Dear Editor Byer,

This letter accompanies our revised manuscript, titled: *“Maybe These Fields Just Don’t Interest Them.” Gender and Ethnic Differences in Attributions about STEM Inequities* (667-4547-1-RV). We appreciate the reviewers time in providing us another round of feedback, and again agree with all of the points raised. Below, we detail how the suggestions from each reviewer are addressed within the manuscript:

**Reviewer A:**
“First, I think the section on social role theory is important to include, but it’s not entirely clear how the theory helps explain how people reason about gender disparities in STEM. Instead, the theory helps explain why gender disparities in STEM exist in the first place, but not how people explain those disparities. The authors note that the theory “provides insight into the social context in which students are developing their reasoning”. Further explanation would be helpful here. In what ways do the authors expect that this social context will impact attributions? Relatedly, do the authors think that SRT predicts gender/ethnic differences in attributions, and if so, how and in what ways?”

*Thank you for this suggestion. We agree that social role theory does a better job of explaining why disparities exist – and as such, plays an important role in the manuscript – but does not adequately explain how people make attributions about these disparities or why there might be gender/ethnic variation in said attributions. We have adjusted this section on pp. 6-7, and instead use SJT and SDT to explain why there may be sociodemographic differences in attributions about STEM inequities.*

“Second, I appreciated the application of system-justification theory. However, I do not believe that the theory necessarily predicts that dominant groups will justify the system more strongly than subordinate groups. Instead, the theory posits that people in general are motivated to view systems that exert control over their lives as just, legitimate, and desirable (especially those features that are difficult or impossible to change). In particular, the theory came about as a way to explain why members of subordinate groups not only tolerate but even defend and justify inequality (to their own disadvantage). That is, the theory “originally formulated to explain the relatively perplexing phenomena of outgroup favoritism and the internalization of inferiority among low-status group members” (Jost, Kay, & Thorisdottir, 2009, p. 8). Accordingly, the theory helps explain why people from dominant AND subordinate groups might endorse causal attributions that justify gender/ethnic disparities in STEM, but it does not predict why dominant groups would endorse system-justifying attributions more than subordinate groups would.”

*We appreciate the clarification. Wording has been changed to better reflect that both dominant and subordinate groups may justify their positions on p. 7. We have also included an illustrative example of how this might look in STEM fields that pulls directly from the literature on STEM Stereotypic Attribution Bias (SSAB).*

“For that, Social Dominance Theory might come in handy. Social Dominance Theory (as well as Social Identity Theory) posits that dominant groups will be more likely to endorse hierarchy-enhancing myths that legitimize the current status quo because it is to their benefit, whereas subordinate groups may be less likely to endorse these myths because it goes against their group interests. That is, Social Dominance Theory recognizes that motives to justify the system may align with (in the case of dominant groups) or conflict with (in the case of subordinate groups) motives to maintain a positive view of one’s ingroup.”

*We agree!**We have added a review of SDT into the sociodemographic variation section on pp. 6-7.*

“I think it would be helpful if the authors include the citations for Inman & Baron (1996) and Brown & Bigler (2004) to the introduction (not just the discussion section). The authors could make the point in the introduction that marginalized groups may be more likely to perceive discrimination (i.e., make attributions to stereotypes/bias) because of their personal experience being targets of stereotyping/discrimination.”

*Thank you for this suggestion. We have added these citations and a brief explanation on p. 5.*

“I have also attached a document with specific comments for the authors.”

*Thank you for the thorough comments and suggestions for clarifying our manuscript. We have addressed these comments throughout. More specifically, we have incorporated the copyedits, removed erroneous statements, and added minor clarifications where requested. In addition, we removed the concept of self-efficacy and clarified our definition of confidence on p. 6 and added clarifications in reference to social dominance theory and system justification theory on pp. 6, 7, 13, and 14. Finally, we have changed the coding category from “Resources and Opportunities” to “Systemic Bias” throughout the manuscript to parallel the introduction.*

**Reviewer C:**
“For consistency, the tables and the text should be aligned. Now Table 3 provides results of χ2 tests by gender and Table 4 provides results of χ2 tests by ethnicity. In the text, first results by ethnicity are described, afterwards the results by gender.”

*Thank you. These tables have been rearranged to better reflect their distribution in the manuscript.*

“In the tables the significance of the χ2 tests should be made visible. Either by highlighting the significant χ2 values in bold, or by using \*\*. In a note below the tables, an explanation about the used symbols should be provided (e.g., \*p < .05, \*\*p < 01).”

*We agree that the chi-square values should be easily visible. We have highlighted the significant χ2**values using asterisks, and a note has been added to each table.*

“The description of the results of χ2 tests in the text currently is not provided in APA style. APA style would be e.g., χ2 (2, N =257), 7.77, p = .02). I would leave the decision to the editor if APA style should be used in this manuscript. I was wondering what the V = .17 stands for in the results?”

*Thank you. The chi-square analyses have been altered to better reflect APA style requirements. The V in the chi-square results reflects Cramer’s V, which is often used as a measure of effect size in nominal tables that are larger than 2x2.*

“A minor point in the results section: On p. 11 the subheading “Not unique to STEM” is written twice.”

*Thank you for catching this error; it has been corrected.*