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Co-Design and Evaluation of an Audio Podcast about Sustainable Development Goals for Undergraduate Nursing & Midwifery Students in Northern Ireland

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Abstract

Background: Sustainable Development Goals (SDGs) are universally recognized targets designed to combat poverty, inequality, and climate change. However, there exists limited awareness and understanding of these goals among nursing and midwifery students. To address this knowledge gap, a co-designed audio podcast was introduced as an educational tool to enhance students' comprehension of SDGs and their relevance to the healthcare profession.

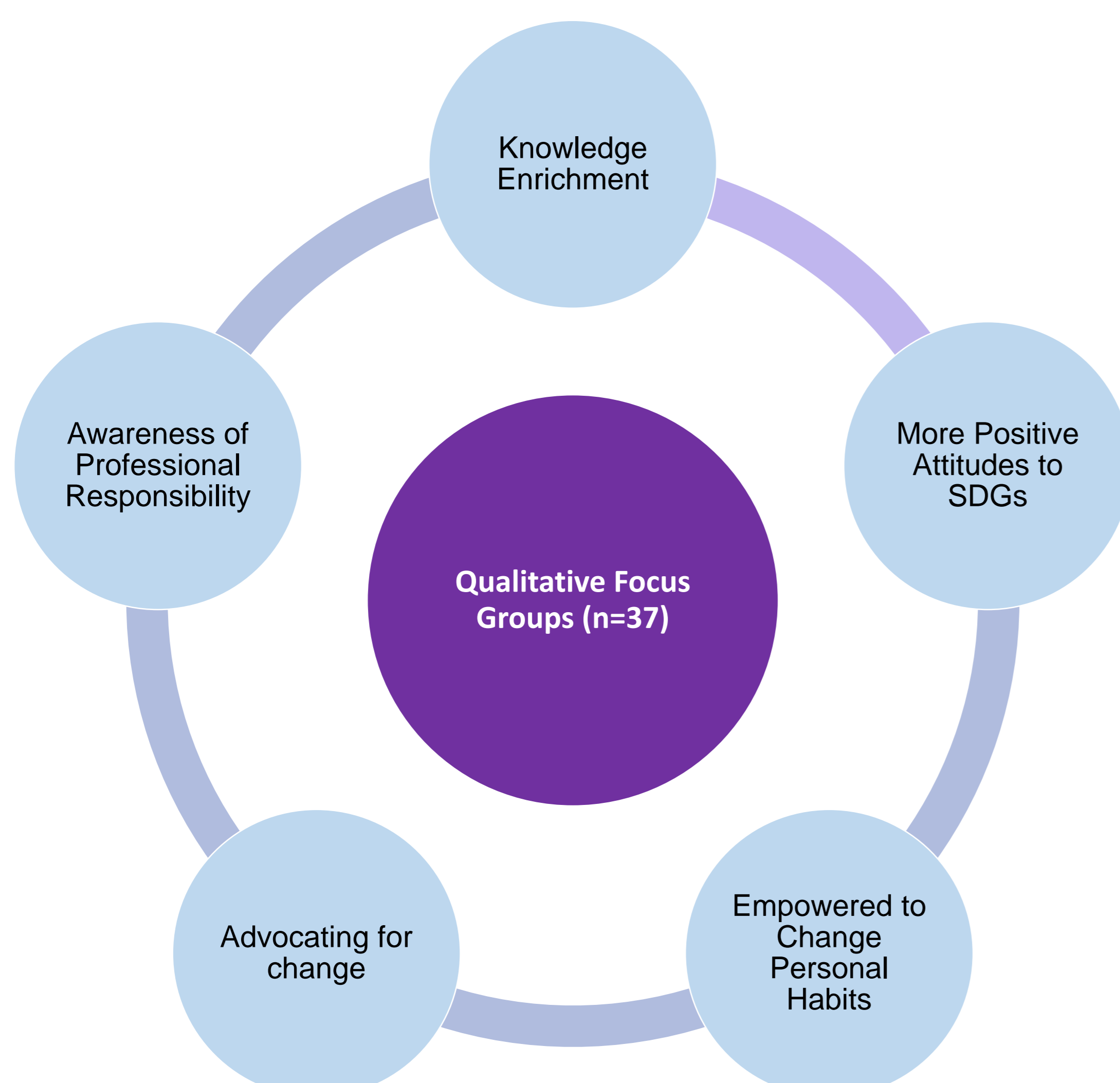
Methods: A prospective study was conducted at Queen's University Belfast, involving 566 first-year nursing and midwifery students. A 60-minute SDG podcast, co-designed with students and stakeholders, was made accessible within the university's learning management system. Pre- and post-test questionnaires were administered to assess changes in students' knowledge levels and attitudes toward SDGs. Additionally, 37 participants engaged in focus group interviews six months after listening to the podcast to explore their experiences and reflections. Quantitative data was analysed using paired t-tests and descriptive statistics, while qualitative data was analysed thematically.

Results: The podcast significantly increased students' awareness of SDGs and their understanding of the goals' relevance to their profession and personal lives. Post-test scores showed substantial improvements across all three sub-scales: knowledge, professional relevance, and personal relevance. Moreover, participants rated the podcast as a valuable learning resource with high acceptability, although some expressed uncertainty about replay intentions. Focus group interviews revealed distinct themes related to knowledge enrichment, perceptions of relevance, behavioural intentions, pedagogical effectiveness, impact on attitudes, barriers and challenges, long-term impact, and recommendations for improvement.

Discussion: This study demonstrates the potential of audio podcasts as an effective and engaging tool for increasing awareness and understanding of SDGs among nursing and midwifery students. The results suggest that such interventions can positively impact students' knowledge, attitudes, and behavioural intentions regarding the SDGs. The findings also emphasize the importance of co-design in developing educational resources tailored to the specific needs and preferences of students. This research contributes to the broader discourse on integrating SDG education into healthcare curricula and offers valuable insights for future educational interventions. Further research is needed to explore the long-term effects and generalizability of this approach and to enhance the pedagogical effectiveness of such podcasts.

Objectives

- To co-design an audio podcast about the UN's Sustainable Development Goals for first year nursing and midwifery students.
- To increase nursing and midwifery student knowledge and awareness of the SDGs
- To quantify the change in knowledge levels among nursing and midwifery students regarding SDGs before and after listening to the co-designed audio podcast, as measured by pre and post-test questionnaires
- To explore the impact of the audio podcast on students' perceptions and attitudes. Specifically, assessing the impact on students' reflection on the SDGs and how this learning was applied to their own personal and professional experiences.
- To gather students' feedback on the podcast as a learning resource.



Results

Sub-Scale	Pre-test Mean (Std. Deviation)	Post-test Mean (Std. Deviation)	Mean Increase (Std. Deviation)	Significance (2-tailed)
Awareness of SDGs	9.78 (3.58)	17.21 (2.20)	7.44 (3.79)	<.001
Professional responsibilities	58.79 (10.13)	75.06 (8.78)	16.50 (10.68)	<.001
Personal responsibilities	56.07 (10.75)	69.38 (10.38)	13.42 (10.40)	<.001

Technology Acceptance

	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
The podcast is a good learning resource	0.6%	0.4%	5.2%	48.0%	45.8%
The podcast was straight-forward & easy to understand	0.2%	0.7%	6.7%	42.8%	49.5%
The podcast met my learning needs	0.4%	0.9%	9.3%	50.8%	38.5%
I would recommend the podcast to others	0.2%	0.2%	10.2%	49.3%	40.0%
The duration of the podcast was appropriate	0.2%	4.8%	13.6%	48.2%	33.1%
I will listen to the podcast more than once	1.7%	9.7%	30.5%	41.9%	16.2%

Scan the QR to listen to the SDG podcast!

