

## Summary of Research

Factors Influencing Water Conservation Behaviors of Elementary School Teachers in Bangkok Metropolis

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The purposes of this research were first to describe water conservation behaviors, second to explain the behaviors, and third to provide model for improving the behaviors of elementary school teachers. The water conservation behaviors comprised saving water, non-littering into water resources and cleaning sewage pipe.

A sample of 1,148 elementary school teachers was randomly selected from schools in inner, middle and outskirt area of Bangkok metropolis. Tools for gathering data were questionnaires about water conservation behaviors, intention to conserve water, attitude toward conserving water (direct and indirect measures), subjective norms (direct and indirect measures), perceived self-efficacy, perceived water pollution, perceived water shortage, responsible for paying water bill, and the amount of water bill. We also collected biosocial variable, such as gender, age and level of education. Statistical analysis used to summarized data were  $\bar{X}$  and SD. Statistical techniques used to confirm a research hypotheses were correlation and regression, t-test, ANOVA and path analysis.

The results were as follows :

1. Teachers showed moderate level of saving water and non-littering into water resources but low level of cleaning sewage pipe.

2. A model that explained saving water included variables such as intention to save water, attitude toward saving water (beliefs-based measure or indirect measure), and perceived self-efficacy. The intention had direct effect on behavior. The standardized path coefficient of intention and behavior was .338. Attitude and perceived self-efficacy had direct effect on intention. The standardized path coefficient of attitude and intention was .465 and of perceived self-efficacy and intention was .129. All of the coefficients were significant. ( $p < .05$ )

3. A model that explained non-littering into water resources consisted of intention not to litter into water resources, attitude toward littering into water resources (beliefs-based measure or indirect measure), subjective norms and perceived self-efficacy. Intention had direct effect on behavior. The standardized path coefficient of intention and behavior was .361. Attitude toward littering into water resources (indirect measure) had direct effect on intention. The standardized path coefficient of attitude and intention was .17. Subjective norms had direct effect on intention. The standardized path coefficient of subjective norms and intention was .136. Perceived self-efficacy had direct effect on intention. The path coefficient of self-efficacy and intention was .41. All of the above coefficients were significant. ( $p < .05$ )

4. A model that explained cleaning sewage pipe consisted of intention, subjective norms, indirect measure of subjective norms (beliefs-based measure of subjective norms), and perceived self-efficacy. Subjective norms and intention had direct effect on behavior. The standardized path coefficient of intention and behavior was .16, of subjective norms and behavior was .17. Subjective norms (indirect measure) and perceived self-efficacy had direct effect on intention. The standardized path coefficient of indirect measure of subjective norms and intention was .27, and of self-efficacy and intention was .34. All of the above coefficients were significant. ( $p < .05$ )

From the research findings improving of saving water, non-littering into water resources, and cleaning sewage pipe must emphasized the followings: Firstly the promotion of beliefs in consequences of performing the saving water, and littering into water resources, secondly the promotion of beliefs that significant others will support the non-littering into water and cleaning sewage pipe behaviors, and thirdly the promotion of self-efficacy in saving water, non-littering into water resources and cleaning sewage pipe