

# Acknowledgements

A systematic review investigating the psychosocial factors  
influencing initiation, use, and subjective experience of  
performance and image-enhancing drugs (PIEDs) in female  
weight-training populations

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# Aims

1. What are the predictors of PIED initiation among female weight-training populations?
2. What is the relationship between different psychosocial phenomena and females' use of PIEDs at various stages of use?

# Background

- Rise in female bodybuilding has coincided in a change in female beauty standards
- Competitive bodybuilding more visible and accessible
- PIEDs as both a tool for aesthetic and competitive goals
- Growing activity and shifts among women in online spaces



# Method

- Mixed-method systematic review (PRISMA)
- 5 databases searched using combinations of keywords from 4 categories: PubMed, PsycInfo, CINAHL, Scopus, ProQuest Social Science
- Appraisal using Mixed Methods Appraisal Tool (MMAT)
- No limitations on time period, study location or language (where English translation available)
- Grey literature and citation list searches following appraisal
- Thematic synthesis using NVivo (Thomas & Harden)
- Initial search: 5480 articles; 21 selected for review

# Methods

Inclusion	Exclusion
<ul style="list-style-type: none"><li>• Studies involving female participants or a mix of male and female participants (cis-gendered)</li><li>• Study participants are aged 13 or over</li><li>• Participants have current or discontinued use of PIEDs (as listed on WADA Prohibited List)</li><li>• Participants engage in some form of strength/resistance training</li><li>• Studies explore some aspect of psycho-social phenomena associated with PIED use</li></ul>	<ul style="list-style-type: none"><li>• Studies involving male participants only</li><li>• Studies with participants under the age of 13</li><li>• Studies exploring PIED prevalence rates only</li><li>• Studies involving the use of PIEDs primarily for medical purposes such as hormone-replacement therapy, injury rehabilitation or gender-affirmation therapy</li></ul>

# Overview of Studies

- Various countries: USA (8), Sweden (6), ) UK (3), Norway (1), Australia (1), Brazil (1) and Canada (1)
- Wide variety of methodologies and range of sample sizes
- Competitive and recreational athletes (bodybuilding and strength sports)
- Analysis: 10 qualitative, 10 quantitative, 1 mixed-methods
- Results highlight complex interplay between body image, social expectations and psychological experiences that can influence decision-making processes



# 5 Themes

1. Body dysmorphia  
and body image  
concern

2. Social effects of  
lifestyle and PIED  
use

3. Information  
sharing and the  
influence of male  
voices

4. Negotiation of the  
meaning and limits  
of femininity

5. Significant  
psychopathology  
features pre, during  
and after use of  
PIEDs



# Key Take-Aways and Implications

- Intersection between 'bodily and social human experiences' – phrase previously used in male literature
- Heavy discussion of gender roles and ideas about gender- how this influences decision-making
- High incidence of pre-existing mental illness
- Several studies emphasised stigma, lack of support and resources available for women
- Need for development of harm-reduction and education resources specific to women's needs
- Importance of lived experience- bridging gap between communities

# Continued Gaps in Research

- Heavy focus on anabolic androgenic steroids (AAS) despite women using several other substances
- Little to no differentiation of substance type or information about dosing in studies
- Recruitment for several studies from helplines and clinical populations- negative skew to research

# Future Directions

- First study of PhD focussing on women's PIED use
- Second study currently in progress: Interpretive Phenomenological Analysis (IPA) focussed on lived experienced of women who use or have used PIEDs
- Third study a mixed methods survey expanding on themes from the first two studies to consolidate the challenges and needs of women in this space

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