

# University Students' Knowledge, Awareness, Perceptions and Practices of Environmentally Sustainable Menstrual Hygiene Products

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Worldwide, single-use disposable sanitary pads are the most commonly used menstrual hygiene products. The environmental challenges posed by the manufacturing and use of disposable menstrual hygiene products are often overlooked despite their significant impact on waste generation, pollution, and resource use. Studies on environmental awareness and sustainable practices of menstrual hygiene products indicate a gap in understanding the benefits of reusable alternatives as a solution to the environmental impacts of these products. Through a survey conducted among female-identifying students at the University of the Free State, the knowledge, perceptions, awareness and practices of the environmental implications of disposable versus reusable sanitary products were explored. The study further investigated the extent to which environmental considerations influence students' use of menstrual hygiene products. The survey forms part of a larger study conducted by researchers at the University of the Free State to design a unique and practical reusable antimicrobial sanitary pad using nano-chemistry. The novelty of this product resides in its ability to be washed and dried without the need for direct sunlight and reused without sacrificing its absorption capacity and levels of comfort. The survey results inform the further development of this new reusable sanitary pad aimed at addressing the challenges of environmental sustainability and contributing towards eradicating period poverty. Period poverty - poor access to menstrual hygiene products that compels the use of, among others, rags, newspapers and low-quality disposable sanitary pads, lack of proper information on menstruation, and inadequate access to water, sanitation, and ways to dispose of used menstrual hygiene products – affect around 500 million people worldwide. The findings point towards the importance of raising awareness among students about alternative menstrual hygiene products such as reusables, especially given the value respondents placed on factors such as cost, health, comfort, quality, and environmental issues.