Psychological Achievements
Fall & Winter, 2025, *32* (2)
Serial Number 34, 337-366
DOI: 10.22055/psy.2024.44824.3118
(Psychol Achiev)
Rcceived: 19 Sep 2023
Accepted: 13 Jan 2024
Orginal Article

Effectiveness of Sex Education Program on Mental Health and Self-Care Development of First-Year High School Students

Shahrazad Qarhbaghi[*]
Marjan Kian[**]
Maryam Moghadasin[***]

Abstract

The purpose of this study was to examine the effectiveness of a sexual education curriculum on mental health and development of self-care among lower secondary school students. The research adopted a quantitative, quasi-experimental design. The statistical population consisted of students from public lower secondary schools in District 1 of Karaj city. Using convenience sampling, 30 seventh-grade female students were selected from a public school and assigned into two groups of 15 (experimental and control). The research instruments included three questionnaires: the Moghadessin Mental Health Questionnaire (2022), the Javidan Self-Care Questionnaire (2017), and a researcher-made checklist designed to appraise the effectiveness of the intervention program. The study was undertaken using a pre-test and post-test design with experimental and control groups. Data were analyzed using multivariate and univariate analysis of covariance (MANCOVA and ANCOVA). The findings revealed that the sexual education curriculum had a statistically significant impact on some components of mental health at the level of $p < 0.01$. Further, in the dimensions of self-care (physical, social, and spiritual), the sexual education program exhibited a significant effect on development of emotional, psychological, and physical self-care ($p < 0.01$). Also, the significant difference between the post-test scores of the experimental group compared to the control group demonstrated the effectiveness of the sexual education intervention program. Based on the findings, it is recommended that educational policymakers design a sexual education curriculum grounded in an Islamic-indigenous approach as well as based on the philosophical, social, and cultural foundations of Iran. They can also

* MA of Curriculum Planning, Faculty of Psychology and Educational Sciences, Khwarazmi University, Tehran, Iran.

** Associate Professor, Department of Curriculum Planning, Faculty of Psychology and Educational Sciences, Kharazmi University, Tehran, Iran. *Corresponding Author:* kian@khu.ac.ir

*** Associate Professor, Department of Clinical Psychology, Faculty of Psychology and Educational Sciences, Kharazmi University, Tehran, Iran.

formally incorporate it as an essential educational and cultural skill in schools so that students can be protected from unintended and hidden social harms.

Keywords: Curriculum of sex education, mental health, self-care, first year of high school.

Extended Abstract

Introduction

Adolescence is a critical developmental stage characterized by major biological, cognitive, emotional, and social changes influencing identity formation, behavior, and psychological well-being. Rapid physical maturation, emotional sensitivity, as well as exposure to technological, social, and cultural challenges may heighten adolescents' vulnerability to psychological difficulties and risky behaviors. From an educational perspective, this period offers an important opportunity for preventive interventions that promote mental health, emotional awareness, and adaptive life skills. International organizations such as WHO and UNESCO underscore the value of age-appropriate educational programs that support responsible decision-making and healthy development. In the Iranian sociocultural context, social changes as well as the increasing gap between puberty and marriage have augmented the need for culturally sensitive sex education. Nevertheless, this topic remains underrepresented in formal education, resulting in limited awareness regarding mental health and self-care. Thus, the present study aimed to explore the effectiveness of a culturally adapted sex education curriculum on mental health and self-care development among first-year high school female students.

Method

This study adopted a quantitative, quasi-experimental design using a pre-test–post-test structure with experimental and control groups. The statistical population consisted of female students attending public first-year high schools in District 1 of Karaj, Iran. Using convenience sampling, 30 seventh-grade female students were selected and randomly assigned to an experimental group (n = 15) and a control group (n = 15).

The intervention included a structured sex education curriculum implemented across 12 instructional sessions. The program addressed key developmental topics, including puberty awareness, personal hygiene, emotional regulation, mental health principles, assertiveness skills, peer relationships, media literacy, self-awareness, and responsible social

behavior. The educational approach underscored holistic development by integrating cognitive, emotional, social, and ethical dimensions aligned with culturally grounded values.

Data were collected using three instruments: the Moghadasin Mental Health Questionnaire (2022), appraising psychological dimensions such as anxiety, anger, aggression, attention-related problems, as well as interpersonal functioning; the Javidan Self-Care Questionnaire (2017), based on Orem's self-care theory and measuring physical, psychosocial, and emotional self-care; and a researcher-developed checklist ascertaining learning outcomes related to the intervention. Reliability and validity indices were supported by previous studies and reassessed in the current research. Data were analyzed via descriptive statistics and inferential analyses, including multivariate and univariate analysis of covariance (MANCOVA and ANCOVA), to compare group differences while controlling for baseline scores.

Results

The findings indicated that participation in the sex education curriculum led to statistically significant improvements in several components of mental health ($p < 0.01$). The intervention significantly lowered anxiety, anger, aggression, and unusual behaviors, while ameliorating students' relationships with family members, peers, and acquaintances. Nevertheless, no significant effects were observed for depression, obsessive tendencies, attention problems, or hyperactivity. This suggests that these dimensions may require longer or more intensive interventions.

Regarding self-care development, significant differences were observed between the experimental and control groups across all three dimensions of self-care. Students in the experimental group exhibited improvements in physical self-care, reflected in greater awareness of health and hygiene practices; psychosocial self-care, reflected in stronger interpersonal skills and social responsibility; and emotional self-care, reflected in improved emotional regulation, self-awareness, and self-acceptance. Significant differences in post-test scores confirmed the overall effectiveness of the intervention, with the effect size estimates indicating moderate to large practical significance, highlighting the educational impact of the curriculum.

Discussion

The findings revealed that a structured, culturally sensitive sex education curriculum can positively influence adolescents' mental health and strengthen self-care capacities. Through promoting awareness, emotional regulation, and social competence, the intervention supported protective

psychological processes that contribute to healthier developmental outcomes. The integration of knowledge-based instruction with life skills and value-oriented guidance appears to have boosted students' adaptive functioning and psychological safety.

These results align with previous research suggesting that skill-based and indirect educational approaches could ameliorate adolescents' psychological well-being, self-efficacy, and responsible decision-making. The curriculum's emphasis on communication skills, ethical reasoning, and self-awareness likely contributed to diminished emotional distress and improved interpersonal functioning.

In spite of these positive outcomes, several limitations should be acknowledged. These include the small sample size, reliance on self-report measures, cultural sensitivities surrounding the topic, as well as the limited duration of the intervention. Future research is recommended to employ larger and more diverse samples, longitudinal follow-up designs, and broader educational contexts to ascertain the long-term sustainability of intervention effects.

In conclusion, the findings highlight the importance of designing and implementing culturally adapted sex education curricula grounded in Islamic-native values and aligned with Iran's philosophical, social, and cultural foundations. The formal integration of such programs into school curricula may serve as an effective educational and preventive strategy for promoting mental health, boosting self-care skills, and protecting adolescents from hidden as well as unintended social harms.

Author Contributions: Author 1, general framework planning, content editing and analyzing, submission and correction. **Author 2**, collaboration in general framework planning, selection of approaches; final review. **Author 3**, comparison of approaches, conclusions.

Acknowledgments: In the end, we would like to thank all the students who were with us in this research, the managers and teachers who cooperated in this research, and the respected professors of Khwarazmi University and Dr. Ehsan Rahmani.

Conflicts of interest: The results of the research are not in conflict with the interests of any institutions or organizations.

Funding: The present study was funded by the authors.