## 摘要

創造力的研究指出一個人收到負面的回饋時,通常會失去創造力,真實生 活觀察的經驗顯示,有一些人卻很奇妙的並不因此而退縮,仍然繼續從事創造 力相關的活動,然而過去的研究卻無法說明這些人爲何能如此。本研究主張個 體有一潛在的力量—即創意自我效能—能維持個人對創造的熱忱,並能夠抗衡 環境的負面回饋。本研究於是以社會認知理論爲基礎,建構出創意的產生歷 程,其中包含五個變項:重要他人回饋、個體內在心理歷程(含創意內、外在動 機及創意自我效能)與創意行為,除呈現描述性統計、差異性檢定及集群分析之 外,也以結構方程模式檢驗五個變項的徑路模式,並進一步探討創意效能在個 體內在心理歷程的位置。前測先以小樣本檢查各量表的品質,正式研究的樣本 取自北部公私立各三所大學中修習通識課程或教育學程的學生,共蒐集有效樣 本 636 份。結果發現:1.大學生因年齡、不同領域的訓練、性別差異以及不同 的專業程度,使創意行爲各向度出現差異,其中學院別與年級別的交互作用達 顯著,大學生在不同學院中所受的專業訓練以及在專業領域中的熟稔程度確實 影響各向度創意行為的多寡。2.將大學生群體以創意行為七向度的反應進行分 類,受試群體依創意行爲頻率可歸納爲三群:「經常性創意型群體」、「偶有 創意型群體」與「幾無創意型群體」。重要他人回饋各變項與個體內在心理歷 程各變項能夠區別出「經常創意者」與「幾無創意者」兩群體間的差異,其預 測準確率爲81.2%。3.比較創意自我效能在動機變項之前、並列以及在動機變項 之後的模式發現,創意自我效能在動機變項之前的模式較佳。4.以結構方程模 式分析整體模式,重要他人正、負面回饋對於創意自我效能與創意外在動機均 具有正面的影響效果,但是對於創意內在動機則不具影響性。個體知覺重要他 人正面回饋與負面回饋對於創意行爲並未有直接效果;而個體知覺重要他人負 面回饋透過創意自我效能、創意外在動機等中介變項對於創意行為具有正面影 響效果,而其中又以個體的創意自我效能對創意行爲的預測力較強。顯然當個 體接受環境回饋後,個體會先依據訊息回饋以及事件對於個體的心理意義進行 評估,而後才會影響到動機層次,此結果確立了創意自我效能對於個體創意行 爲的關鍵性角色。最後研究者依據研究結果,提出若干建議供未來研究與教學 實務參考。

關鍵字:社會認知理論、重要他人回饋、創意自我效能、創意思考外在動機、 創意思考內在動機、結構方程模式



## A social cognitive model of significant other's feedback, creative self-efficacy, internal motivation and external motivation on creative behavior: A structure equation modeling study

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Previous research results show an individual when receiving negative feedback from environment often decreases the frequency of engaging in and quality of creative works. From my personal observation, I find some people, fortunately, survive from others' attack or criticism and keep on working creatively. It seems that some people obtain greater mental strength to maintain passion about creative works, and it even leads them to confront with negative feedback from significant others. This critical variable is named as creative self-efficacy after a comprehensive review of two trends of research, one about the effects of social environment on creativity and the other, effects of intrinsic and extrinsic motivation (Amabile, 1996). Then, five variables were considered important in constructing a social cognitive model of creativity, that is, significant others' feedback (about one's creativity works), inner process (including intrinsic motivation, extrinsic motivation, and creative self-efficacy), and creative behavior. Descriptive statistics, hypothesis tests of differences, and cluster analysis were adopted in analyzing data. Besides, structural equation modeling was used to test the hypothetical models and alternative models, especially regarding various roles of creative self -efficacy in social cognitive model. Participants were 636 undergraduates selected from six universities in northern Taiwan. The results show, first of all, individual characters, e.g., gender, grade, and majors, affected one's creativity. Moreover, grade and major show a two-way interaction that various fields needs more or less years of training to display higher degree of creative works. Second, a clustering analysis demonstrated that students could be grouped into three clusters along their frequencies of creative experiences. They were named as "frequent creators", "occasionally creators", and "rarely creators". Third, compared with the model A- creative self-efficacy in front of the intrinsic, extrinsic motivation and model B- creative self-efficacy, intrinsic, extrinsic motivation was paralleled. Besides, the author also explores the model C- creative self-efficacy in back of the intrinsic, extrinsic motivation. The result indicated that the model A is better than the

model B, it confirmed with the social cognitive theory. Fourth, a structural equation modeling for the examination of the modified model shows that positive feedback and negative feedback could directly predict creative self-efficacy and extrinsic motivation as the hypothesis suggested, yet they could not predict intrinsic motivation. In addition, positive feedback and negative feedback from significant others though could not directly predict creative behavior, they displayed indirect effect on creative behavior. Therefore, it seems reasonable to conclude that when individual receive feedbacks, one often evaluate the task and feedback. Then the evaluation outcomes that we called creative self-efficacy will affect one's motivation and in turns affect creative behavior. This result confirmed the importance of creative self-efficacy as Bandura (1997) has suggested. Based on the results, several suggestions for educational administrations, schools, teachers and future research were offered.

Keywords: social cognitive theory, feedbacks of significant others, creative selfefficacy, extrinsic motivation of creative thinking, intrinsic motivation of creative thinking, structure equation modeling