Title Feedback:

The title of the manuscript, "An evaluation of psychometric properties of homophobia scale using data from Indonesian religion-based university students," is clear and succinct. However, it lacks specificity and does not provide enough information about the focus and scope of the study. It could be improved by including details about the unique aspects of the homophobia scale under investigation and the key findings of the study.

Abstract Feedback:

The abstract provides a concise overview of the study, outlining the methodology and major findings. However, it lacks important details and context that would enhance the reader's understanding. Below are specific points of critique and suggestions for improvement:

1. **Clarity and Specificity:**

   - The abstract should clearly state the purpose of the study and why it is important. Specify the research gap or the problem the study addresses in the context of existing literature.

   - Define the homophobia scale briefly, including its origin, purpose, and any unique aspects that differentiate it from other scales. This is crucial for readers unfamiliar with the scale.

2. **Methodology:**

   - Provide a brief overview of the Rasch model analysis and why it was chosen for this study. Mention any specific challenges or limitations faced during the analysis.

   - Describe the demographic aspects considered in the study (age, study program, university type) and explain why these factors were chosen. Justify the relevance of these factors to the study.

3. **Results and Findings:**

   - Specify the key findings in more detail. What were the significant results of the PCA, reliability analysis, and DIF assessment? Highlight specific values or percentages to quantify the results.

   - Explain the implications of the findings. How do the results contribute to our understanding of homophobia in the context of Indonesian religion-based university students? Relate the findings back to the research gap or problem stated earlier.

4. **Language and Structure:**

   - Ensure the abstract is written in clear, concise, and grammatically correct language. Avoid jargon and technical terms that might confuse readers who are not experts in the field.

   - Structure the abstract in a logical sequence: Purpose, Methodology, Results, and Conclusion. Each section should be brief but informative.

5. **Construct Validity and Implications:**

   - Elaborate on the construct validity mentioned in the abstract. What aspects of homophobia were measured, and how were these aspects validated?

   - Discuss the practical implications of the findings. How can the results be applied in real-world scenarios, such as education or social policy, to reduce homophobia and promote tolerance?

The introduction of your manuscript provides a good overview of the topic and the need for your study. However, there are several areas where it could be improved for clarity, conciseness, and to better set the stage for your research. Here's a detailed critique and suggestions for improvement:

1. **Clarity and Structure:**

   - The introduction begins by discussing the stigmatization of homosexuals among university students, but it lacks a clear statement of the research problem or a specific research question or hypothesis. It would be helpful to explicitly state the research gap or objective.

2. **Literature Review:**

   - The introduction contains a series of studies that highlight the stigmatization of homosexuals among university students in different countries. While these studies provide important context, there is a need to synthesize and summarize this information more effectively. Consider grouping the studies by theme (e.g., verbal harassment, rejection, discrimination) to provide a clearer narrative.

3. **Homophobia Definition:**

   - The term "homophobia" is introduced, but it might be beneficial to provide a clear and concise definition for readers. Define what it encompasses, including attitudes, behaviors, and stereotypes related to homosexuality.

4. **Theoretical Framework:**

   - It's essential to discuss any theoretical framework or conceptual model that guides your research. How does the concept of homophobia fit into existing psychological theories or models? This could help readers understand the theoretical foundation of your study.

5. **Measurement Scales:**

   - The introduction mentions several existing homophobia scales (H-scale, ATLG, HATH), but it does not explain why these scales are relevant or how they have been used in previous research. Provide a brief overview of these scales' characteristics and their strengths and weaknesses.

6. **Research Gap and Justification:**

   - Clearly state the research gap that your study aims to address. Why is it important to evaluate the psychometric properties of the homophobia scale in the context of religion-based universities in Indonesia? What unique contributions will your study make to the existing literature on homophobia?

7. **Methodological Explanation:**

   - The introduction introduces the use of the Rasch model analysis, but it lacks a detailed explanation of why this method was chosen and how it addresses the research questions. Consider providing a brief rationale for using Rasch analysis in this context.

8. **Transition to the Study:**

   - The transition from the literature review to the description of your study's objectives and methods could be smoother. Clearly state the purpose of your study, such as evaluating the psychometric properties of the homophobia scale, and mention that it was conducted in religion-based universities in Indonesia.

9. **Citations and References:**

   - Ensure that citations are consistently formatted according to the appropriate style guide (e.g., APA, MLA). Additionally, provide full publication details for all referenced studies to enhance the credibility and accessibility of your sources.

10. **Avoid Jargon:**

   - Be mindful of jargon and technical terms that may not be familiar to all readers. Define or explain specialized terminology when necessary.

The Methodology section of your manuscript provides a detailed description of your study's sample, data collection instrument, and data analysis procedures. However, there are some aspects that could benefit from further clarity, elaboration, and organization. Here's a detailed critique with suggestions for improvement:

1. **Sample Description:**

   - The sample description is clear and provides essential information about the participants. However, it would be helpful to include more context about the selection process, such as how participants were recruited or any inclusion/exclusion criteria.

- The demographic breakdown in Table 1 is useful, but it lacks an explanation of why these demographic variables (gender, age, program, university) were chosen and how they relate to the research objectives. Provide a rationale for their inclusion.

2. **Data Collecting Instrument:**

   - The description of the data collection instrument is informative, but it would be beneficial to provide a brief explanation of the rationale for adapting items from previous scales (Klamen et al., 1999; Larsen et al., 1980). Explain why these specific items were chosen for your study and how they align with your research objectives.

   - When introducing the Likert scale, clarify the scale's range (e.g., from 1 to 5) and ensure consistency in terminology (e.g., "Likert scale" rather than "Liker scale").

3. **Ethical Considerations:**

   - You mention that the research protocol was approved by the university ethics committee, which is essential information. However, consider providing additional details on the ethical considerations, such as informed consent, participant confidentiality, and any potential risks associated with the study.

4. **Data Collection Procedure:**

   - The description of how the survey was administered is clear. However, consider mentioning the mode of administration (e.g., online survey) and the approximate duration it took for participants to complete the survey.

   - It's important to clarify whether participants were informed about the study's purpose and their right to withdraw at any time.

5. **Rasch Analysis:**

   - Provide a brief rationale for choosing Rasch analysis as the analytical method. Explain how Rasch analysis aligns with your research goals and why it is suitable for assessing the psychometric properties of the homophobia scale.

   - When discussing the conversion of data into logit values, briefly explain the purpose of this transformation and how it helps in maintaining equal measurement intervals.

   - The mention of missing values, outliers, and inappropriate responses is important, but it would be beneficial to describe how you handled these issues. Did you impute missing values, remove outliers, or take any corrective actions?

6. **Sample Size Justification:**

- You mention that the minimum sample size for Rasch analysis is 50, and your study used 213 participants, which exceeds this requirement. However, briefly explain why a larger sample size was chosen and how it enhances the robustness of your analysis.

7. **Organization and Clarity:**

   - The methodology section is quite detailed, which is good, but it could benefit from a clearer structure. Consider dividing it into subsections for sample, data collection, and data analysis to enhance readability.

   - Avoid redundancy, such as repeating the information that logit values were converted for equal measurement intervals. Once mentioned, you can refer back to it when relevant.

Your Results section provides a comprehensive overview of the data analysis, including descriptive statistics, Rasch analysis, and Differential Item Functioning (DIF) analysis. However, there are areas that can be improved for clarity and precision. Here's a detailed critique with suggestions for improvement:

1. **Descriptive Statistics:**

   - The presentation of logit values for each item in Table 2 is clear and informative. However, consider labeling the items more descriptively to give readers a better understanding of the content of each item.

   - Include a brief explanation of what "SE" (standard error) represents for clarity.

2. **Descriptive Statistics for Person and Item:**

   - The presentation of descriptive statistics for both person and item classifications in Table 3 is appropriate. However, it might be helpful to include a brief explanation of what these statistics (e.g., Min, Max, Mean, S.SD) signify to aid readers who may not be familiar with Rasch analysis.

3. **Person-Item Map:**

   - The inclusion of the person-item map (Figure 1) is a valuable addition, but it requires further explanation. Consider providing a legend or key to explain the symbols used in the map.

   - Clarify the significance of the vertical lines in the map in terms of the distribution of people and items. A brief description of how to interpret the map would be beneficial for readers.

   - Explain why certain items are categorized as having "very high," "high," "moderate," "low," or "very low" levels of difficulty. Provide a rationale for this classification.

4. **Evaluation of Rasch PCA:**

- The explanation of the Rasch PCA is concise but could benefit from a bit more detail. Provide a brief description of what unidimensionality means in the context of the homophobia scale and why it is important.

- Clarify the meaning of the "PCA threshold of 20%" for readers who may not be familiar with this concept.

5. **Reliability of Item and Person:**

- The assessment of item and person reliability is crucial, but the presentation could be more reader-friendly. Explain what "α" represents in the context of reliability and why it is important.

- It would be helpful to interpret the values of item reliability ($\alpha > 0.90$) and person reliability ($\alpha = 0.79$) to convey their practical significance. Does a higher reliability value indicate better measurement precision, for example?

6. **Differential Item Functioning (DIF) Analysis:**

- The DIF analysis is a critical part of your study, and the presentation is generally clear. However, make sure to explain the significance of the DIF contrast value and why a value greater than 0.5 logits and a significant Rasch-Welch ($p < 0.05$) indicate DIF.

- When discussing DIF results (Table 5 and Table 6), provide an interpretation of the practical implications of these findings. What does it mean that female students have more negative perceptions about homosexuality than males for specific items?

- In the last paragraph, you mention that students from state universities have negative views about homosexuality when associated with AIDS, but the significance of this finding and its practical implications are not fully explained. Does this finding align with your expectations, and what does it suggest about the attitudes of students from state universities?

7. **Clarity and Organization:**

- Ensure that the Results section is organized logically and follows a clear structure. It might be beneficial to use subheadings to delineate different aspects of the analysis (e.g., Descriptive Statistics, PCA, Reliability, DIF Analysis).

8. **Legends and Labeling:**

- When presenting figures or tables, ensure that you provide clear legends, labels, and explanations to guide readers through the data and visual representations.

9. **Consistency in Reporting:**

- Maintain consistency in reporting, particularly in terms of the presentation of results, the use of acronyms, and the inclusion of explanations where necessary.

Overall, your Results section contains valuable information, but it can benefit from additional explanations and contextualization to enhance reader comprehension and the practical relevance of your findings.

Your Discussion section effectively summarizes the key findings of your study and provides some context for interpreting the results. However, there are several areas where you can enhance the clarity and depth of your discussion:

1. **Interpretation of Rasch Analysis:**

   - While you briefly mention that the Rasch analysis suggests good psychometric properties, it would be beneficial to delve deeper into what these properties imply. For instance, how do the PCA results confirm the unidimensionality of the homophobia scale, and why is this important for construct validity?

   - Explain the practical implications of the unexplained variance of the residuals being under 15%. Does this suggest that the scale adequately captures the concept of homophobia without significant overlap with other constructs? What does this mean for the utility of the scale?

2. **Item Map Analysis:**

   - Your discussion of the item map analysis provides some insights into students' perceptions, but it could be more comprehensive. For items that are considered difficult or easy to respond to, offer potential explanations. Why do students find certain items challenging or straightforward?

   - Discuss the implications of students having a positive perception of homosexuality and homosexuals but not wanting these to be recognized as normal in campus society. What factors might contribute to this paradoxical view, and how does it align with previous research or societal attitudes?

3. **Differential Item Functioning (DIF) Analysis:**

   - When discussing the potential DIF based on participants' age, study program, gender, and university, provide a more in-depth analysis of why these differences may exist. Do cultural or societal factors play a role? What might explain the unexpected finding that female students have more negative views than males, contrary to previous research?

   - Offer recommendations for addressing DIF in future studies. How can the scale be modified or adapted to account for these demographic differences and improve its cross-cultural validity?

4. **Reliability Comparison:**

   - When comparing the reliability of your homophobia scale to previous studies (Klamen et al., 1999; Moral-de la Rubia et al., 2015), elaborate on the possible reasons for differences in reliability

scores. Are there specific items or response formats that might affect the reliability of your scale differently?

   - Address the implications of having a slightly lower Cronbach's alpha (0.79) than previous studies. Does this affect the scale's overall reliability and utility? What steps can be taken to potentially improve reliability without compromising the validity of the scale?

5. **Conclusions and Recommendations:**

   - Summarize your main findings and their significance. What does this study contribute to our understanding of homophobia among university students in Indonesia, and how might it inform future research or interventions?

   - Your discussion ends abruptly; consider expanding your final thoughts. For instance, what specific recommendations can you offer for further research in this area? How might researchers account for the limitations you've identified, such as the influence of students' religious background?

6. **Clarity and Structure:**

   - Ensure that your discussion is well-structured with clear transitions between different aspects of the analysis and interpretation. This will help readers follow your line of reasoning more easily.

   - Avoid making assumptions about participants' motivation or comprehension without evidence. If you suspect these factors influenced your results, consider discussing this more cautiously.

7. **Citations and References:**

   - When discussing previous studies (e.g., Klamen et al., 1999; Moral-de la Rubia et al., 2015), provide a bit more context about their findings and methodologies to help readers understand the basis for your comparisons.

8. **Grammar and Style:**

   - Proofread your discussion for grammar and style. Clear and concise language will make your discussion more reader-friendly.

In summary, your Discussion section provides a foundation for interpreting your results, but it could benefit from a more in-depth analysis of the findings, consideration of potential cultural or societal influences, and clearer explanations of the practical implications of your results. Additionally, offering more comprehensive recommendations for future research will enhance the overall impact of your study.