

## **Sense Environmental Hormones in Elementary School Teachers and Their in Service Learning Motivation**

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**Abstract :** Our environment has been contaminated by many artificial chemicals, such as plastics, pesticides. Many of them have hormone-like activity and are classified as 'environmental hormone (also named endocrine disruptors)'. These chemicals interfere with or mimic hormones have adverse effects that persist into adulthood. Environmental education is an important way to teach students to become engaged in real-world issues that transcend classroom walls. Elementary education is the first stage to perform environmental education and it is an important component to help students develop adequate environmental knowledge, attitudes, and behavior. However, elementary teachers' knowledge plays a critical role in this mission. Therefore, we use a questionnaire to survey the knowledge of environmental hormone of elementary school teachers and their learning motivation of the environmental hormone-regarding knowledge. We collected 218 questionnaires from Taiwanese elementary teachers and the results indicate around 73% of elementary teachers do not have enough knowledge about environmental hormones. Our results also reveal the in-service elementary teachers' learning motivation of environmental hormones knowledge is positively enhanced once they realized their insufficient cognitive ability of environmental hormones. We believe our study will provide the powerful reference for Ministry of Education to set up the policy of environmental education to enrich all citizens sufficient knowledge of the effects of the environmental hormone on organisms, and further to enhance our correct environmental behaviors.

**Keywords :** elementary teacher, environmental hormones, learning motivation, questionnaire

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