Examining Diversity in Eating Disorder Research: Trends in Reporting Practices

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Research Question

How does the evolving reporting of racial characteristics in eating disorder risk factor research influence our understanding of the prevalence and impact of eating disorders among diverse racial populations?

Introduction

Eating disorders, affecting over 13% of women, lead to severe health issues including heightened suicide risks (Allen, Byrne, Oddy, & Crosby, 2013; Stice, Marti, & Rohde, 2013). However, a critical examination of existing research reveals a prevalent focus on affluent adolescent white female study samples, raising valid questions about the inclusivity and generalizability of findings to diverse racial populations.

Recent insights challenge these assumptions, revealing the impact of eating disorders across diverse races (Passel& Cohn, 2008; Wildes & Forbush, 2015). Variations in prevalence among ethnic groups, exposing conflicting findings in studies. While some evidence suggests higher prevalence for eating disorders among White adults, including anorexia nervosa, bulimia nervosa, and binge eating disorder, other studies find no significant ethnic differences in the prevalence of these disorders.

The investigation into ethnic differences in risk factors adds another layer of complexity, hinting at potential cultural factors that may protect ethnic minorities from body dissatisfaction and eating disorders. As the socio-cultural landscape evolves, understanding these nuances becomes crucial. Therefore, our systematic review of studies predating 2023 aims to scrutinize the representation of diverse groups, focusing particularly on race. This initiative strives to provide valuable insights, establishing a foundation for a thorough understanding of how prevalent eating disorders are and the factors influencing them across diverse racial populations.

Public Significance

Our study aimed to explore the state of diversity science within eating disorder literature by investigating how often studies from the past 50 years disclosed the racial characteristics of their samples. We found that over the past 50 years, racial characteristic reporting has become increasingly common. Nevertheless, studies have consistently used predominantly White samples, highlighting the need for more inclusive and representative studies to advance our understanding of eating disorders across diverse racial populations.

Methodology

A systematic literature search was conducted across PubMed, PsycInfo, and Google Scholar to identify longitudinal studies published prior to January 1, 2023 which examined prospective risk factors for the onset, maintenance, remission and/or relapse of eating pathology The present review was conducted within a larger meta-analysis whose inclusion/ exclusion criteria are specified in Harris et al. (in prep). The dataset used for analysis incorporated findings from 627 articles, ensuring a robust and representative sample.

Subsequently, our method involved extracting important information from each article. A team of coders focused on details about the individuals in the studies, with a specific emphasis on their racial background. Our primary objective was to ascertain the racial composition of each study sample, including the percentage of individuals categorized as White, Black, Asian/Pacific Islander, Indigenous/American Indian/Alaskan Native, Other/Multiethnic, or instances where racial information was unknown.

We sought to identify trends and patterns over time. Utilizing straightforward numerical measures, we assessed the proportion of articles reporting characteristics of the study samples. To discern potential temporal changes, we employed chi-square analyses, scrutinizing publishing periods spanning from pre-1985 to post-2020. This approach facilitated a comprehensive understanding of how the frequency of reporting sample characteristics, particularly those related to race, evolved over distinct time intervals.
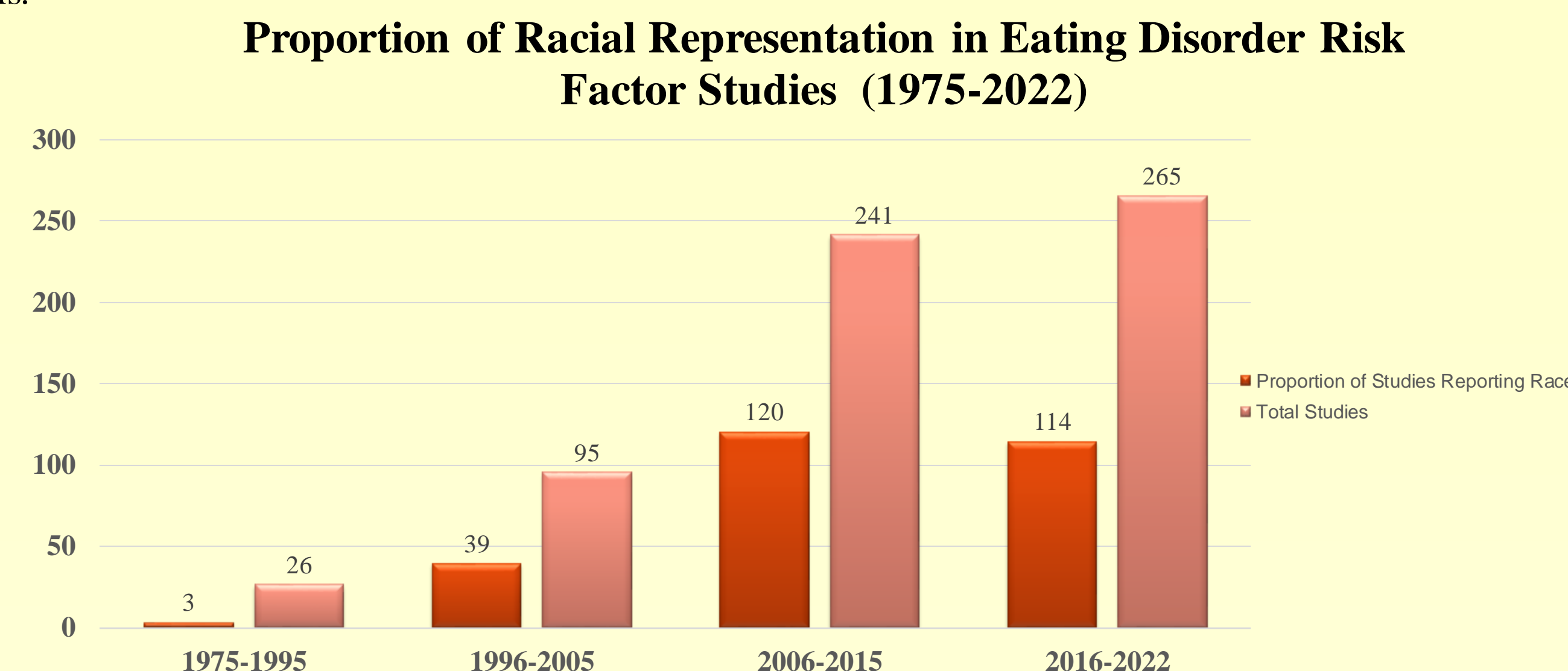

Proportion of Racial Representation in Eating Disorder Risk Factor Studies (1975-2022)

Figure 1. The table illustrates the proportional representation of reported race in published works from the years 1975 to 2022. The data provides insights into the evolving landscape of race representation within this publishing era

Our analytical inquiry extended further to evaluate the average demographic composition of the subset of studies that presented information about their participants. To achieve this, we implemented Analysis of Variance (ANOVA), a statistical method examining potential differences in means across multiple groups. In our case, these groups were defined by distinct time periods. ANOVA allowed us to discern changes in sample characteristics over time, providing insights into nuanced trends within the literature. This method not only helped us understand the details of our chosen factors but also gave us valuable insights into how research practices are changing over time in our particular timeframe.

Results

In our comprehensive analysis of 627 eating disorder risk factor studies, we found that 44.02% of these studies reported the racial breakdown of their respective samples. Importantly, within the subset of papers reporting racial characteristics, there has been a consistent lack of significant changes in the racial breakdown over time; they predominantly feature White samples.

Table 1

Average Racial Breakdown of Eating Disorder Risk Factor Articles (N=276)

Race (%)	Overall		Pre-1995		1996-2005		2006-2015		2016-2022	
	M	SD	M	SD	M	SD	M	SD	M	SD
White	71.22	26.16	76.53	31.60	76.57	20.66	72.31	27.20	68.01	26.52
Black	6.60	11.20	1.20	2.08	5.82	9.96	6.85	10.12	6.74	12.76
Asian	5.31	10.87	7.57	10.61	4.01	6.05	3.34	5.55	7.72	15.18
Indigenous	0.95	0.38	0.87	1.50	0.61	1.14	0.32	0.88	0.35	0.94
Latinx/Hispanic	4.55	7.48	7.60	13.16	6.38	8.01	3.90	7.15	4.53	7.47

Note. M, Mean; SD, standard deviation. None of these characteristics significantly changed across eras, F = 0.93, p = 0.43.

Table 1. shows stable racial breakdowns in Eating Disorder Risk Factor Articles (N = 276) across eras—Pre-1995, 1996-2005, 2006-2015, and 2016-2022, indicated by non-significant changes (F = 0.93; p = 0.43).

To assess temporal changes reporting racial characteristics, chi-square analyses were employed across four distinct publishing time periods (Pre-1995, 1996-2005, 2006-2015, 2016-2022). The results revealed a notable and statistically significant improvement in reporting racial characteristics over time (chi2 = 14.73, ps = .002, Φ = .15).

Conclusion

. In conclusion, the trend in reporting racial characteristics reflects a positive shift toward increased transparency in eating disorder risk factor studies, emphasizing the importance of providing comprehensive demographic information for interpreting findings. Despite this progress, a significant 71.2% of articles consistently depict predominantly White samples, raising concerns about inclusivity and generalizability. The stability of this proportion over time warrants examination of underlying factors, such as challenges in recruiting diverse participants or biases in research processes. Addressing these issues is crucial for accurately representing the diverse population affected by eating disorders and improving the external validity of study findings.

While the positive trend in reporting racial characteristics in eating disorder risk factor studies signifies positive progress, the persistent prevalence of predominantly White samples remains a notable point of concern. This observation underscores a persistent limitation in the field that necessitates concerted efforts to address. Future research should prioritize and implement strategies aimed at improving the representation of diverse racial and ethnic groups, thereby fostering a more comprehensive understanding of eating disorders. By committing to inclusivity, the field can contribute to the generation of more robust, applicable, and generalizable findings, ultimately advancing our knowledge in this critical area of research.

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