title IX increasingly frames the policy as a great success (Whiteside and Roessner 2016). Yet, scholarly assessment of the policy’s achievements lacks a clear consensus. Many

point to uneven and incomplete implementation (see appendix Table A-2 which details inequities in the distribution of opportunities and expenditures; also see, e.g., Kane and Ladda 2012; NCWGE 2017; NWLC 2012; U.S. Department of Education 2003).² The most recent U.S. Department of Education (2012) report on Title IX finds that athletic issues comprised the largest number of Title IX discrimination complaints in 2010 and 2011, illustrating that activists continue to demand more robust enforcement.³

Within this evolving landscape of Title IX's politics, we know very little about what average college student-athletes – one of Title IX's central beneficiary groups – believe about sex-based resource discrimination.⁴ Do student-athletes believe men's and women's sports are treated equally (i.e., without sex discrimination)? What factors determine these beliefs? These questions matter when it comes to policy feedback, which posits that public policy implementation and concomitant social change may beget new forms of opinion and mobilization (Campbell 2003, 2012; c.f., Jacobs and Mettler n.d.; Patashnik and Zelizer 2013).⁵ The feedback concept suggests that public policy can reformulate the capacity of the state by affecting administrative capabilities, and/or by impacting the political goals and/or identities of social groups (Skocpol 1992). Policy feedback can either reinforce past policy trajectories, inspire civic participation, and mobilize political engagement – what scholars call “positive

² There is notable variation in the impact of Title IX, based on geography, race, and other individual characteristics (see, e.g., Sharrow 2017 for discussion).

³ That said, other issues (i.e., non-athletic) have risen in prominence among the types of federal discrimination complaints in recent years (Reynolds n.d.).

⁴ Other studies focus on Title IX-specific policy knowledge and support among the mass public (Sigelman and Wilcox 2001), athletic administrators (Staurowsky and Weight 2013), and college athletes (Druckman et al. 2014). There are also large literatures on legal aspects of Title IX (see Brake 2010), and the long-term consequences of policy implementation on the lives of girls and women (e.g., Kaestner and Xu 2010; Stevenson 2010).

⁵ While much of the feedback literature focuses on political structures and policy development, recent work has turned to citizens' opinions (Mettler and Soss 2004, 64) in such areas as health care policy (e.g., Campbell 2011; Jacobs and Mettler n.d.; Lerman and McCabe 2017), welfare reform (Soss and Schram 2007), and criminal justice policy (Weaver and Lerman 2010). We seek to add to this recent work.

feedback” (e.g., Mettler 2005; Pierson 1993) – or undermine democratic processes, unravel existing policy regimes, and demobilize constituent groups – what scholars refer to as “negative feedback” (e.g., Patashnik 2008; Soss 2000; Weaver 2010).⁶ Given the relative stability of Title IX’s regime (i.e., policy interpretations in athletics have remained largely consistent since 1979) and the public nature of accountability under the Equity in Athletics Disclosure Act, we argue that “positive” feedback is more likely among those affected. That is, those who believe policy implementation is incomplete will continue to push for gender equity via resource redistribution (i.e., reallocation towards greater gender equality) and political action.⁷ Policy imbues student-athletes with rights, increasing the likelihood that they will mobilize to seek equity.

To be clear, we recognize that isolating the direct effect of a forty-five year-old law on contemporary attitudes would be a challenging, if not impossible, task given the simultaneous societal shift in gendered attitudes (see Jacobs and Mettler n.d.).⁸ Our goal is to “audit” beliefs about the law’s stated goal of ending discrimination. Even though many social forces and experiences shape relevant beliefs, the existence of the policy – particularly a policy designed to address historical discrimination toward a marginalized group – likely still plays a role in shaping opinions. It can do so by establishing normative expectations of resource allocation. Moreover, it is entirely possible that current beliefs among recipient populations not only reflect assessments of the past and present but that they also suggest prospective thinking about future policy modifications and political mobilization (e.g., Campbell 2003 in the realm of Social Security policy). Our study of the extent to which policy objectives have been achieved

⁶ The most positive mobilizing effects extend from policies that promote democratic authority structures (Bruch, Ferree and Soss 2010), instead of paternalistic ones (Soss, Fording and Schram 2012).

⁷ Other feedback scholars acknowledge that Title IX exists among the population of policies which “expand and underscore citizens’ rights” (Mettler and Soss 2004, 61), and that “decisions on equal protection and Title [IX] have encouraged, and in some cases created, populations” (Norton 2004, 58).

⁸ Policy implementation of Title IX co-evolved with the widespread shift in attitudes around gender equality and gender roles (e.g., Aronsen 2003; Bolzendahl and Myers 2004; Burns and Gallagher 2010; Sigel 1996).

illuminates the degree to which opinion may serve as important positive feedback into *future* iterations of relevant policy around Title IX.

Hypotheses

To assess beliefs about the intent of the policy, we focus on the stated target of Title IX's policy intervention: sex-based "discrimination." We follow Pager and Shepherd's (2008) operationalization: "discrimination" under current policy occurs when one group (in our case: men or women student-athletes) is advantaged relative to another.⁹ Policy guidelines provide a similar, if more capacious, metric which is employed by the Office for Civil Rights in Title IX investigations as discussed in the appendix. Do student-athletes perceive discrimination, and if so, which student-athletes?

We expect two factors to drive perceptions of discrimination among student-athletes: respondent sex and attitudes about societal sex discrimination. Objectively, men's sports remain advantaged in college athletics (NCAA 2017; Yanus and O'Connor 2016); for example, in the National Collegiate Athletic Association's (NCAA) Big Ten Conference, men received roughly 10% more participation opportunities, 37% more expenditures for recruiting, and a whopping 43% more in overall expenditures during 2015-16 (U.S. Department of Education 2016; see the appendix for details and additional data). These figures mean that women student-athletes experience relative "losses" from a purportedly equal status quo, and it is well established that individuals recognize and weigh losses more than gains (e.g., Baumeister et al. 2001). We

⁹ For a more detailed discussion of how the policy constitutes men and women as distinct groups, see Sharrow (2017).

therefore hypothesize that women should perceive these inequities to a greater extent than men, all else being constant (Hypothesis 1).¹⁰

Additionally, we hypothesize that as individuals perceive greater (less) sex discrimination in society writ large, they will believe there is more (less) inequity when it comes to college sports (Hypothesis 2). This expectation follows from research on motivated reasoning which suggests that those who perceive broader inequalities will be more likely to observe disparities when assessing specific situations. In contrast, those who believe that the status quo is equitable will be less likely to recognize objective inequalities (e.g., Taber and Lodge 2006).

In line with the (positive) policy feedback model (Campbell 2003; Mettler 2002), we also hypothesize that these same individuals who tend to be *less* satisfied with the current state of policy implementation will be *more* likely to support a redistribution of resources so as to align more closely with full equity (e.g., move resources from men's sports to women's sports to achieve greater equality) (Hypothesis 3). Because they are also more likely to view the policy itself as necessary to compel colleges and universities to pursue equitable treatment, they will therefore also be more likely to advocate for robust enforcement (i.e., they will support the policy and take action on behalf of it, exhibiting evidence of "positive feedback") (Hypothesis 4). This expectation follows from the positive feedback model which suggests that those dissatisfied with a relevant policy will be more likely to advocate for their rights (e.g., Campbell 2003; Gusmano, Schlesinger, and Thomas 2002). Our predictions, while ostensibly intuitive, suggest that the very people meant to benefit from Title IX (e.g., women) are less likely to perceive it as a success, and more likely to mobilize in light of this perception.

¹⁰ High school girls who participate in athletics tend to perceive greater levels of discrimination relative to girls who do not (e.g., Knifsend and Graham 2012); thus, we may see an especially pronounced effect of sex given our focus on athletes.

Survey

We tested our hypotheses using a survey in which we solicited participation from NCAA Big Ten Athletic Conference student-athletes (i.e., our population is Big Ten student-athletes). We e-mailed an invitation to current student-athletes on March 30th, 2016, asking them to take part in a survey on college athletics. A total of 1,615 student-athletes completed (at least a portion of) the survey. Survey implementation details, explanation and justification for our sampling approach (as well as a discussion of limitations), and (weighted) sample demographics are provided in the appendix.

To gauge perceptions of (in)equality, we asked respondents how they believe their university, across all sports, *actually* distributes athletic resources and opportunities between women and men. We asked this on 24 distinct items and practices relevant to college athletics (e.g., athletic scholarships, coaches); respondents rated each item on a 5-point scale ranging from “women extremely advantaged” (1) to “men extremely advantaged” (5). We also asked them to rate the same items with regard to how they think their university *should* distribute each item between women and men athletes. These two batteries allow us to explore perceptions of inequality and attitudes about redistribution (i.e., the difference between one’s perception of status quo distribution and one’s belief about what it should be). The 24 items map onto four distinctive areas, for which we created index measures: overall resources (a single item, non-indexed), opportunity (e.g., to participate, have an athletic scholarship, practice), personnel (e.g., full time coaches, medical staff), and equipment (e.g., locker rooms, facilities, training).¹¹ We

¹¹ The overall resource item is a single, non-indexed variable, while the other measures average multiple items, as detailed in the appendix. Since there are a large number of items on our survey instrument, we list descriptive statistics here and report all details in the appendix. The respective alphas for opportunities, personnel, and equipment are: .84, .83, and .90. These metrics are meant to capture a holistic assessment of the multi-faceted domain of college athletics. Some of our measures are detailed in the 1979 Title IX Policy Interpretation, which governs implementation, and others are items that are annually reported by athletic departments to the federal government under the Equity in Athletics Disclosure Act (EADA). We discuss the details of both the Title IX

assessed policy opinions and political mobilization by asking: (1) the extent to which the respondent disagrees or agrees with Title IX's requirements (on a 7-point scale with higher scores indicating greater agreement), and (2) the respondent's likelihood of taking seven different actions to express an opinion about gender (in)equity in sports (e.g., talking to the athletic director or a coach, protesting, signing a petition, etc.). For the action items, we created a single indexed variable ($\alpha = .87$).¹²

We measured respondent's sex with a straightforward self-report question; to capture general attitudes about sex discrimination, we used a four-question battery ($\alpha = .71$) that resembles one used in prior work (e.g., Swim et al. 1995; similar items also appeared in the 2012 American National Election Study).¹³ Additionally, we included measures of ethnicity, familial income, ideology (with higher scores indicating greater conservatism), year in school, whether the respondent attended high school in the United States (thereby capturing internationally recruited athletes), whether the respondent has an athletic scholarship, the university the respondent attends, and in what sport(s) the respondent competes.

regulations and the EADA metrics in the appendix, as the two do not directly map onto each other (although athletic programs must be responsive to both).

¹² These actions are partially derived from standard measures of political mobilization used by the American National Election Study (i.e., attending a protest), and created to reflect specific action options available to athletes (i.e., talking to a coach). We recognize our measures involve intent rather than actual behavior; in so doing, we follow a large literature that relies on similar intention measures. For example, Ajzen and Fishbein (2005: 188) explain that an "intention to perform a behavior... is the closest cognitive antecedent of actual behavioral performance..." Further, O'Keefe (2002: 128) states, "there is good evidence that voluntary actions can be successfully predicted from intentions" (also see Sears et al. 1978; Lubell et al. 2007).

¹³ See

http://www.electionstudies.org/studypages/anes_timeseries_2012/anes_timeseries_2012_userguidecodebook.pdf.

General gender discrimination attitudes tend to be quite stable as they reflect fundamental values and ideology; in discussing the related gender traditionalism scale (i.e., which includes more overt items than we use), McThomas and Tesler (2016, 35) state that it is "quite stable over time at the individual level. Moreover, stable predispositions, such as gender attitudes, rarely change in accordance with mass assessments of well-known political figures (Tesler 2015) [or in our case, we presume issues]." Thus, we are confident that the causal direction flows from this general battery to perceptions of equality in sports (and not vice versa) and that the inclusion of the latter did not substantially impact answers to the former (the general scale was also placed later in the sequence of the survey).

For our analyses, we include four dummy variables to indicate if the respondent competes in men's basketball, men's football, men's or women's track and field/cross country, and men's wrestling. The former two sports are commonly referred to as "revenue producing" sports at the NCAA Division I level and policy critics sometimes suggest they should therefore be treated separately when it comes to Title IX (Boyle 2016; Suggs 2005). Track and field and cross-country stand out as high-participant, low-cost sports and thus those participants may have distinct perceptions of resource distribution.¹⁴ Wrestling has been central to equity policy discussions due to claims that colleges defunded and disbanded a number of men's wrestling teams in pursuit of Title IX compliance (e.g., Ridpath et al. 2009). We also included variables to identify respondents attending the University of Iowa and the University of Minnesota since, during the time of our data collection, both schools were in the midst of public Title IX controversies.¹⁵

Finally, following extant work on participation (e.g., Rosenstone and Hansen 1993), we include variables we expect to affect our action items, including measures of internal university efficacy (i.e., perceived ability to understand university affairs), external university efficacy (i.e., perceived ability to have a say in what the university does), and trust in the university. Full details about the wording of questions on the survey instrument are in the appendix.

Results

¹⁴ In the Big Ten, track and field/cross country has more participants than any sport other than football (see the appendix). Yet, among the schools in our population their average expenditures are \$13,506 per athlete whereas the average expenditures for football are \$227,352 (United States Department of Education 2016). These numbers are calculated using EADA statistics that report expenditures and participation numbers across, rather than within, track and field/cross country teams. The number reported here for track and field/cross country averages per athlete expenditures on both women and men.

¹⁵ Minnesota was under official investigation by the federal government for spending inequities in athletics during the year before our survey was in the field (Lerner, Browning, and Nelson 2015; Rayno 2015), and Iowa faced a March 2016 Title IX lawsuit regarding discrimination against women's coaches (A.P. 2016).

We expect perceptions and behaviors to depend, in part, on gender, sport, and university. As is true in virtually any survey, our sample did not perfectly represent the population on these important factors. Thus, we follow common practice, and, for all analyses, we weight the data based on gender, sport, and university. This facilitates generalization to the population of Big Ten student-athletes (see the appendix for weighted sample comparisons with the population).¹⁶

We start by evaluating opinions on how respondents believe resources and opportunities *should* be distributed between women and men. Remarkably, the vast majority of respondents believe that there should be near exact equality. Throughout, a score of “3” on each scale indicates the opinion that “neither women nor men [should be] advantaged.” The respective averages in each domain are: overall resources 3.09 (std. dev. = .41; N = 1,287), opportunity 3.06 (.33; 1,289), personnel 3.03 (.33; 1,281), and equipment 3.04 (.34; 1,288). As indicated by the low standard deviations, most respondents believe that equality *should* be the norm.¹⁷ These results suggest a diffusion of the ideology of sex equality within Title IX’s policy mandate, as women and men student-athletes report normative attitudes toward equal treatment of women and men. Under Title IX’s contemporary policy regime, our results suggest that student-athletes’ *beliefs about how resources should be distributed* are in concordance with the expected implementation outcome of equity established by policy guidelines. This suggests that Title IX

¹⁶ Specifically, we apply inverse probability weights to our sample (see Steinmetz et al. 2014); for population statistics, we relied on the information we gathered to obtain the sample, which involved identifying the population of student-athletes from available schools (see the appendix). We did not record and were unable to identify data on other demographic attributes of the population; however, the three variables on which we weight are clearly the most relevant to our hypotheses.

¹⁷ The modal score for each item is 3.0 with an overwhelming number of respondents registering these scores – for each respective measure, the percentages who score 3.0 are 90%, 74%, 88%, and 86%. The average scores for men are: overall resources 3.15 (std. dev. = .50), opportunity 3.12 (.40), personnel 3.07 (.41), and equipment 3.09 (.42). The average scores for women are: overall resources 3.02 (.26), opportunity 3.01 (.22), personnel 2.99 (.22), and equipment 2.99 (.23).

(and/or the current social climate towards equity) establishes an expected baseline of equity from which athletes may evaluate the practices of their athletic departments.

When it comes to perceptions of *actual* resource distribution, we observe a very different story. The mean scores for all four domains veer towards the perception that men are advantaged. Indeed, all scores on the perceptions of actual distributions are statistically significantly higher than the scores on how respondents believe resources *should* be distributed. The respective mean scores (and tests of significance) are: overall resources 3.31 (std. dev. = .79, N = 1342; $t_{2627} = 8.91, p < .01$ for a two-tailed test), opportunity 3.20 (.56, 1347; $t_{2634} = 7.78, p < .01$), personnel 3.21 (.48, 1328; $t_{2607} = 11.12, p < .01$), and equipment 3.30 (.59, 1341; $t_{2627} = 13.77, p < .01$).

In order to test our hypotheses regarding the impact of respondent's sex and attitudes towards sex discrimination, we regress each of our distribution perception variables on respondent's sex and sex discrimination attitudes along with the aforementioned controls. We display the results in Table 1.¹⁸ Across all four measures, consistent with our first hypothesis, the sex of respondents has a significant and large effect. To get a sense of the substantive impact, consider that, holding all other variables at their means, the predicted mean values for women respondents, on overall resources, opportunity, personnel, and equipment are: 3.62 (standard error: .04), 3.49 (.03), 3.34 (.03), and 3.59 (.03).¹⁹ These sharply contrast the respective predicted values for men which are 3.13 (.04), 2.97 (.03), 3.12 (.03), and 3.09 (.03).

[Table 1 about here]

We additionally find strong support for our second hypothesis on sex discrimination attitudes. Those who perceive broader patterns of sex discrimination in society also observe

¹⁸ The Ns change due to missing responses on selected items; results are robust to multiple imputation techniques.

¹⁹ We used *Clarify* to calculate predicted values (see King, Tomz, and Wittenberg 2000).

disparate treatment in their athletic departments. Substantively, for example, holding other variables at their means, there is a 10% increase in perceptions of inequality on our overall resource measure when one compares a respondent who scores one standard deviation below the mean discrimination score with a respondent who scores one standard deviation above it.

Otherwise, interestingly, male student-athletes from sports often at the heart of Title IX debates – the well-resourced sports of football and men’s basketball and the wrestlers who are often described as suffering cuts due to Title IX – *also* perceive distribution biases (at least on some of the measures). It may be that participating in a sport that intersects with Title IX debates generates more awareness of the aforementioned objective inequities. Track and field/cross country student-athletes perceive less inequality when it comes to overall resources and opportunity, perhaps reflecting that they experience more equality across genders within their sport. We find that Minnesota student-athletes are also more attuned to inequities in two cases (likely due to the aforementioned public attention on Title IX). Otherwise, we find variables such as ideology, familial income, and other demographics do not matter in any systematic, predictable way.²⁰

Our data also allow us to evaluate the effects of beliefs about resource redistribution in athletics. In order to assess this, we calculate the difference between each respondent’s answer to the “should be” items and their perceptions of actual, existing distributions. We present our findings in the appendix (Table A-7). Not surprisingly, given that virtually all respondents reported a normative view of equal distribution, women and those who perceive more sex discrimination in society exhibit greater support for redistributing resources in a more equitable manner across all measures (consistent with hypothesis 3). For example, as compared to men,

²⁰ That said, Hispanic respondents perceive significantly less inequality when it comes to opportunity and equipment, and those who attended high school in the U.S. perceive less inequality of resources and opportunity.

women, on average, believe there should be a 6% reallocation in overall resources to make the distribution more sex-equal. This is fairly clear evidence that one of the main targets of Title IX – women college student-athletes – believe both that sex-based discrimination remains a problem, and that redistribution is needed. This finding suggests that women college athletes hold opinions *more* aligned with scholars and activist groups who remain focused on Title IX’s unfulfilled implementation promise (e.g., Buzuvis 2014; Sharrow 2017; Yanus and O’Connor 2016), and *less* aligned with common media portrayals of policy success (Whiteside and Roessner 2016). The finding also means that the NCAA’s own “definition of gender equity” has not been met insofar as they dictate: “An athletics program can be considered gender equitable when the participants in both the men's and women's sports programs would accept as fair and equitable the overall program of the other gender” (NCAA 2017: 3).²¹ Our results suggest that women in particular do not accept their programs as fair and equitable given that they view redistribution as necessary.²²

Public opinion feedback among student-athletes on Title IX’s application to college athletics is that the law has not met its full potential. Another step in the policy feedback model is to assess whether affected individuals, particularly those who may not be fully satisfied, mobilize. We thus next test whether the individuals who perceive more mal-distribution also are more likely to become politically mobilized to advocate for a policy solution to address inequity

²¹ Of course, federal law under Title IX is more binding to athletic department practices than is NCAA policy. However, the NCAA offers guidance to member institutions on developing their “gender equity” practices and in responding to EADA data requests (see <http://www.ncaa.org/about/resources/finances/ncaa-membership-financial-reporting-system>).

²² We asked respondents their opinion regarding whether men’s football and/or basketball should be included or excluded when considering gender equality in the overall distribution of resources. Policymakers and the courts consistently reject this argument, although the idea of isolating so-called “revenue producing sports” from equity policy remains in circulation among Title IX’s harshest critics. Forty-three percent of respondents thought they should be excluded. We also asked about objective and normative views of overall resource distribution if men’s football and basketball were excluded. We present those results in the appendix Table A-8.

– i.e., more robust enforcement or implementation of Title IX itself. Table 2 displays the models, which evaluate support for Title IX specifically, and mobilization as measured by several action measures. The results provide evidence in support of hypothesis 4, in that those most likely to believe the policy has not eliminated inequality are also relatively supportive of Title IX specifically and more likely to take action to address inequality. Clearly, these individuals believe policy solutions (like better enforcement or more thorough implementation) are still required and are willing to politically mobilize on the issue.²³ Otherwise, football players express significant support for Title IX, consistent with the prior results; yet, they are not more likely to mobilize to action around gender equality concerns and in fact are nearly significantly less likely to do so (as are men’s basketball players). These well-resourced athletes likely feel less compelled to mobilize because the status quo already benefits their interests (and redistribution of resources may indeed hurt their current standing in the status quo). Track and field/cross-country student athletes are more likely to mobilize, which may result from their own experiences of having to advocate for their sport that receives scant resources.²⁴

²³ In results available from the authors, we create an aggregate measure of inequality perceptions (by merging the four distinct batteries) and add it to the regressions presented in Table 2. We find this scale is significant for Title IX support but not for the action items. Even so, the scale does not seem to substantially mediate the relationship between gender/discrimination attitudes and Title IX support. That is, there is not clear evidence that gender and discrimination attitudes affect distribution perceptions that in turn, affect policy support and the likelihood of taking action. Gender and discrimination attitudes appear to assert independent effects on distribution perceptions, policy support, and actions. On its face this may seem contrary to a positive policy feedback model where perceived consequences stimulate subsequent policy support and actions. However, we suspect that the results instead reveal that policy support/mobilization among these individuals comes from not just extant perceptions but also speculation about future possibilities that could exist sans the policy and/or actions. Policy feedback effects can be potentially prospective.

²⁴ We also find that familial income has a negative relationship with activism which is sensible insofar as the type of activism we are studying involves extra-systemic (protest type) activities, which have been shown to negatively correlate with income (e.g., Bowles and Gintis 1982). In the appendix Table A-9, we explore whether the relationships we find for taking actions are contingent on either income or whether the sport is more individual or team-oriented (since income and social pressure that could come from a team have been shown to impact/moderate types of political participation).

We see variables that typically affect political participation matter here, in predictable ways when it comes to internal efficacy and trust. Surprisingly though, increased external efficacy significantly lowers the likelihood of taking action. This could reflect a belief among athletes that the university will be responsive to student-athletes in general and thus their extra-systematic action is not needed. Taken as a whole, these results support a positive feedback model for understanding the contemporary politics of Title IX in college athletics – those dissatisfied with the policy’s extant implementation support more aggressive policy implementation and demonstrate a likelihood to take political action in response to perceived injustices within their university athletic environment.²⁵

[Table 2 about here]

We earlier noted that the beliefs and intentions we study here surely reflect a host of experiences, beyond the presence of the law itself. Indeed, we positioned our study as one that, in some sense, is auditing the feedback on the law’s intent. One could even go so far as to ask whether the Act itself is relevant for these reactions – that is, is the Act playing any role in the responses we study – is this actually “feedback” on the Act? There is clear evidence that it is, on three counts. First, we asked on the survey whether respondents had heard of Title IX and 91% responded affirmatively. It thus seems likely that, as we suggested earlier, Title IX is on student-athlete’s minds and *sets the normative expectation of equality* – for which we find such strong evidence. Second, that the same factors (i.e., gender and discrimination perceptions) drive views of equality *and* support for the Act suggests that these student-athletes connect inequities to the policy specifically.

²⁵ Although we know of no similar athlete equity opinion among college athletes data from the era before Title IX, the historical record captures significant mobilization by college football coaches and players (as well as the NCAA itself) *against* the implementation of Title IX in the 1970s (Edwards 2010; Sharrow 2017).

Third, our survey asked respondents whether they knew if Title IX applied only to athletics, only to education, both athletics and education, or neither (the correct answer is both; see Druckman et al. 2014).²⁶ We find that, relative to offering the correct answer, women student-athletes, all else constant, are significantly more likely to believe the Act only applies to athletics. In contrast, those with stronger societal discrimination perceptions are less likely, albeit not to the point of statistical significance, to hold that incorrect belief (the full results are in the appendix Table A-10). These findings cohere with our theory insofar as we argued that women's beliefs stem from their experiences in the domain of athletics and so they may think of Title IX strictly in that sense. The dynamic behind our discrimination perception expectation though was one of motivated reasoning, which tends to occur with greater frequency as knowledge increases (Taber and Lodge 2006); increased knowledge also reflects the concern about equality across the domains to which Title IX applies. Put another way, these knowledge findings are consistent with our theoretical mechanisms about how beliefs regarding Title IX specifically form. Future work is needed to pin down mechanisms. For instance, it could be that instead of experiences in college, women student-athletes perceive greater inequalities due to particular personal qualities or experiences (see Knifsend and Graham 2012). These attributes may lead women to both select into pursuing a collegiate sport career and to perceive inequities. Untangling the role of experiences in college versus other individual-level factors (e.g., by comparing similar student-athletes to non-student athletes) is a question for future work.²⁷

Conclusion

²⁶ Overall, 22% believe the law only applies to athletics, 2% believe it only applies to education, 74% correctly believe it applies to both athletics and education, and 2% believe it applies to neither.

²⁷ One study of post-college life outcomes among NCAA athletes suggests that athletes have distinctive outcomes from their non-athlete peers, suggesting that researchers may also benefit from studying the role that experience plays in shaping athletes during college as well (Gallup 2016).

There is little doubt that Title IX altered the landscape of athletics by vastly expanding opportunities for girls and women. Yet, to date, we are not aware of any work that has studied whether one of the primary affected populations actually believes that the policy has fully worked to eliminate discrimination “on the basis of sex.” We show that college student-athletes strongly support the spirit of the policy, with nearly all reporting that there “should” be equity. Yet, a sizeable and important population also believes mal-distribution exists among resources and opportunities, thinks redistribution is needed, and is willing to take political action to improve equality. This provides evidence of positive feedback where those who perceive the policy has not fully succeeded seek change consistent with the policy’s principles. We further offer some evidence that existence of the policy itself plays a role in reactions. An interesting next step would be to explore which types of inequities student-athletes view as more or less problematic (e.g., are they less concerned with scholarship/equipment inequality, given the large size of the football team, than with facility inequality?).

Regardless of such possible tradeoffs, our results suggest an overall uneven landscape for sex equity politics in college athletics. On the one hand, Title IX is *not* an unmitigated implementation success; women and those who believe there are sex-based inequities in society continue to perceive, and indeed question, the dramatically unequal practices endemic to college sports. On the other hand, when this circumstance is viewed as an extension of recent studies showing the benefits of melding theories of opinion formation with policy feedback, we find some evidence of policy success. First, the evidence of widespread support for sex equitable practices suggests that the *norm of equity* embedded in Title IX has, via various social forces and policy implementation, diffused and impacted how athletes think athletics *should* be organized. Second, the diffusion of this norm may inspire the broad-based demands needed to achieve better

policy enforcement. Very little evidence, to date, has demonstrated that when student-athletes see these equity norms being violated that they would be willing to take action. In this sense, our findings suggest that there exists among current student-athletes a potential for mobilizing social movement demands that could compel policy change. Such a movement, on a local or national level, will likely be necessary to enact broad-based policy change (e.g., Weldon 2002, 2011).

We also isolate an important problem concerning democratic responsiveness. Public policies typically affect a subset of the broader population – in this case, college student-athletes. Yet, policy-makers and those who implement the policies often must consider the effect of the policy on less directly impacted populations (e.g., taxpayers). For Title IX that might include fans of college athletics and alumni who consume the product of college sports, especially men’s basketball and football. Consequently, efforts to redistribute resources may go unanswered, in part, because the less directly affected constituencies have more power. This is a particularly perplexing situation when it comes to college sports given that student-athletes’ lives are highly regulated at the same time as their rights are far from clear.²⁸ Democratic responsiveness to the less-empowered stakeholders in college athletics may ultimately be attenuated by the ascendance of an economic model for college sports (Clotfelter 2011; Lanter and Hawkins 2013). So long as athletic departments in the most competitive conferences remain committed to a central goal of producing revenue, sex equity concerns may continue to receive short shrift.

This analysis of the “feedback” politics at stake in Title IX suggests that the future of college sports is potentially complicated by student-athletes who perceive themselves as rights-

²⁸ Staurowsky (2014: 23–24) explains, “In the netherworld that has existed for college athletes between bona fide workers and students, their ability to access their rights becomes more difficult... The lives of college athletes are routinely regulated in ways that distinguish them from their colleagues in the general student population... in an atmosphere where questioning the status quo is not welcome and with the expectation that players will not go public with their grievances for fear of damaging the program and their own prospects, there is considerable risk associated with player activism...”

bearing citizens with civil rights protections – women athletes, in particular. The economic model for college athletics may, our results suggest, be forced to grapple with civil rights protections afforded to the athletes who comprise college sports. How politics and law intersect with college athletics is a topic that has received scant attention from political science despite the inherent political nature of college sports. Our results suggest that scholars of policy should take seriously the domain of athletics because it overlaps with the domain of civil rights. With women athletes poised, in particular, to see themselves as rights-bearing policy leaders, athletic departments may have no choice but to reckon with the still-evolving debate over gender politics.

Table 1. Determinants of Distribution Perceptions (probability-weighted OLS)

	(1) Resources	(2) Opportunity	(3) Personnel	(4) Equipment
Female	0.486*** (0.056)	0.516*** (0.040)	0.217*** (0.031)	0.504*** (0.038)
African-American	-0.066 (0.125)	-0.136 (0.085)	-0.124* (0.071)	-0.073 (0.094)
Asian	-0.023 (0.114)	-0.050 (0.068)	-0.123** (0.050)	0.021 (0.068)
Hispanic	-0.146 (0.133)	-0.238** (0.105)	-0.064 (0.120)	-0.192** (0.095)
U.S. High School	-0.172** (0.085)	-0.134** (0.060)	-0.038 (0.064)	0.005 (0.059)
Year	0.050** (0.022)	-0.010 (0.018)	0.012 (0.017)	-0.001 (0.017)
Familial Income	-0.021 (0.025)	-0.042** (0.020)	-0.012 (0.019)	-0.017 (0.019)
Ideology	-0.010 (0.019)	0.006 (0.014)	0.004 (0.014)	0.005 (0.015)
Discrimination Perceptions	0.205*** (0.044)	0.123*** (0.032)	0.079*** (0.030)	0.091*** (0.031)
Athletic Scholarship	0.022 (0.059)	0.006 (0.047)	0.041 (0.045)	0.009 (0.047)
Wrestling	0.248* (0.137)	0.213* (0.111)	0.009 (0.103)	-0.016 (0.103)
Football	0.595*** (0.122)	0.578*** (0.108)	0.262** (0.106)	0.418*** (0.103)
Men's Basketball	0.397*** (0.138)	0.310*** (0.055)	-0.020 (0.038)	0.059 (0.048)
Track & Field/Cross-Country	-0.109* (0.059)	-0.170*** (0.038)	-0.001 (0.033)	-0.050 (0.043)
Iowa	0.156 (0.096)	-0.080 (0.060)	-0.008 (0.057)	0.015 (0.054)
Minnesota	0.174** (0.085)	0.073 (0.058)	0.029 (0.052)	0.122** (0.058)
Constant	2.429*** (0.215)	2.741*** (0.165)	2.819*** (0.154)	2.729*** (0.151)
Observations	1,137	1,139	1,138	1,138
R-squared	0.200	0.296	0.103	0.218

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ for two-tailed tests.

Table 2. Determinants of Title IX Support and Actions (probability-weighted OLS)

	(1) Support	(2) Action
Female	1.630*** (0.132)	0.193** (0.081)
African-American	0.080 (0.211)	0.226* (0.127)
Asian	-0.744*** (0.198)	0.153 (0.156)
Hispanic	-0.027 (0.285)	0.084 (0.232)
U.S. High School	0.164 (0.183)	0.197 (0.176)
Year	-0.044 (0.042)	-0.016 (0.025)
Familial Income	-0.075* (0.044)	-0.082*** (0.029)
Ideology	-0.080** (0.036)	-0.031 (0.023)
Discrimination Perceptions	0.623*** (0.085)	0.158*** (0.054)
Athletic Scholarship	0.122 (0.107)	-0.041 (0.066)
Wrestling	-0.033 (0.257)	0.038 (0.152)
Football	0.631*** (0.196)	-0.223 (0.137)
Men's Basketball	-0.137 (0.335)	-0.479** (0.225)
Track & Field/Cross-Country	-0.079 (0.125)	0.160** (0.078)
External University Efficacy		-0.096*** (0.033)
Internal University Efficacy		0.161*** (0.060)
University Trust		-0.085** (0.037)
Iowa	0.176 (0.203)	0.221* (0.125)
Minnesota	-0.105 (0.165)	0.101 (0.093)
Constant	1.925*** (0.427)	2.335*** (0.421)
Observations	1,129	1,099
R-squared	0.396	0.135

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ for two-tailed tests.

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Appendix

I. Sex Equity Policy Requirements: Title IX and the Equity in Athletics Disclosure Act

Here we provide detailed discussion about Title IX and its implementation with regard to college athletics. This provides context to the focus of the paper and motivates the particular items we used in surveying student-athletes' opinions toward sex equity practices.

Importantly, although Title IX of the Education Amendments of 1972 provides the primary policy guidelines for implementing and complying with sex non-discrimination policy in athletics, the public reporting of equity practices is managed under the purview of the Equity in Athletics Disclosure Act (EADA), which requires institutions to annually report intercollegiate athletic equity statistics to the U.S. Department of Education. Title IX's non-discrimination mandate applies to all institutions receiving federal funding (including through direct educational and research grants, as well as through federal grants and loans to students enrolled at the institution), with a few exemptions: private school admissions decisions, public elementary and secondary school admissions (meaning: single-sex schools at these levels are allowed), private schools controlled by religious organizations, military academies, fraternities or sororities, and some specific auxiliary programs (i.e., Boys and Girls State programs, the Boy Scout and Girl Scouts, etc.) (20 U.S.C. §1681-1688).

Intercollegiate athletic departments do not annually report Title IX statistics, *per se*, although they are required to account for all sex equity practices if the Office for Civil Rights opens a Title IX investigation of an educational institution. Instead, since the mid-1990s, college-level programs have been required to annually report on their equity practices using metrics required under the EADA. The reporting manual which all schools follow specifically notes that the data annually reported under the EADA "may not be the same as data used for determining compliance with other Federal or state laws, including Title IX" (see link in appendix footnote 3). Intercollegiate athletic programs are legally required to comply with both of these mandates.

We detail the differences and similarities between the two reporting requirements in Table A-1. As this table shows, public data on college athletics does not perfectly overlap with the requirements of compliance with Title IX. For the purpose of our research questions, and as detailed below in section III, we solicited college athlete opinion in 24 distinctive areas that draw on both the Title IX guidelines *and* the EADA data. The requirements of Title IX are the most comprehensive measures of sex equity practices and they have been the subject of the most legal scrutiny (Brake 2010), although the Office for Civil Rights (OCR) retains significant leeway in interpreting compliance with the measures.¹ For our purposes, soliciting opinion on only either Title IX's specific requirements or the EADA report requirements would have obscured major elements of equity practices in college athletics.

¹ It is also worth noting that no institution has ever been subjected to having their federal funding revoked as a result of a Title IX investigation. More typically, the result of an OCR investigation is an agreement between the federal government and the institution, which will guide future practices towards sex equity at the institution under investigation.

Table A-1. Title IX compliance measures compared to the EADA requirements

Title IX compliance measures ²	EADA annual reporting requirements ³
Equitable participation opportunities, i.e., substantially proportional men’s and women’s athletic opportunities; or history and continuing practice of expanding opportunities for the underrepresented sex; or full and effective accommodation of the interests and abilities of the underrepresented sex	Male and female athletic participants (counted on the first day of competition in the sport)
Substantially proportional men’s and women’s athletic aid	Athletically-related Student Aid (reported in \$)
Equal treatment of the men’s and women’s athletic programs, considering such factors as: equipment and supplies, games and practice times, travel and per diem, coaching and academic tutoring, assignment and compensation of coaches and tutors, locker rooms, practice and competitive facilities, medical and training facilities, housing and dining facilities, publicity, recruitment, and support services.	Head Coaches of Men’s and Women’s Teams (full and part-time) Assistant Coaches of Men’s and Women’s Teams (full and part-time) Head Coaches’ Salaries Assistant Coaches’ Salaries Recruiting Expenses Operating Expenses Per Team/per Participant Total Expenses Total Revenue

² Title IX’s 1979 policy implementation guidelines provide an interpretation of policy for intercollegiate athletics (OCR 1979) and they operate in tandem with a second clarification in 1996 (OCR 1996) to produce this list of requirements. The guidelines focus on the meanings of “equal opportunity” in athletics, delineating three domains (often referred to as the “three-part test” of compliance), which we delineate in this column: participation opportunities, athletic aid, and equal treatment (see 34 C.F.R. § 106.1).

³ https://surveys.ope.ed.gov/athletics/images/Instructions/2016_EADA_user_s_Guide.pdf See also the EADA reporting website: <https://surveys.ope.ed.gov/athletics/>

II. Objective Sex Inequities within Big Ten Intercollegiate Athletic Programs

Next, we present the publicly available EADA data from Big Ten Conference institutions during the 2015-16 school year (and the year that our survey was in the field). The statistics presented demonstrate evidence of objective inequities in athletic opportunities and resources between women and men in the conference. These findings are reported in Table A-2.

Our source for these data is the publicly available EADA Online Cutting Tool (<https://ope.ed.gov/athletics/>).⁴ The EADA requires all coeducational institutions of postsecondary education that participate in a Title IV federal student financial assistance program and have an intercollegiate athletic program to “prepare an annual report to the Department of Education on athletic participation, staffing, and revenues and expenses, by men's and women's teams.” In order to compile the information in Table A-2, we searched the online “cutting tool” for each institution in the Big Ten Conference and collected their EADA statistics for the 2015-16 academic year for items which directly correlate with equity measures on our survey. These include statistics on athletic participation (including total participants, unduplicated participants, and non-competing practice players),⁵ coaching staff (both full and part time), coaching salaries, athletically related student aid, recruiting expenses, and other expenses and revenues.

We then calculate the data in Table A-2 by determining the difference in men’s and women’s participation opportunities, scholarship dollars, number of teams,⁶ recruiting expenditures, full-time coaches (measured as coaches of men’s or women’s teams, regardless of the gender of the coaches employed), and overall annual expenditures. We present both count and percent differences for all measures except number of athletic teams. As we note in the text, these data demonstrate significant bias towards men’s opportunities, scholarships, expenditures, and coaching staffs. There exists some variation across schools in the conference in the magnitude of differential opportunities, spending, and support for men and women athletes, but Table A-2 demonstrates the overwhelming trend that men receive significantly more support in a number of domains.

We also designate in the second row how these measures comport with our analytic indices for overall resources, opportunity, and personnel. We compute averages for all measures across the Big Ten Conference as a whole, and among our sampled schools. The EADA data represent the most systematic accounting of objective practices in athletics.

⁴ According to the U.S. Department of Education: “The data are drawn from the OPE Equity in Athletics Disclosure Website database. This database consists of athletics data that are submitted annually as required by the EADA, via a Web-based data collection, by all co-educational postsecondary institutions that receive Title IV funding (i.e., those that participate in federal student aid programs and that have an intercollegiate athletics program.” See: <https://www2.ed.gov/finaid/prof/resources/athletics/eada.html>.

⁵ We make our calculations based on unduplicated counts (i.e., not counting twice any athletes that compete in multiple sports – schools must report the “unduplicated numbers” across all sports), and we subtract male practice players who practice with women’s teams. This method reveals actual numbers of women’s participation opportunities (Cheslock and Eckes 2008).

⁶ Title IX does not require equity in number of teams offered for each sex, instead requiring substantially proportional opportunities between the sexes, across all sports. In fact, most schools in the Big Ten host more women’s teams than men’s teams because of the large numbers of men’s football players on Big Ten team’s rosters.

Table A-2. Distribution of Opportunities and Expenditures in the Big Ten Conference, 2015-16

Institution Name	% difference (Men's - Women's) in Participation Opportunities **	# difference (Men's - Women's) Participation Opportunity **	% difference (Men's - Women's) in Scholarship Dollars	\$ difference (Men's - Women's) in Scholarship Dollars	# difference (Men's - Women's) in number of teams	% difference (Men's - Women's) in Recruiting Expenditures	\$ difference (Men's - Women's) in Recruiting Expenditures	% difference (Men's - Women's) Full Time Coach	% difference (Men's - Women's) in Overall Expenditures	\$ difference (Men's - Women's) in Overall Expenditures
	Opportunity Measures					Personnel Measures			OVERALL	
Indiana University-Bloomington	7.22%	49	7.81%	\$1,153,383	-2	47.14%	\$708,267	1.9%	46.22%	\$ 28,656,324
Michigan State University	3.00%	22	10.16%	\$1,474,820	-1	46.80%	\$648,333	3.5%	51.08%	\$ 35,729,655
Northwestern University	-2.42%	-12	11.23%	\$2,123,099	-3	42.78%	\$481,865	0.0%	37.98%	\$ 20,833,075
Ohio State University-Main Campus+	13.69%	138	2.99%	\$543,640	-1	25.63%	\$489,816	7.1%	43.64%	\$ 38,665,140
Pennsylvania State University-Main Campus	19.41%	157	15.06%	\$2,835,767	1	49.95%	\$1,079,769	8.2%	46.88%	\$ 37,028,681
Purdue University-Main Campus	19.76%	100	27.33%	\$2,955,909	0	38.57%	\$514,019	9.0%	42.60%	\$ 18,036,897
Rutgers University-New Brunswick	3.25%	21	5.28%	\$681,059	-4	38.27%	\$485,641	4.0%	40.06%	\$ 21,568,565
University of Illinois at Urbana-Champaign	23.01%	107	18.78%	\$2,291,727	-1	50.49%	\$867,809	7.0%	42.12%	\$ 19,276,628
University of Iowa	3.86%	26	4.52%	\$520,179	-2	26.19%	\$411,798	-2.4%	44.27%	\$ 28,844,608
University of Maryland-College Park*	20.08%	104	13.68%	\$2,118,194	-3	23.71%	\$288,902	1.6%	39.90%	\$ 20,657,022
University of Michigan-Ann Arbor	4.23%	37	10.68%	\$2,397,195	-1	46.89%	\$1,153,989	1.7%	43.67%	\$ 38,271,842
University of Minnesota-Twin Cities	5.03%	36	9.64%	\$1,009,863	-1	26.79%	\$407,222	-1.0%	43.98%	\$ 27,856,677

University of Nebraska-Lincoln*	15.21%	89	12.48%	\$1,378,835	-4	41.73%	\$885,722	5.5%	37.01%	\$ 23,230,116
University of Wisconsin-Madison	2.22%	17	9.12%	\$1,271,168	-1	16.38%	\$184,764	3.4%	41.90%	\$ 33,097,322
AVERAGE across full Big Ten Conference	9.82%	64	11.34%	\$1,625,346	-1.6	37.24%	\$614,851	3.1%	42.95%	\$ 27,982,325
AVERAGE within our sampled subset of schools	8.52%	58	11.05%	\$1,604,817	-1.3	37.99%	\$619,441	3.0%	43.70%	\$ 28,988,785

Source: Equity in Athletics Disclosure Act Online Cutting Tool (<https://ope.ed.gov/athletics/>), Office of Postsecondary Education in the U.S. Department of Education

Notes:

* Institution excluded from survey sample (see Appendix Part III Survey Implementation and Sample)

** Count based on data which excludes male practice players on women's team roster counts

+ Participation information excludes coed sports

III. Survey Implementation and Sample

Our ideal population is all student-athletes affected by Title IX which would include virtually all high school and college athletes in the United States (except those enrolled in military institutions or religious schools granted exemption from the law). It was infeasible for us to obtain contact information from the 1,000s of secondary schools. We opted to focus on a single major NCAA Division I conference for three reasons. First, the funding and visibility of schools in NCAA's Division I is notably higher than other colleges (NCAA 2017). As such, the respondents are student-athletes for whom Title IX's influence may be most salient, making them a clear "target" population (i.e., athletic participation is a significant part of their lives and identities) (see also Ingram and Schneider 1991 for literature discussion of "target populations").⁷ Second, we are unaware of an available list of contact information for all NCAA student-athletes. That means that we had to obtain contact information by visiting each school's website, identifying student-athletes, and obtaining their e-mail addresses. Practical concerns about time and resources prevented us from drawing a random sample from the more than 170,000 student-athletes who participate on one of the more than 6,000 Division I teams (from roughly 350 schools; <http://www.ncaa.org/about?division=d1>). Third, these constraints meant one approach could have been to randomly select schools and then sports, and then student-athletes (or to target all student-athletes from a selected team given time constraints of searching for rosters and then e-mails). We opted to not take this approach as we wanted to ensure a sufficient number of student-athletes from the sports for which we controlled (some of which have been implicated in Title IX debates): football, men's basketball, men's and women's track and field/cross country, and men's wrestling. For these reasons, we opted to focus on a single Division I conference – the Big Ten – where our sampling frame could be the universe of student-athletes with publicly available contact information. Our population is thus Big Ten student-athletes.

The Big Ten Conference includes 14 major research universities located in the Midwest and Eastern parts of the country. We believe this is a strong starting point as it includes a large amount of variance among universities and includes schools that recruit nationally and internationally. Our focus on a single conference also follows other studies of student-athletes (e.g. Druckman et al. 2014; Fountain and Finley 2009). That said, we also recognize that the Big Ten may differ from other conferences/schools due to relatively high levels of media coverage (and the selling of media rights) and geographic considerations (e.g., the Big Ten includes many schools from relatively high social capital states). These factors may lead to, on average, relatively greater sensitivity to gender equality among these student-athletes – obviously further theorizing and empirical work is needed to explore this. Even so, ours is a reasonable starting point, and, if nothing else, we see no reason why our central explanatory variables (to explain our perceptions of discrimination, mobilization) would not generalize to all Division I student-athletes.

In the winter of 2016, we accessed the athletic websites of all the Big Ten schools and obtained the full rosters for all sports at every school. We then accessed each school's website to

⁷ College student-athletes are directly affected by the 1979 athletic guidelines (Sharro 2017). That said, they are one type of the many groups targeted by Title IX, including girls and women in education (Rose 2015). Increasingly, other groups are mobilizing to make political claims under Title IX, including survivors of campus sexual assault (Reynolds n.d.). Our survey only explored opinion towards equity practices and Title IX among college athletes.

locate and record the email address (and sport and gender) of every student-athlete listed on those rosters. This information was publicly available at all schools except for the University of Nebraska and the University of Maryland. These two schools thus are excluded from our sample. Overall, we located 7,977 names on rosters (which we believe is the full population of Big Ten student-athletes at the time, from all but the two schools). We found no e-mails for 788 student-athletes and subsequently we sent out 7,189 e-mails. Of them, 1,678 bounced back as no longer in service (which could be due to the students no longer being enrolled, database errors, website errors, or some other reason). Thus, we successfully sent (on March 30th, 2016) a total of 5,511 e-mails that, to our knowledge, reached their intended targets. We also sent out one reminder (on April 4th, 2016) to all respondents. The invitation letter (and the reminder) asked the student-athletes to participate in a survey aimed at understanding what student-athletes think about a range of relevant issues revolving around college athletics. They were directed to an encrypted link and assured of anonymity.

In the end, we received 1,615 responses leading to response rate of $1615/5511 = 29.3\%$. This rate exceeds the typical response rate in e-mail surveys of this length, especially those that do not employ incentives (see Couper 2008; Ritter and Sue 2007: 36; Shih and Fan 2008 for discussion of typical response rates in similar surveys). We report features of the sample in Table A-3. Tables A-4 and A-5 report the percentages of our sample from each school and sport. Sample size varied across schools due to variations in the number of sports each school sponsors. As explained in the text, we weighted all of our analyses so that our sample approaches population figures on gender, sport, and school (obtained from our download of the rosters). The descriptive statistics provided below are also weighted – the tables reveal that the weighted sample used in the analyses closely resembles the population.

Table A-3. Sample Characteristics (Weighted)

Variable	Percent
Female ¹	44.95%
Race/Ethnicity	
White	88.32%
Black	8.86%
Asian	2.67%
Hispanic	2.61%
Year	
Freshman	25.83%
Sophomore	27.31%
Junior	23.19%
Senior	19.67%
Graduate Student	3.56%
Sport	
Wrestling	5.55%
Men's Basketball	1.52%
Football	18.82%
Track & Field/Cross Country	15.40%
Athletic Scholarship	53.33%
US High School	95.06%
	Mean (std. dev.)
Familial Income (1-5 scale) ²	3.67 (1.09)
Women Discrimination (1-5 scale)	3.49 (.74)
Ideology (1-7 scale)	4.12 (1.58)

¹We do not have population percentages on the demographic data, other than for gender for which the population is 44.30% female.

² 1=<\$30,000, 2=\$30,000-\$69,999, 3=\$70,000-\$99,999, 4=\$100,000-\$200,000, 5= >\$200,000.

Table A-4. Sample Composition by University (Weighted)

School	Percent of Sample	Percent of Population
Illinois	5.66%	6.09%
Indiana	7.16%	7.99%
Iowa	7.92%	8.22%
Michigan	10.29%	10.24%
Michigan State	8.60%	8.95%
Minnesota	8.70%	8.89%
Northwestern	6.96%	6.12%
Ohio State	10.56%	10.49%
Penn State	9.77%	9.62%
Purdue	6.34%	6.52%
Rutgers	7.86%	7.31%
Wisconsin	10.00%	9.55%

Table A-5. Sample Composition by Sport (Weighted)¹

Sport	Percent of Sample	Percent of Population
Baseball	4.08%	4.43%
Basketball	3.58%	4.21%
Cross Country	8.56%	6.61%
Fencing	1.76%	1.59%
Field Hockey	2.65%	2.24%
Football	18.82%	16.64%
Golf	2.74%	2.81%
Gymnastics	3.12%	3.06%
Ice Hockey	3.51%	3.13%
Lacrosse	4.96%	4.46%
Lightweight Rowing	0.83%	0.66%
Pistol	0.14%	0.13%
Rifle	0.15%	0.18%
Rowing	7.70%	6.62%
Soccer	5.93%	6.59%
Softball	3.51%	3.10%
Swimming and Diving	12.38%	8.81%
Synchronized Swimming	0.50%	0.35%
Tennis	2.72%	2.85%
Track and Field	15.19%	14.04%
Volleyball	2.65%	2.32%
Water Polo	0.38%	0.29%
Wrestling	5.55%	4.88%
Other Sport	0.18%	0.00%

¹Of the total who participate in either cross-country or track, 54% (weighted) do both. Otherwise, less than 1% of the sample participates in more than one sport.

IV. Survey Instrument

Survey question wordings appear below. As noted in the text, our sex discrimination scale (to measure general attitudes about sex discrimination) merged the four items (listed below) that ask about women and discrimination. The action/mobilization scale merged the seven “action” measures also listed below. The precise items that we used for our inequality batteries appear in a table in Table A-6, which appears below the question wordings.

What University do you attend?

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Indiana University | <input type="checkbox"/> Ohio State University | <input type="checkbox"/> University of Illinois | <input type="checkbox"/> University of Minnesota |
| <input type="checkbox"/> Michigan State University | <input type="checkbox"/> Purdue University | <input type="checkbox"/> University of Iowa | <input type="checkbox"/> University of Wisconsin |
| <input type="checkbox"/> Northwestern University | <input type="checkbox"/> Pennsylvania State University | <input type="checkbox"/> University of Michigan | <input type="checkbox"/> University of Nebraska |
| <input type="checkbox"/> Rutgers University | <input type="checkbox"/> University of Maryland | | |

Which sport(s) do you or did you play at a varsity level this past academic year? (If you played on multiple varsity sports teams, select all teams on which you played.)

- | | | | | |
|---|---------------------------------------|---|--|-------------------------------------|
| <input type="checkbox"/> Baseball | <input type="checkbox"/> Fencing | <input type="checkbox"/> Lacrosse | <input type="checkbox"/> Softball | <input type="checkbox"/> Volleyball |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Field hockey | <input type="checkbox"/> Lightweight Rowing | <input type="checkbox"/> Swimming | <input type="checkbox"/> Water polo |
| <input type="checkbox"/> Beach Volleyball | <input type="checkbox"/> Football | <input type="checkbox"/> Pistol | <input type="checkbox"/> Synchronized Swimming | <input type="checkbox"/> Wrestling |
| <input type="checkbox"/> Bowling | <input type="checkbox"/> Golf | <input type="checkbox"/> Rifle | <input type="checkbox"/> Tennis | <input type="checkbox"/> Other |
| <input type="checkbox"/> Cross country | <input type="checkbox"/> Gymnastics | <input type="checkbox"/> Rowing | <input type="checkbox"/> Track and Field | |
| <input type="checkbox"/> Diving | <input type="checkbox"/> Ice Hockey | <input type="checkbox"/> Soccer | | |

Are you male or female?

Male

Female

Which of the following do you consider to be your primary racial or ethnic group (*you may check more than one*)?

White

African American

Asian American

Hispanic

Native American

Other

What is your current year in school?

First year

Sophomore

Junior

Senior

Graduate student

N/A

What is your estimate of your family's annual household income (before taxes)?

< \$30,000

\$30,000 - \$69,999

\$70,000-\$99,999

\$100,000-\$200,000

>\$200,000

Are you on a full or partial scholarship?

*No Scholarship
scholarship)*

Full Scholarship

Partial Scholarship (including partial tuition and/or book

If you have a scholarship, is it for academics and/or for athletics?

No Scholarship

Academic Scholarship

Athletic Scholarship

Both (mix of Academic and Athletic)

Below is a list of items relevant to intercollegiate sports. For each item, indicate whether you believe your university, across all sports, **actually** distributes the item such that women are extremely advantaged, women are somewhat advantaged, neither women nor men are advantaged, men are somewhat advantaged, or men are extremely advantaged. That is, how do you think these items are **actually** distributed at your university?

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Overall resources	1	2	3	4	5
Overall financial support	1	2	3	4	5
Number of opportunities to participate on athletic team	1	2	3	4	5
Number of sports teams	1	2	3	4	5
Number of athletic scholarships	1	2	3	4	5
Scheduling of practice times	1	2	3	4	5
Scheduling of competition times	1	2	3	4	5
Quality of team travel arrangements to competition (via bus, airplane, etc.)	1	2	3	4	5
Quality of equipment for strength training (e.g., weight rooms)	1	2	3	4	5
Scheduling of strength training opportunities	1	2	3	4	5
Quality of press releases written about team performance	1	2	3	4	5
Quality of team media guides	1	2	3	4	5

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Quality of full-time coaches	1	2	3	4	5
Number of full-time coaches	1	2	3	4	5
Quality of athletic medicine staff	1	2	3	4	5
Quality of academic support staff	1	2	3	4	5
Support from athletic department administrators	1	2	3	4	5
Quality of support for recruiting new team members	1	2	3	4	5

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Quality of locker rooms	1	2	3	4	5
Quality of practice facilities	1	2	3	4	5
Quality of competition facilities	1	2	3	4	5
Quality of uniforms	1	2	3	4	5
Quality of apparel for sport-specific training	1	2	3	4	5
Quality of equipment for sport-specific training	1	2	3	4	5

We just asked you about how you think various items are *actually* distributed, across gender, at your university? We are now going to list the same items, but this time, we are interesting in knowing, across sports, the *extent to which you think the distribution, at your university, **should*** extremely advantage women, somewhat advantage women, neither advantage women nor men, somewhat advantage men, or extremely advantage men. That is, how do you think things **should** be distributed at your university, regardless of the actual distribution?

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Overall resources	1	2	3	4	5
Overall financial support	1	2	3	4	5
Number of opportunities to participate on athletic team	1	2	3	4	5
Number of sports teams	1	2	3	4	5
Number of athletic scholarships	1	2	3	4	5
Scheduling of practice times	1	2	3	4	5
Scheduling of competition times	1	2	3	4	5
Quality of team travel arrangements to competition (via bus, airplane, etc.)	1	2	3	4	5
Quality of equipment for strength training (e.g., weight rooms)	1	2	3	4	5
Scheduling of strength training opportunities	1	2	3	4	5
Quality of press releases written about team performance	1	2	3	4	5
Quality of team media guides	1	2	3	4	5

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Quality of full-time coaches	1	2	3	4	5
Number of full-time coaches	1	2	3	4	5
Quality of athletic medicine staff	1	2	3	4	5
Quality of academic support staff	1	2	3	4	5
Support from athletic department administrators	1	2	3	4	5
Quality of support for recruiting new team members	1	2	3	4	5

	Women extremely advantaged	Women somewhat advantaged	Neither men nor women advantaged	Men somewhat advantaged	Men extremely advantaged
Quality of locker rooms	1	2	3	4	5
Quality of practice facilities	1	2	3	4	5
Quality of competition facilities	1	2	3	4	5
Quality of uniforms	1	2	3	4	5
Quality of apparel for sport-specific training	1	2	3	4	5
Quality of equipment for sport-specific training	1	2	3	4	5

Do you think men’s football and/or men’s basketball should be excluded or included when universities consider gender equality in the *overall distribution of all resources*?

Included

Excluded

Not sure

When it comes the gender distribution of **all** resources across sports, but **excluding** men’s football and men’s basketball, which of the following best describes your view about how resources are **actually** distributed?

<u> </u> <i>Women extremely advantaged</i>	<u> </u> <i>Women somewhat advantaged</i>	<u> </u> <i>Neither women nor men advantaged</i>	<u> </u> <i>Men somewhat advantaged</i>	<u> </u> <i>Men extremely advantaged</i>
--	---	--	---	--

When it comes the gender distribution of **all** resources across sports, but **excluding** men’s football and men’s basketball, which of the following best describes your view about how resources **should** be distributed?

<u> </u> <i>Women extremely advantaged</i>	<u> </u> <i>Women somewhat advantaged</i>	<u> </u> <i>Neither women nor men</i>	<u> </u> <i>Men somewhat advantaged</i>	<u> </u> <i>Men extremely advantaged</i>
--	---	---	---	--

Have you heard of a piece of legislation called Title IX?

<u> </u> <i>Yes</i>	<u> </u> <i>No</i>	<u> </u> <i>Don't Know</i>
---	--	--

Do you know if Title IX applies to college spending on athletics, on education, on both, or on neither?

<u> </u> <i>Only Athletics</i>	<u> </u> <i>Only Education</i>	<u> </u> <i>Both Athletics and Education</i>	<u> </u> <i>Neither Athletics nor Education</i>
--	--	--	---

Given your own knowledge about Title IX, do you disagree or agree with its requirements?

<u> </u> <i>Definitely Disagree</i>	<u> </u> <i>Mostly Disagree</i>	<u> </u> <i>Slightly Disagree</i>	<u> </u> <i>Neither Disagree Nor</i>	<u> </u> <i>Slightly Agree</i>	<u> </u> <i>Mostly Agree</i>	<u> </u> <i>Definitely Agree</i>
---	---	---	--	--	--	--

How unlikely or likely is it that you would ever take one of the following actions (at least once) to express your opinion about gender equity in sports? (If you have already taken such an action, check the appropriate box.)

	Extremely unlikely	Somewhat unlikely	Neither unlikely nor likely	Somewhat likely	Extremely likely
Talk to your coach about unequal treatment in your athletic department					
Talk to your athletic director about unequal treatment in your athletic department					
Talk with your teammates about unequal treatment in your athletic department					
Write a letter or email to your university president about unequal treatment in your athletic department					
Sign a petition about unequal treatment in your athletic department					
Participate in a protest about unequal treatment in your athletic department					
Participate in a protest about unequal treatment in your athletic department					

*Disagree
strongly*

*Disagree
somewhat*

*Neither disagree
nor agree*

*Agree
somewhat*

*Agree
strongly*

“How often can you trust your university to do what is right?”

Never

*Some of
the time*

*About half
of the time*

*Most of
the time*

Always

Table A-6. Content of Indexed Equity Measures

Overall Resources	Opportunity Scale	Personnel Scale	Equipment Scale
Overall resources	Overall financial support	Quality of full time coaches	Quality of locker rooms
	Number of opportunities to participate on athletic team	Number of full time coaches	Quality of practice facilities
	Number of athletic scholarships	Quality of athletic medicine staff	Quality of competition facilities
	Scheduling of practice times	Quality of academic support staff	Quality of uniforms
	Scheduling of competition times	Support from athletic department	Quality of apparel for sport-specific training
	Quality of team travel arrangements to competition	Quality of support for recruiting new team members	Quality of equipment for sport-specific training
	Scheduling of strength training opportunities		Quality of equipment for strength training
	Quality of press releases		
	Quality of team media guides		

V. Additional analyses

In Table A-7, we present the results of our redistribution analyses, as discussed in the text. Recall the dependent variables are the differences between each respondent's answer to the "should be" items and their perceptions of actual, existing distributions. Gender and discrimination perceptions remain highly significant.

As noted in the text, we asked respondents about objective and normative views of overall resource distribution if men's football and basketball were excluded. We present those results in the Table A-8. These results, largely but do not entirely, echo our main results that do not explicitly exclude those sports. The main difference is that discrimination perceptions fall short of significance when it comes to perceptions of resource distribution (it remains positive and near significant – at the .15 level). This suggests that those who perceive societal discrimination put particular weight on football and men's basketball when thinking about resource inequities. This is not the case for women student-athletes who perhaps are likely to consider their own experiences rather than larger distributional allocations.

In Table A-9, as noted in the text, we analyze the action variable by looking specifically at low and high familial income, and individual and team sports. In terms of the former, we reran our analyses separately for student-athletes from low-income and high-income families (using a median split on income). We find that for respondents from low-income families, gender remains significant but perception of discrimination does not (it falls just short of significance). For student-athletes from high-income families, gender is not significant but perception of discrimination is significant. These findings are sensible insofar as individuals from low-income families engage in protest activities when they feel they have a direct (possibly material) interest at stake. They otherwise may not have the resources to act. In contrast, individuals from high-income families do not feel the need to protest for their own interests (they have other sources of capital) but they do protest when they feel their values are violated. This is consistent with the notion that post-material concerns of justice and higher income lead to protest behaviors (Copeland 2014). We explored whether the nature of the sport matters with the idea that team-oriented sports may produce distinct types of social pressures to take actions.³⁹ Consistent with this idea, we find that the effects of gender and discrimination perceptions are just short of significant in individual (non-team oriented) sports and strongly significant for team-oriented sports. In sum, familial income and the nature of the sport seem to somewhat moderate the impact of gender and discrimination perceptions in prompting people to take *action*.

In Table A-10, we present the results from our knowledge question about to what areas Title IX applies, as discussed in the text.

³⁹ Sports for which there are *both* individual and team titles awarded at the NCAA Championship (or analogous competitions for sports for which the NCAA does not sponsor championships) classify as "individual sports" whereas sports for which there are only a team title awarded classify as "team sports." Using this approach, the "individual sports" are cross country, diving, fencing, golf, gymnastics, pistol, rifle, swimming, tennis, track and field, and wrestling. The "team sports" are: baseball, basketball, bowling, field hockey, football, ice hockey, lacrosse, rowing (lightweight and open weight), soccer, softball, synchronized swimming, volleyball (beach and regular), and water polo.

Table A-7. Determinants of Redistribution Attitudes (probability-weighted OLS)

	(1) Resources	(2) Opportunity	(3) Personnel	(4) Equipment
Female	0.536*** (0.066)	0.544*** (0.042)	0.223*** (0.030)	0.517*** (0.038)
African-American	0.085 (0.121)	0.041 (0.074)	0.017 (0.063)	0.085 (0.088)
Asian	-0.069 (0.119)	-0.107 (0.076)	-0.168*** (0.044)	-0.029 (0.073)
Hispanic	-0.087 (0.128)	-0.210** (0.090)	-0.016 (0.099)	-0.143* (0.075)
U.S. High School	-0.228** (0.093)	-0.096 (0.102)	-0.035 (0.064)	-0.039 (0.063)
Year	0.025 (0.023)	-0.001 (0.018)	0.028 (0.022)	0.009 (0.018)
Familial Income	-0.024 (0.024)	-0.031* (0.017)	0.019 (0.017)	0.002 (0.017)
Ideology	-0.037** (0.019)	-0.014 (0.013)	-0.015 (0.011)	-0.014 (0.013)
Discrimination Perceptions	0.237*** (0.051)	0.169*** (0.032)	0.102*** (0.029)	0.115*** (0.030)
Athletic Scholarship	-0.021 (0.059)	-0.036 (0.041)	0.005 (0.037)	-0.034 (0.041)
Wrestling	0.287*** (0.101)	0.272*** (0.068)	0.062 (0.047)	0.060 (0.060)
Football	0.379*** (0.116)	0.352*** (0.089)	0.046 (0.085)	0.221*** (0.081)
Men's Basketball	0.366*** (0.113)	0.304*** (0.077)	-0.133 (0.095)	0.009 (0.093)
Track & Field/Cross-Country	-0.088 (0.061)	-0.161*** (0.038)	-0.017 (0.032)	-0.054 (0.042)
Iowa	0.069 (0.132)	-0.145 (0.101)	-0.072 (0.084)	-0.055 (0.086)
Minnesota	0.114 (0.086)	0.033 (0.048)	-0.016 (0.038)	0.071 (0.048)
Constant	-0.507** (0.226)	-0.459** (0.191)	-0.319* (0.169)	-0.318** (0.137)
Observations	1,133	1,135	1,133	1,135
R-squared	0.219	0.337	0.134	0.248

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ for two-tailed tests.

Table A-8. Determinants of Resource Distribution Perceptions and Redistribution Preferences, Excluding Football and Men’s Basketball (probability-weighted OLS)

	(1) Perception	(2) Redistribution
Female	0.857*** (0.075)	-0.951*** (0.090)
African-American	0.121 (0.105)	-0.043 (0.123)
Asian	0.144 (0.110)	-0.121 (0.119)
Hispanic	0.217 (0.185)	-0.167 (0.193)
U.S. High School	-0.284** (0.116)	0.158 (0.120)
Year	-0.066*** (0.025)	0.052** (0.026)
Familial Income	-0.040 (0.026)	0.050* (0.026)
Ideology	-0.006 (0.019)	0.023 (0.023)
Discrimination Perceptions	0.068 (0.047)	-0.095* (0.058)
Athletic Scholarship	0.060 (0.061)	-0.041 (0.064)
Wrestling	0.246 (0.178)	-0.171 (0.187)
Football	0.679*** (0.114)	-0.764*** (0.124)
Men’s Basketball	0.611*** (0.146)	-0.710*** (0.184)
Track & Field/Cross-Country	-0.117 (0.079)	0.069 (0.082)
Iowa	-0.059 (0.105)	0.132 (0.116)
Minnesota	-0.027 (0.082)	0.040 (0.081)
Constant	2.638*** (0.240)	0.563** (0.278)
Observations	1,136	1,135
R-squared	0.240	0.271

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.105$ for two-tailed tests. We used “*” for .105 significance (rather than .100) as that is the level for discrimination perception and felt it worth noting given our focus.

Table A-9. Determinants of Actions By Familial Income and Sport Type (probability-weighted OLS)

VARIABLES	(1) Low Income	(2) High Income	(3) Individual Sport	(4) Team Sport
Female	0.348*** (0.120)	0.120 (0.105)	0.142 (0.098)	0.336** (0.133)
African-American	0.131 (0.161)	0.356 (0.218)	0.085 (0.193)	0.349** (0.168)
Asian	0.292** (0.145)	0.103 (0.222)	0.162 (0.188)	-0.092 (0.269)
Hispanic	-0.078 (0.354)	0.223 (0.251)	-0.413 (0.348)	0.606*** (0.171)
U.S. High School	0.433** (0.207)	-0.055 (0.204)	0.080 (0.175)	0.327 (0.280)
Year	0.024 (0.039)	-0.041 (0.031)	-0.019 (0.035)	-0.013 (0.034)
Familial Income	-0.087 (0.069)	-0.108 (0.080)	-0.049 (0.039)	-0.109*** (0.039)
Ideology	-0.080** (0.036)	-0.005 (0.027)	-0.052 (0.032)	-0.008 (0.030)
Discrimination Perceptions	0.136 (0.088)	0.151** (0.065)	0.125 (0.079)	0.143* (0.075)
Athletic Scholarship	-0.153 (0.101)	0.052 (0.084)	-0.064 (0.086)	-0.030 (0.093)
Wrestling	0.174 (0.250)	0.031 (0.198)	-0.019 (0.171)	n/a
Football	0.004 (0.217)	-0.333** (0.163)	n/a	-0.139 (0.165)
Men's Basketball	0.027 (0.278)	-0.623** (0.317)	n/a	-0.398 (0.247)
Track & Field/Cross-Country	-0.009 (0.116)	0.230** (0.100)	0.082 (0.094)	n/a
External University Efficacy	-0.086* (0.048)	-0.101** (0.045)	-0.084* (0.046)	-0.116** (0.048)
Internal University Efficacy	0.134 (0.091)	0.152** (0.076)	0.147* (0.076)	0.182** (0.086)
University Trust	-0.042 (0.057)	-0.122*** (0.047)	-0.081 (0.051)	-0.093* (0.052)
Iowa	-0.010 (0.190)	0.388** (0.164)	0.289* (0.159)	0.120 (0.181)
Minnesota	0.145 (0.126)	0.090 (0.125)	0.122 (0.128)	0.103 (0.128)
Constant	2.165*** (0.627)	2.821*** (0.535)	2.630*** (0.501)	2.135*** (0.589)
Observations	431	668	533	561
R-squared	0.172	0.140	0.094	0.179

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ for two-tailed tests.

Table A-10. Determinants of Knowledge About Title IX (probability-weighted Multinomial Logit with excluded category being the correct answer of applies to both “athletics and education”)

	(1) Applies Only to Athletics	(2) Applies Only to Education	(4) Applies Neither to Athletics nor Education
Female	0.553*** (0.203)	-1.468** (0.692)	0.851 (0.932)
African-American	-0.193 (0.399)	0.443 (1.048)	1.189** (0.568)
Asian	0.092 (0.382)	-15.692*** (0.534)	0.001 (1.130)
Hispanic	-0.095 (0.458)	1.100 (1.071)	1.084 (1.083)
U.S. High School	0.403 (0.388)	15.934*** (0.430)	-0.019 (1.123)
Year	-0.028 (0.069)	0.249 (0.252)	-0.465* (0.237)
Familial Income	0.118 (0.086)	0.009 (0.228)	-0.231 (0.294)
Ideology	0.011 (0.058)	0.100 (0.154)	0.025 (0.217)
Discrimination Perceptions	-0.185 (0.145)	-0.408 (0.472)	-0.263 (0.450)
Athletic Scholarship	-0.103 (0.190)	-0.294 (0.639)	-0.386 (0.535)
Wrestling	-0.203 (0.497)	-1.189 (0.969)	0.716 (1.132)
Football	-0.118 (0.472)	-1.240 (1.207)	1.463 (0.900)
Men’s Basketball	-1.585 (1.086)	-17.753*** (1.018)	1.299 (1.310)
Track & Field/Cross-Country	0.151 (0.195)	0.124 (0.698)	-0.058 (0.825)
Iowa	0.297 (0.292)	0.015 (1.156)	-16.186*** (0.516)
Minnesota	-0.029 (0.267)	0.517 (0.767)	-16.257*** (0.408)
Constant	-1.566** (0.753)	-18.745*** (2.221)	-1.478 (2.412)
Observations	1,129	1,129	1,129

Standard errors are in parentheses. Statistical significance is denoted by: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ for two-tailed tests.

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