

INPLASY PROTOCOL

To cite: Chrobak. Narrowing the achievement gaps in higher education with social-belonging intervention : A systematic review. Inplasy protocol 202330021. doi: 10.37766/inplasy2023.3.0021

Received: 06 March 2023

Published: 06 March 2023

Corresponding author:

Bartłomiej Chrobak

bartlomiej.chrobak@unidistance.ch

Author Affiliation:

UniDistance Suisse / FernUni Schweiz.

Support: The author received no financial support for this research, authorship, and/or publication of this article from any funding agency in the public, commercial, or not-for-profit sectors.

Review Stage at time of this submission: The review has not yet started.

Conflicts of interest:
None declared.

Narrowing the achievement gaps in higher education with social-belonging intervention : A systematic review

Chrobak, B¹.

Review question / Objective: Summary - Social-belonging intervention belongs to the family of wise psychological interventions (for exhaustive review of wise interventions, see Walton & Crum, 2021). The latter notion was introduced by Walton (2014), for whom a wise intervention is “a precise tool, often instantiated in a brief exercise, to change a specific psychological process in a real-world setting” (p. 74). In line with this definition, a social-belonging intervention is a brief interactive exercise for freshman students conveying a message according to which worries and doubts about their social belonging in higher education are normal and they tend to dispel over time (Walton & Brady, 2021). This intervention seems to enhance academic outcomes of underrepresented or minority students in higher education (Walton & Brady, 2021), thus helping at narrowing (or closing) the achievement gaps. The main aim of this review is to examine in a rigorous way, using the systematic review methodology, quantitative studies addressing the question of the efficiency of social-belonging intervention in narrowing the achievement gaps in higher education (Research Question 1). Moreover, this review will also focus on analyzing other outcomes (educational and health), which may be impacted and enhanced by this intervention (Research Question 2). Finally, our goal is to investigate how to implement this intervention in the most efficient way (Research Question 3). Answers to these research questions may be a valuable resource to psychologists and educators willing to apply an evidence-based intervention in order to close or to narrow an achievement gap, as well as to psychologists and educational researchers working on higher education.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 March 2023 and was last updated on 06 March 2023 (registration number INPLASY202330021).

INTRODUCTION

Review question / Objective: Summary - Social-belonging intervention belongs to

the family of wise psychological interventions (for exhaustive review of wise interventions, see Walton & Crum, 2021).

The latter notion was introduced by Walton (2014), for whom a wise intervention is “a precise tool, often instantiated in a brief exercise, to change a specific psychological process in a real-world setting” (p. 74). In line with this definition, a social-belonging intervention is a brief interactive exercise for freshman students conveying a message according to which worries and doubts about their social belonging in higher education are normal and they tend to dispel over time (Walton & Brady, 2021). This intervention seems to enhance academic outcomes of underrepresented or minority students in higher education (Walton & Brady, 2021), thus helping at narrowing (or closing) the achievement gaps. The main aim of this review is to examine in a rigorous way, using the systematic review methodology, quantitative studies addressing the question of the efficiency of social-belonging intervention in narrowing the achievement gaps in higher education (Research Question 1). Moreover, this review will also focus on analyzing other outcomes (educational and health), which may be impacted and enhanced by this intervention (Research Question 2). Finally, our goal is to investigate how to implement this intervention in the most efficient way (Research Question 3). Answers to these research questions may be a valuable resource to psychologists and educators willing to apply an evidence-based intervention in order to close or to narrow an achievement gap, as well as to psychologists and educational researchers working on higher education.

Rationale: To our best knowledge, no systematic review investigating these research questions exists. A book chapter about social-belonging intervention was published in 2021 (Walton & Brady, 2021). However, its scope was general without targeting the achievement gaps. Moreover, the chapter presents a narrative review about the intervention, without applying the systematic review methodology. Thus, our systematic review is going to fill in a gap in existing literature.

Condition being studied: Studied problem : How the social-belonging intervention may narrow achievement gap for minority or underrepresented students in higher education ?

METHODS

Search strategy: Keyword:

- * Social-belonging intervention
 - * Higher education OR college OR post-secondary
 - * Achievement gap
 - * Minority students OR underrepresented students OR first-generation students OR women
- Electronic databases :
- * PsycInfo
 - * PsycARTICLES
 - * Education Research Complete via EBSCO
 - * Google Scholar.

Participant or population: This review will focus on students enrolled in higher education, male and female. A focus will be made on minority groups, amongst others : minority students, underrepresented students, first-generation students, women, etc.

Intervention: The social-belonging intervention.

Comparator: N/A.

Study designs to be included: Following inclusions criteria concerning studies will be used in this review : original research only, quantitative studies only (RCTs), published in peer review journals.

Eligibility criteria: Inclusion criteria : original research only; quantitative studies (RCTs); publication in peer review journals; publication language : English. Exclusion criteria : systematic reviews with or without meta-analysis or book chapters, non original research, qualitative studies, no peer review, not published in English.

Information sources: Our main information sources are electronic databases, such as : PsycInfo, PsycARTICLES, Education

Research Complete via EBSCO and Google Scholar.

Other sources, such as contact with authors and additional sources following bibliographic analysis of selected papers, may be also used.

Main outcome(s): The main outcome of the review is to investigate how the social-belonging intervention may (or may not) narrow the achievement gap of minority students in higher education. Our review will therefore focus on analysing the impact of this intervention on academic outcomes (grades / GPA) of minority students compared to majority students.

Additional outcome(s): Additional outcomes will be investigated : persistence, social integration, health, etc.

Data management: Data extraction

To be extracted :

- * Authors and Publication Year
- * Study country
- * Experimental conditions
- * Study type (controled randomized trial vs. others)
- * Study type (qualitative vs. quantitative)
- * Population (N, age, groups: minority, women, first-generation students, etc.)
- * Course of study (program) and Level of studies (undergraduate, graduate, etc.)
- * Type or intervention : online vs in-class
- * Outcomes (main and secondary).

Quality assessment / Risk of bias analysis: A publication language may potentially introduce a bias if some papers on the topic have been published in other languages than English.

Concerning other bias, an overall methodological quality of included studies will be assessed. A quality tool / checklist will be used.

Strategy of data synthesis: No meta-analysis will be included. The found data will be narratively synthesized.

Subgroup analysis: This review will focus on students enrolled in higher education, male and female. A focus will be made on minority groups, amongst others : minority

students, underrepresented students, first-generation students, women, etc. The found data will be narratively synthesized.

Sensitivity analysis: N/A.

Language restriction: The review will be performed in English.

Country(ies) involved: The author works in Switzerland.

Keywords: Social-belonging intervention; higher education; achievement gaps.

Dissemination plans: Intend to publish this systematic review in a peer review journal in the field of education, educational psychology or social psychology in education.

Contributions of each author:

Author 1 - Bartłomiej Chrobak.

Bibliography: Walton, G. M. (2014). The New Science of Wise Psychological Interventions. *Current Directions in Psychological Science*, 23(1), 73–82. <https://doi.org/10.1177/0963721413512856>
Walton, G. M., & Brady, S. T. (2021). The social-belonging intervention. In G. M. Walton, & A. J. Crum (Eds). *Handbook of Wise Interventions : How social psychology can help people change* (pp. 36-62). Guilford press.
Walton, G. M., & Crum, A. J. (2021). *Handbook of wise interventions: How social psychology can help people change*. Guilford Press.