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PREDICTION OF PER-HEAD CARBON FOOTPRINT THROUGH MINDFULNESS

Somarathne EASK^{1,2*}, Gunathunga MW³ and Lokupitiya E¹

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

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

³Department of Community Medicine, Faculty of Medicine, University of Colombo, Sri Lanka *sksomarathne@stu.cmb.ac.lk

ABSTRACT

The ability to pay attention to the present moment while retaining an open, nonjudgmental frame of mind is known as mindfulness. It has been known that practising mindfulness acts as an activator of positive attitudes and behaviours. Awareness of the present moment plays a key role in low-carbon lifestyles. Hence the present research investigated the influential effects of mindfulness on per head carbon footprints of long-term mindfulness practitioners (n = 33). The Sinhala version of the Five Facet Mindfulness Questionnaire (FFMQ), which addresses five elements of trait mindfulness (i.e. nonreactivity to present moment experiences, observing, acting with awareness, describing and non-judging of experience) was used in the data collection. Per head carbon footprint was calculated using 14-day self-reported data under the domains of food and beverage consumption (CF_{FB}), electricity consumption at residence (CF_{EC}), travelling behaviour; (CF_{TB}) and solid waste disposal behaviour at residence; disposal done at the disposal site (CF_{SWDS}), open burning of solid waste (CF_{OB}). The results of the stepwise regression analyses indicated that acting with awareness negatively influenced (p < 0.05) per head carbon emissions except for CF_{SWDS}. The CF_{SWDS} was negatively influenced by the describing facet of mindfulness ($R^2 = 52.20$ %, $\beta = 0.02$, p < 0.001). The non-judging of experience facet of mindfulness was a significant predictor of the CF_{OB} ($R^2 = 62.77\%$, $\beta = 0.01$, p < 0.001). Autocorrelations were not found for any significant regression model (VIF < 5, Durbin-Watson statistic range = 1.9 -2.5). We conclude that though mindfulness is a significant predictor of per-head carbon footprint, not all the domains of carbon footprint are significantly predicted by all the facets of mindfulness. Moreover, with higher mindfulness levels, lower carbon emissions could be anticipated.

Keywords: per-head carbon footprint, carbon emission, mindfulness, climate change mitigation