Does the quality of life connect with an individual's nature connectedness and per capita greenhouse gas emission? A preliminary study

E. A. S. K. Somarathe^{1,2*}, and M. W. Gunathunga³, E. Lokupitiya¹

¹ Department of Zoology and Environment Sciences, Faculty of Science, University of Colombo, Colombo 03, Sri Lanka.

² Research Promotion and Facilitation Center, Faculty of Medicine, University of Colombo, Colombo 08, Sri Lanka.

³ Department of Community Medicine, Faculty of Medicine, University of Colombo,

Colombo 08, Sri Lanka

* sksomarathne@stu.cmb.ac.lk

Sri Lanka is a country that struggles to deal with the negative consequences of climate change caused by increased levels of greenhouse gas (GHG) emission. There is a need to reduce the gap between man and nature while improving the quality of life (QoL). The current study aimed at finding possible relationships between nature connectedness, GHG emission, and perceived quality of life at individual level. According to our knowledge, this was the 1st attempt taken by a Sri Lankan research group to investigate possible links between GHG emissions, connectedness to nature and quality of life. A preliminary cross-sectional study was carried out with rigorously screened 30 individuals (mean age = 44 + 2 years). Participants in the present study included a group of meditation practitioners from a largescale study on "meditation, mindfulness and health". Data were collected to assess perceived quality of life under 5 domains: a) overall perception of QoL, b) physical QoL, c) psychological QoL, d) social relationships associated with QoL and e) environmental QoL; the latter was assessed through a person's attitude towards the environment or connectedness to nature and GHG emissions under electricity consumption and travelling. Bivariate correlational analyses revealed a significant negative relationship between GHG emission due to travelling and psychological QoL (r = 0.51, p < 0.05). Except GHG emission due to electricity consumption, other environmental variables were linearly correlated with overall QoL. Even though the findings of the current study have limitations in terms of generalizability due to a non-probability sampling, the methodology of the current research opens doors to investigate QoL in environmental research. Our study findings indicate that ensuring the perceived QoL at the individual level may lead to a reduction in GHG emissions while promoting nature connectedness. Hence, this research highlights the importance of considering the perceived quality of life as a determinant of connectedness to nature and GHG emission at the individual level.

Keywords: quality of life, QoL, CNS, GHG