Assessing Gender Dysphoria

by Sarah Joy Bowman

Thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy (Clinical Psychology)

under the supervision of Associate Professor Bethany Wootton, Dr John McAloon, and Dr Daniel Demant.

University of Technology Sydney
Graduate School of Health
July 2022
Statement of Original Authorship

I, Sarah J. Bowman, declare that this dissertation, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy (Clinical Psychology) in the Graduate School of Health at the University of Technology Sydney.

This dissertation is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the dissertation.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

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Sarah Joy Bowman

Date: 31st March 2022
Abstract

Trans and gender diverse people who experience gender dysphoria often report higher rates of mental health concerns than the general population. Some trans and gender diverse individuals may choose to engage in social, medical, and surgical interventions, others may seek psychological support, and others may use a combination of these approaches. Evidence-based psychological assessment requires a multi-modal approach that consists of clinician interviews, diagnostic interviews and patient-reported (self-report) outcome measures (PROMs). However, current PROMs used in the psychological assessment of gender dysphoria are limited and insufficient, especially when used with youth. The aim of this program of research was to improve the psychological assessment of gender dysphoria, focussing on PROMs. Firstly, a systematic review, conducted in line with the Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN) methodology, identified five PROMs that assessed gender dysphoria. This study (Study 1) found that none of the identified PROMs were suitable for use with adolescents and that they needed further development to improve their content validity and trustworthiness. Secondly, a PROM of gender dysphoria, the Gender Preoccupation and Stability Questionnaire – 2nd Edition (GPSQ-2), was developed for use with both adolescents and adults.

Studies two, three and four focus on the development and validation (Study 2), further validation in a clinical sample (Study 3), and an assessment of interpretability (Study 4) of the GPSQ-2. The findings suggest that the GPSQ-2 is a valid, brief, easy to use tool for assessing experiences of gender dysphoria. This program of research has clinical implications for the psychological assessment and treatment of adolescents and adults who experience gender dysphoria.
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List of Abbreviations

APA  American Psychiatric Association
AusPATH Australian Professional Association for Trans Health
CFA  Confirmatory factor analysis
CFI  Comparative fit index
COSMIN Consensus-based Standards for the Selection of Health Measurement Instruments
DSM  Diagnostic and Statistical Manual of Mental Disorders
ECV  Explained common variance
GRADE Grading of Recommendations Assessment, Development and Evaluation
HBIGDA Harry Benjamin International Gender Dysphoria Association
ICC  Intraclass correlations coefficient
ICD  International Classification of Diseases
KR20  Kuder-Richardson 20
MIC  Minimal important change
PRISMA Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PROMs Patient-reported outcome measures
PROSPERO International Prospective Register of Systematic Reviews
PUC  Percent of uncontaminated correlations
REDCap Research Electronic Data Capture
RMSEA Root mean square error of approximation
SDC  Smallest detectable change
SEM  Standard error of measurement
SOC  Standards of Care
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>Standardised root mean residuals</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WPATH</td>
<td>World Professional Association for Transgender Health</td>
</tr>
<tr>
<td>WLSMV</td>
<td>Weighted least square mean and variance adjusted</td>
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### List of Measures

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BIS</td>
<td>Body Image Scale (Lindgren &amp; Pauly, 1975)</td>
</tr>
<tr>
<td>DMGIDQ</td>
<td>Dimensional Measure of Gender Identity Questionnaire</td>
</tr>
<tr>
<td></td>
<td>(Haghighat et al., 2019)</td>
</tr>
<tr>
<td>GAD-7</td>
<td>Generalized Anxiety Disorder – 7 (Spitzer et al., 2006)</td>
</tr>
<tr>
<td>GCLS</td>
<td>Gender Congruence and Life Satisfaction Scale (Jones et al., 2019b)</td>
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<tr>
<td>GFA</td>
<td>Gender Feeling Amplitude Measure (Riley, 2017)</td>
</tr>
<tr>
<td>GIDYQ-AA</td>
<td>Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults</td>
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<td></td>
<td>(Deogracias et al., 2007)</td>
</tr>
<tr>
<td>GMRS</td>
<td>Gender Minority Stress and Resilience Scale (Testa et al., 2015)</td>
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<tr>
<td>GPSQ</td>
<td>Gender Preoccupation and Stability Questionnaire</td>
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<td></td>
<td>(Hakeem et al., 2016)</td>
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<tr>
<td>GPSQ-2</td>
<td>Gender Preoccupation and Stability Questionnaire – 2nd Edition</td>
</tr>
<tr>
<td></td>
<td>(Bowman, Hakeem, et al., 2021)</td>
</tr>
<tr>
<td>GRRS</td>
<td>Gender Identity Reflection and Rumination Scale</td>
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<td></td>
<td>(Bauerband &amp; Galupo, 2014)</td>
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<tr>
<td>K-10</td>
<td>Kessler Psychological Distress Scale (Kessler et al., 2002)</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>Patient Health Questionnaire – 9</td>
</tr>
<tr>
<td></td>
<td>(Johnson et al., 2002; Kroenke et al., 2001)</td>
</tr>
<tr>
<td>RCGIS</td>
<td>Recalled Childhood Gender Identity Scale (Zucker et al., 2006)</td>
</tr>
<tr>
<td>STIS</td>
<td>Strength of Transgender Identity Scale (Barr et al., 2016)</td>
</tr>
<tr>
<td>TC³</td>
<td>Trans Collaborations Clinical Check-in (Holt et al., 2019)</td>
</tr>
<tr>
<td>TCBS</td>
<td>Transgender Community Belongingness Scale (Barr et al., 2016)</td>
</tr>
<tr>
<td>TCS</td>
<td>Transgender Congruence Scale (Kozee et al., 2012)</td>
</tr>
<tr>
<td>TG AIM</td>
<td>Transgender Adaptation and Integration Measure (Sjoberg et al., 2006)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>TIIS</td>
<td>Transgender Identity Stigma Scale (Chakrapani et al., 2017)</td>
</tr>
<tr>
<td>TIS</td>
<td>Transgender Identity Survey (Bockting et al., 2020)</td>
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<tr>
<td>T-PIM</td>
<td>Transgender Positive Identity Measure (Riggle &amp; Mohr, 2015)</td>
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<tr>
<td>TSAS</td>
<td>Trans and Gender Diverse Social Anxiety Scale (Ho &amp; Mussap, 2020)</td>
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<tr>
<td>TVQ</td>
<td>Transsexual Voice Questionnaire for Male-to-Female Transsexuals (Dacakis et al., 2013)</td>
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<tr>
<td>UGDS</td>
<td>Utrecht Gender Dysphoria Scale (Cohen-Kettenis &amp; van Goozen, 1997)</td>
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<tr>
<td>UGDS-GS</td>
<td>Utrecht Gender Dysphoria Scale – Gender Spectrum (McGuire et al., 2019)</td>
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**Terminology**

**Agender:** A term to describe someone who does not identify with any gender.

**Assigned female at birth:** A person who was thought to be female when born and initially raised as a girl.

**Assigned male at birth:** A person who was thought to be male when born and initially raised as a boy.

**Brotherboy and Sistergirl:** Aboriginal and Torres Strait Islander people may use these terms in a number of different contexts, however they can be used to refer to trans and gender diverse people. Brotherboy typically refers to masculine spirited people who were assigned female at birth. Sistergirl typically refers to feminine spirited people who were assigned male at birth.

**Cisgender:** A term for someone whose gender identity aligns with their sex assigned at birth.

**Gender diverse:** A term to describe people who do not conform to their society or culture’s expectations for males and females. Being transgender is one way of being gender diverse, but not all gender diverse people are transgender.

**Gender dysphoria:** A term that describes the distress experienced by a person due to incongruence between their gender identity and their sex assigned at birth.

**Gender fluid:** A person whose gender identity varies over time.

**Gender identity:** A person’s innermost concept of self as male, female, a blend of both or neither. One’s gender identity can be the same or different from their sex assigned at birth.

**Medical transition:** The process by which a person changes their physical sex characteristics via hormonal intervention to more closely align with their gender identity.
**Non-binary:** A term to describe someone who doesn’t identify exclusively as male or female.

**Social transition:** The process by which a person changes their gender expression to more closely align with their gender identity.

**Surgical transition:** The process by which a person changes their physical sex characteristics via surgery to more closely align with their gender identity.

**Trans/transgender:** A term for someone whose gender identity is not congruent with their sex assigned at birth.

**Trans boy/male/man:** A term to describe someone who was assigned female at birth who identifies as a boy/male/man.

**Trans girl/female/woman:** A term to describe someone who was assigned male at birth who identifies as a girl/female/woman.

Adapted from Telfer et al. (2017).
Statement of Contributions of Co-authors

Sarah J. Bowman is responsible for the design, data collection, data analysis, data interpretation, and authorship of all chapters presented in this dissertation.

John McAloon provided advice on the data design and analysis for Studies 1 and 2 and provided feedback on the text of all chapters presented in this dissertation.

Bethany M. Wootton provided advice on the data design and analysis for Studies 2, 3, and 4, and provided feedback on the text of all chapters presented in this dissertation.

Daniel Demant provided advice on the data design and analysis for Studies 2, 3, and 4, and provided feedback on the text of all chapters presented in this dissertation.

Liam J. Casey assisted with the data analysis for Study 1 and provided feedback on the text of Study 1.

Az Hakeem assisted with the data analysis for Study 2 and provided feedback on the text of Study 2.
List of Papers and Presentations Arising from This Dissertation

Papers Appearing in this Dissertation


Other Papers Contributed to in Course of Candidature


**Conference Presentations**


Other Presentations

1. **Bowman, S. J.** (2019, February 13). *Assessing gender dysphoria* [presentation for Graduate School of Health research seminar]. Graduate School of Health, University of Technology Sydney, Australia.


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Finally, I would like to thank my supervisory panel (Associate Professor Bethany Wootton, Dr John McAloon, and Dr Daniel Demant) and co-authors (Dr Az Hakeem, and Liam Casey). Without your inspiration, support, and guidance this work would not have been possible.