

	ORIGINAL RESEARCH PAPER A NARRATIVE REVIEW- EFFECTIVENESS OF “RAINBOW RISE”- A DIGITAL SANCTUARY APP ON PSYCHO-SOCIAL CHALLENGES AMONG LGBTQA+ COMMUNITY	Nursing KEY WORDS: LGBTQA+ mental health, psycho-social challenges, digital intervention, mobile app, Rainbow Rise, online support, minority stress, community well-being, stigma reduction, queer technology
Ms. Joyce Prabhudas Ranadive	Ph.D. Scholar, Sharda School of Nursing Science and Research, Sharda University	
Dr. Rizu Negi	Associate Professor, Sharda School of Nursing Science and Research, Sharda University	
Dr. Lalit Pratap Chandravanshi	Associate Professor, Sharda School of Allied Health Science, Sharda University	
Prof. (Dr.) R. Sree Raja Kumar	Associate Dean, Sharda School of Nursing Science and Research, Sharda University	
Ms. Pooja Thakur	Ph.D. Scholar, Sharda School of Nursing Science and Research, Sharda University	
ABSTRACT	The LGBTQA+ community continues to face significant psycho-social challenges, including discrimination, stigma, identity crises, mental health disparities, and lack of safe support systems. In response, digital interventions have emerged as innovative tools to offer inclusive, accessible support. This narrative review explores the effectiveness of Rainbow Rise, a mobile application designed as a digital sanctuary tailored to the unique needs of LGBTQA+ individuals. The app incorporates features such as peer support forums, access to mental health resources, crisis intervention tools, and identity-affirming content.	
INTRODUCTION Throughout history, the LGBTQA+ community has faced discrimination, marginalization, and legal challenges worldwide. However, there have been significant milestones in the fight for rights and recognition like: Recognition of Gender Identity – Various countries now allow legal gender changes without requiring medical intervention. Despite progress, challenges still remain, including discrimination, hate crimes, and legal restrictions in various parts of the world. LGBTQA+ pride events, such as Pride Month (June) and Pride parade, celebrate diversity and advocate for equal rights. These events are an opportunity for the community and allies to stand together in support of love and identity without fear. The Indian government in the year 2014 under NALSA judgment (National Association for Law Making) recognized the issue and included the Other Gender. The concept of "other gender" refers to identities that exist outside the traditional binary of male and female. This includes non-binary, genderfluid, genderqueer, agender, bigender, and many other gender identities. LGBTQA+ (The Plus (+))- The + sign includes other sexual orientations and gender identities including: Non-binary: People who do not identify strictly as male or female. Pansexual: Attraction to individuals regardless of their gender. Intersex: People born with physical sex characteristics that do not fit typical definitions of male or female. Global Prevalence: A 2020 report by Rock Health indicated that 79% of LGBTQ+ respondents had accessed telemedicine services, compared to 69% of non-LGBTQ+ individuals. Additionally, 61% of LGBTQ+ users reported higher satisfaction with live-video telemedicine compared to in-person visits, versus 52% of non-LGBTQ+ users. Prevalence in India: In India, the 'Evolve' app focuses on mental well-being with a strong emphasis on the LGBTQIA+ community. As of 2023, it had approximately 200. In recent years, there has been increasing awareness and		
visibility of the psycho-social challenges faced by the LGBTQA+ community. Despite advancements in legal rights and societal recognition, many individuals within this community continue to encounter stigma, discrimination, isolation, and mental health issues stemming from exclusion and marginalization. These challenges often go unaddressed due to lack of safe spaces, supportive resources, and inclusive platforms that validate their identities and experiences. This study will investigate the effectiveness of Rainbow Rise in mitigating psycho-social challenges within the LGBTQA+ community. By evaluating user experiences, mental health outcomes, and perceptions of support, this research seeks to determine whether digital platforms like Rainbow Rise can serve as a vital support system for marginalized individuals in an increasingly digital world. Significance of the Study The significance of studying "The Effect of Rainbow Rise App on the Psycho-Social Challenges Faced by the LGBTQA+ Community" lies in wide range of psycho-social challenges, including stigma, discrimination, social exclusion, mental health issues, and limited access to safe and affirming spaces faced by LGBTQA+ community. The emergence of digital tools offers new opportunities for support, connection, and empowerment, especially in environments where in-person resources are scarce or unsafe. This study is significant for Empowerment through Technology, Mental Health and Wellbeing, Bridging the Support Gap, Data-Driven Advocacy, Contribution to Literature and Scalability and Innovation. Therefore, this study will add to the growing body of literature in gender studies, psychology, and sociology, encouraging further research and meaningful dialogue about equity and inclusion. The findings will contribute to evidence-based practice. Methodology The present study is a narrative review to assess the effectiveness of “Rainbow Rise”- a digital sanctuary app for LGBTQA+ community. Literature from 2017 to 2024 was searched using electronic database from PubMed, Cochrane, Research gate, SCOPUS, Google Scholar and Elsevier clinical		

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library. The study is a Methodological study to assess the psycho-social challenges faced by LGBTQA+ community by assessing the effectiveness of digital app.

Electronic database search was done to extract the articles related to the theme of research problem and related terms using the keywords -“Psychological challenges” OR “social challenges” AND “LGBTQA+” AND “digital app” AND

“randomized controlled trial”.

A total of 12 articles were reviewed, that includes cross sectional surveys (incidence and Prevalence studies), Randomized controlled trials, Clinical trials, Qualitative study and conclusion was drawn based on the review of articles findings.

Review of Literature

SECTION I: Digital App and Psycho-social Wellbeing of LGBTQA+ Community

Author/ Year	Title	Method	Sample/ Sampling Technique	Result
Celia B. Fisher , et.al, 2024, United States	Social media: A double-edged sword for LGBTQ+ youth	- PHQ-9 to assess depressive symptoms - GAD-7 to assess anxiety - CRAFT (Car, relax, Alone, Forget, friends and Trouble) Screening Test to assess substance abuse	Purposive sampling technique	(31.8%) were found to have depression symptoms (30.2%) were found to have anxiety (38%) youth were found to be addicted to substance
Alex Dubov,et.al, 2021, Los Angeles, United States	Development of a Smartphone App to Predict and Improve the Rates of Suicidal Ideation Among Transgender Persons (TransLife)	mHealth suicide prevention phone app, TransLife. (3week evaluation)	Purposive sampling technique	The result suggests that TransLife is an engaging, useful, and acceptable mHealth intervention. Participants reported that the app was easy to use and understand, supported mental self-care, promoted self-awareness, and helped them identify triggers of negative moods.
Christina J Sun, et.al, 2020.	A Sexual Health Promotion App for Transgender Women (Trans Women Connected)	Digital Trans Women Connected app (used in 3 phases)	Purposive sampling technique	Participants reported high acceptability for the mobile app; the mean rating across all usability and likability questions was 5.9 out of 7
Cesar A G et.al, 2017, United States	Evaluation of the Trans Women Connected Mobile App for Changes in Sexual Health-related Behavior Among Transgender Women (TWC)	2 app were developed. Experimental group was given TWC mobile app with 42 interactive activities and control group was given TWC COVID only mobile app with 7 interactive activities	Purposive sampling technique	TWC app was majorly preferred by trans women for changes in sexual health related behavior.
Christina J. S et.al, 2020	A sexual health promotion app for transgender women (Trans Women Connected):Development and Usability Study	Trans Women Connected mobile app	NA	Participants reported high acceptability for the mobile app; the mean rating across all usability and likability questions was 5.9 out of 7.
César G., et.al, 2022	Examining Social Media Experiences and Attitudes Toward Technology-Based Interventions for Reducing Social Isolation Among LGBTQ Youth Living in Rural United States: An Online Qualitative Study	Online interviews with LGBTQ youth aged 14-19	NA	Viewing positive representation of and connecting with LGBTQ groups, content from people shared experiences, and utilizing a wide array of platform features to increase the likelihood of positive connections are key to a positive social media experience among this group.
Kamal Gautam., et.al, 2022	Adaptation of a Theory-Based Mobile App to Improve Access to HIV Prevention Services for Transgender Women in Malaysia: Focus Group Study	6 focus group session were conducted.	Purposive sampling technique	The results revealed that multifaceted barriers hinder PrEP uptake and use among transgender women (stigma and discrimination, limited PrEP knowledge, high PrEP cost, accessibility concerns, alternative prevention methods, and perceived adverse effects
Maura P. et.al., 2020	The Use of Smartphone Apps as a Supplement to Transgender and Communication Therapy	Voice analyst app	Snowball sampling technique	Participant 141 did not experience a significant change in the size of her pitch range Participant 161 exhibited some change in pitch range Participant 182 attended at least six weeks of therapy sessions showed average speaking pitch of 118 Hz Participant 113 missed at four weeks of therapy

Mitchell R L. et.al, 2019	Using mobile technology to engage sexual and gender minorities in clinical research	Development of an iPhone mobile application ("app") to engage and recruit SGM people to The PRIDE (Population, Research in Identity and Disparity for equality) Study-Phase 1.	NA	More than 98% identified as a sexual minority, and more than 15% identified as a gender minority.
Alex A A., et.al, 2022	Trans Competent Interaction Design: A Qualitative Study on Voice, Identity, and Technology	Semi structured interview	NA	Each participant used media and communication technology as they explored gender identity and affirmation. The websites participants interacted with, for this specific purpose, were mainly distributed across YouTube, Tumblr, and Reddit.

Limitations OfThe Study

- Sample Bias
- Generalizability
- Complexity of Mental Health
- Self-Reporting Bias
- Technological Limitations
- Attrition Rates
- Ethical and Privacy Concerns

Scope For Further Research

1. Mental Health & Well-being Apps

- AI-powered therapy & chatbots – Offering confidential support, coping strategies, and guidance.
- Community-driven mental health support – Peer-to-peer counseling and group therapy options.
- Mood & mental health tracking – Personalized tracking of emotional well-being, linking users to resources when needed.

2. Safe Social & Dating Platforms

- Queer-friendly dating & networking apps – Designed with privacy, security, and consent in mind.
- Community-building platforms – Local and global spaces for LGBTQIA+ individuals to connect safely.
- Identity-sensitive AI moderation – Ensuring a safe, harassment-free environment.

3. Legal Rights & Support Apps

- Legal aid & advocacy apps – Providing real-time legal help, documentation support, and legal rights awareness.
- Discrimination & abuse reporting platforms – Anonymous complaint mechanisms integrated with NGOs and support systems.

4. Education & Awareness Platforms

- Interactive learning apps – Covering LGBTQIA+ history, rights, and inclusivity education.
- Ally training apps – Educating workplaces, schools, and organizations on diversity and inclusion.

5. Healthcare & Wellness Apps

- Queer-friendly health services locator – Connecting users with LGBTQIA+-friendly therapists, doctors, and clinics.
- Hormone therapy tracking apps – Helping trans and non-binary individuals manage their transition journey.
- Sexual health & STI awareness apps – With tailored resources for the community.

6. Employment & Career Support

- Job portals for LGBTQIA+ individuals – Featuring companies with inclusive policies.
- Entrepreneurial support apps – Funding and mentorship resources for LGBTQIA+ business owners

REFERENCES

1. Australian Bureau of Statistics National Survey of Mental Health and Wellbeing: Summary of Results, 2007, 4326.0. Australian Government, Canberra.
2. Asexuality Visibility and Education Network (AVEN). (2011). A history of asexuality. Retrieved August 17, 2011
3. American Psychological Association. Psychological practice guidelines with transgender and gender nonconforming clients. Am. Psychol. 2015, 70, 832–864.
4. Alonzo, D. J., and Buttitta, D. J. (2019). Is “coming out” still relevant? Social

- justice implications for LGB-membered families.’aj. Fam. Theory Rev. 11, 354–366.
5. Chakraborty, A., McManus, S., Brugha, T. S., Bebbington, P., and King, M. (2011). Mental health of the non-heterosexual population of England. Br. J. Psychiatry 198, 143–148. doi: 10.1192/bjp.bp.110.08227
6. Amadio DM, Adam T, Buleza K. Gender differences in alcohol use and alcohol-related problems:Journal of Gay and Lesbian Social Services. 2008; 20:315–327.
7. Amadio DM, Chung YB. Internalized homophobia and substance use among lesbian, gay, and bisexual persons. Journal of Gay & Lesbian Social Services: Issues in Practice, Policy & Research. 2004; 17:83–101.