

自我修養於高中生科學活動滿意度與科學探究能力之中 介角色探討研究

曾瑞蓮¹ 林之丞^{2*}

¹國立科學工藝博物館助理研究員

^{2*}育英醫護管理專科學校助理教授兼通識教育中心主任

摘 要

本文以本土心理學觀點連結華人自我修養與科學學習，探討參與博物館活動之高中學生的科學活動滿意度、自我修養與科學探究能力之關係，以及自我修養在科學活動滿意度與科學探究能力之間是否有中介效果。研究以參與國立科學工藝博物館主辦之高中探究實作競賽科學營的 402 位高中生為對象，研究工具採用「科學活動滿意度量表」、「自我修養量表」與「科學探究能力量表」。透過實徵資料的蒐集，應用描述統計與結構方程式模型進行分析。研究結果發現：參與博物館科學活動之高中學生的活動滿意度對自我修養與科學探究能力有顯著正向影響。自我修養在科學活動滿意度與科學探究能力之間，扮演著完全中介變項的角色。

關鍵詞：自我修養、科學探究、博物館教育、科學活動

*聯繫作者：育英醫護管理專科學校通識教育中心，807 高雄市三民區大昌二路 420 巷 15 號。

Tel: +886-7-3811765#1125

Email: cclin108@gmail.com

Self-Cultivation as a Mediator between High School Students' Satisfaction of Science Activity and the Ability of Scientific Inquiry

Jui-Lien Tseng¹ Chih-Cheng Lin^{2*}

¹Assistant Researcher, National Science and Technology Museum

^{2*}Assistant Professor, Yuh-Ing Junior College of Health Care & Management

Abstract

The present study adopts a Chinese cultural perspective was adopted to investigate the mediating role of self-cultivation on the relationship between science activity satisfaction and scientific inquiry among high school students participating in museum activities. A survey research method was adopted in this study, which comprised three questionnaires: "Science Activity Satisfaction Scale," "Self-Cultivation Scale," and "Scientific Inquiry Ability Scale." Participants were 402 high school students in the science camp of high school's scientific inquiry and practice competition held by National Science and Technology Museum. The collected data were analyzed by descriptive statistics and structural equation modeling. The findings are summarized as follows: (1) the satisfaction of science activity significantly and positively affects the ability of scientific inquiry and self-cultivation; while self-cultivation significantly and positively affects the ability of scientific inquiry. (2) Self-cultivation plays the full mediating role between the satisfaction of science activity and the ability of scientific inquiry.

Keywords: self-cultivation, scientific inquiry, museum education, science activity

*Corresponding author: General Education Center, Yuh-Ing Junior College of Health Care & Management, No.15, Lane 420, Dachang 2nd Rd., Sanmin District, Kaohsiung City 807, Taiwan.
Tel: +886-7-3811765#1125
Email: cclin108@gmail.com