



Social Media Exposure & Ocean Literacy Among Coastal Youth in Sri Lanka: A Survey-Based Computational Analysis

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Coastal communities in Sri Lanka are increasingly affected by marine environmental issues such as plastic pollution, coastal habitat degradation, and pressure on fisheries and tourism. This study examined how social media exposure influences ocean literacy and community engagement among coastal youth in Sri Lanka. A structured questionnaire was administered to 192 students and youth from selected coastal areas over a three-week period, collecting data on social media usage, marine information sources, understanding of ocean concepts, and participation in local conservation activities. The collected responses were analyzed using descriptive statistics, cross-tabulation, correlation analysis, one-way ANOVA, and chi-square testing. The results showed that respondents with high social media exposure had higher ocean literacy scores than those with medium and low exposure, and this difference was statistically significant ($p < 0.05$). Daily social media usage also showed a moderate positive relationship with ocean literacy, while ocean literacy was positively associated with community engagement. In addition, respondents with higher exposure to marine-related content were more likely to participate in coastal clean-up activities and awareness programs. The findings suggest that social media can support ocean literacy and community participation when used with targeted, youth-oriented content. The study concludes that digital platforms can play an important role in strengthening marine awareness and community engagement among coastal youth in Sri Lanka.

Keywords: Ocean literacy, Social media exposure, Coastal youth, Community engagement, Digital platforms, Sri Lanka