Mediation and Moderated Mediation in the Relationship among Environmental Factors, Health-Related Knowledge, Attitude, Practices, Age and Gender

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Abstract: The study made use of 365 adolescent respondents aging between 11 and 19 years of age enrolled in 13 SDA schools in West, Central and East Indonesia. Structural Equation Modeling was utilized as statistical tool, to obtain mediation and moderated mediation results. Results indicate that (a) technology has positive impact on health practices, food environment, and social environment, however it has a negative impact on knowledge on health. (b) Built environment has positive effect on health practices and (c) social environment has positive influence on health practices. Food environment, social environment and health attitude partially mediate technology environment on health practices. Likewise, built environment (i) fully mediate technology environment on food environment and partially mediate on social environment and health attitude. Finally, food environment, social environment health attitude and knowledge on health fully mediate, respectively, the relationship between built environment and health practices while knowledge on health between social environment and health practices. Moderated mediations relationship were observed such that for male, (i) technology were found to have a greater influence; (ii) technology environment had a stronger positive influence on health attitude than female. On the other hand, male had stronger negative influence than female in the relationship between built environment and knowledge on health.

Keywords: Mediation, moderated mediation, Structural Equation Modeling, environmental factors