

# Eco-Socius: A Novel Approach Using Multivariate Analysis To Understand Youth Behavior in Circular Economy

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The most used economic flow in the world is based on production, consumption, and disposal, which caused an increase in consumption of 1.7 times greater than the real needs of the population. This situation affects mental health, causing high levels of eco-anxiety among young people. However, the Circular Economy (CE), a socio-economic flow that is based on sustainable practices, is a viable alternative to this eminent environmental cataclysm. Nevertheless, its implementation requires a radical behavioral change in consumption patterns. Thus, this research studies Brazilian youth behavior in CE through Multivariate Analyses. A Behavioral Model was developed with three constructs and ten indicators (refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle and recover). A questionnaire-based survey was applied to 508 young people between 14 and 19 years of age from the South coast of Brazil. For data analysis it was used SPSS v.17.0. Structural Equation Modeling (SEM) was performed using AMOS v.26.0. The findings indicate that the youth behavior could be measured through CE practices, being a factor that predicts Brazilian youth behavior. The Model showed that the lack of familiarity of young Brazilians with the R's of CE is a behavior gap. To overcome this behavior gap, this research suggests two measures that were applied: (i) Behavior Change Intervention and a (ii) Free and Online Course on CE. Both raise the issue that education is a driver for encouraging circular behaviors. This novel approach contributed to boosting the inclusion of all people in CE, being relevant not only for the construction of a CE but for a society that thinks and acts in a sustainable way.

**Awards Won:**

