

聲光刺激任務下大腦不同區域之 CNV 反應之研究

A Study of the CNV Responses with Sound and Flash Stimuli on Different Brain Regions

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(Received September 19, 2018; Revised May 10, 2019; Accepted July 10, 2019)

摘要：人們生活於科技進步時代，環境中充斥著各種視覺與聲音的刺激，而人類因這些刺激長時間的累積影響下，造成心理的負荷產生了所謂的壓力。過去的研究發現，人類在壓力持續累積的狀態下，容易造成憂鬱、焦躁不安，身體上的病痛等心理與生理層面的影響。自 1929 年由 Electroencephalogram(EEG)腦電波圖發現大腦的自發電位後，引起人類對於大腦反應的興趣，利用不同類型的刺激來探討腦波反應的相關研究也越來越多。由簡單的視覺與聲音的任務刺激中，發現了人類對於任務的期待，而表現出在心理負荷的過程中產生負向偏轉 (Contingent Negative Variation : CNV)反應的腦波訊號。因此，對於大腦生理訊號與心理層面的研究與探討，已成為至今腦波研究的重要議題。為了解大腦在聲音與光的刺激下並接受不同任務，使得 CNV 的反應會有何種不同的差異。因此設計了一套利用一種聲刺激與閃光刺激，執行忽略、按按鈕、記憶與按按鈕配合記憶等四種不同動作反應任務的實驗區段，針對 15 位(平均年齡 23.1 歲)身心健康的受測者，進行雙耳雙眼的聲音與閃光任務刺激實驗。結果顯示，CNV 的振幅大小會因為任務的困難度不同會有所變化。記憶任務會因分心效應降低 CNV 振幅使注意力無法提高。越複雜的任務動作會使心理負荷提高，在任務完成後心理負荷

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的解脫越大。而按鈕反應時間的結果顯示，在有記憶計數任務的按鈕反應時間會比無記憶計數任務的反應時間還快。

關鍵詞：心理負荷、腦電波圖、負向偏轉

Abstract : Living in the age of advanced technology, visual and auditory stimuli pervade everywhere and people have caused stress due to long exposure to these stimuli. Previous research have shown those people who are constantly under stress environment will easily induce depression, anxiety, and other physical and mental illnesses. The discovery of spontaneous brain potentials as the electroencephalogram (EEG) since 1929, people have been interested in the study of brain's response. Thus, more studies use different types of stimulations to explore the various responses of the brain. From the application of auditory and visual stimuli in brain researches, the results of EEG have shown that the brain's response of contingent negative variation (CNV) is related to mental load of stress. Therefore, the study of the brain's biological reaction and its relation to the psychological aspect is an important topic in EEG. In order to understand the brain responses of CNV from auditory and light stimuli of different experiments, this study designed a series of sections using sound and flash light stimuli to conduct four sections (Inattention, Attention-Button, Attention-Memory, and Attention-Button-Memory) on 15 healthy participants (mean age 23.1 years). The results of this study show that the amplitude of CNV depends on the difficulties of the given tasks. The memory tasks will decrease the amplitude of CNV due to the effects of distraction. The more complex tasks, the more stress the subject's mind is. On the contrary, the greater mental relief is when the task is completed from the results of the reaction time during button-pressing task. Also, it is evident that the reaction time that involves memorization is faster than the one without memorization.

Keywords: electroencephalogram (EEG), contingent negative variation (CNV), mental load

癌症食慾不振和惡病質症候群之 處理策略

Management of Cancer Anorexia-Cachexia Syndrome

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(Received February 04, 2019; Revised September 23, 2019; Accepted October 20, 2019)

摘要：癌症食慾不振和惡病質症候群(CACS)是一種嚴重致命但困難定義的非自主性體重減輕的症候群，不但造成病人生理、心理、社會及靈性極大的負荷，對於照顧者也是極具壓力的挑戰。臨床醫護人員容易忽略營養的問題，也較缺乏與病人及家屬溝通此問題的機會。護理人員應熟悉 CACS 之照護，以及時提供病人及家屬適切的評估與處置，延緩營養流失的速度。本文介紹 CACS 的定義、機轉、診斷及處理方式，透過心理社會支持、教育與溝通的多元介入方式，協助癌症病人及家屬更能了解惡病質的相關資訊、接受疾病不可逆的自然進展、抒發及緩和焦慮，以期有效降低體重與進食相關的困擾，提升癌症照護品質。

關鍵詞：癌症食慾不振和惡病質症候群、症狀處理、體重減輕。

Abstract: Cancer anorexia-cachexia syndrome (CACS) is a lethal but poorly defined involuntary wasting disorder. Cachexia presents physiological, psychological, social, and spiritual burdens for the patient and is a stressful challenge for caregivers. Medical professionals may overlook nutritional problems, and neglect to discuss nutrition with patients and family members. Nurses play an important role in caring for those with cancer cachexia; they should be familiar with the

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symptoms of this highly-prevalent, highly-fatal syndrome to provide patients and families with timely evaluation and treatment. This paper introduces the definition, mechanism, diagnosis, and treatment of cancer cachexia and describes psychological and social support, education, and communication that may help patients and their families understand cachexia, accept that it is a natural progression, dispel anxiety, and reduce difficulties regarding the patient's weight and diet, thus improving the quality of care.

Key words: Cancer anorexia-cachexia syndrome, symptom management, weight loss

兩個鏷(III)系金屬一維配位聚合物 含吡啶-2-羧酸根合成及結構分析

Synthesis, structure and of two new 1-D Lanthanide(III) Coordination polymers based on the ligand Pyridine-2-carboxylate

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(Received December 03, 2018; Revised May 23, 2019; Accepted June 24, 2019)

摘要：利用水熱合成反應，得到兩個含吡啶-2-羧酸根的鏷(III)系金屬配位化合物 $[\text{Ln}_2(\text{pya})_6]_n$ ($\text{Ln} = \text{Pr}$ (1) 及 Nd (2); $\text{pya} =$ 吡啶-2-羧酸根)。利用 X-Ray 晶體繞射儀測定產物晶體結構，兩個配位錯合物的結構相類似。錯合物以三配位羧酸根為橋鍵($\mu_2\text{-}\eta^2\text{:}\eta^1$ -橋鍵配位模式)形成一維鏈狀聚合物。晶體結構中含有分子間 $\text{C—H}\cdots\text{O}$ 氫鍵，連結錯合物分子形成超分子網狀聚合物。金屬間最近距離 $\text{Ln}\cdots\text{Ln}$ 分別為 3.956 (1) Å 化合物 1 及 3.946 (2) Å 化合物 2。

關鍵詞：晶體結構、鏷(III)系錯合物、配位聚合物、吡啶-2-羧酸

Abstract : Two lanthanide(III) coordination complexes $[\text{Ln}_2(\text{pya})_6]_n$ ($\text{Ln} = \text{Pr}$ (1) and Nd (2); $\text{pya} =$ pyridine-2-carboxylate) were prepared by hydrothermal reaction. The crystal structures were determined by X-ray crystal diffraction and both of two coordination complexes are isostructures. The complexes form a one-dimensional chain polymer with a tridentate carboxylato-bridged

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(μ_2 - η^2 : η^1 -bridging coordination mode). In both structures, intermolecular C—H \cdots O hydrogen bonds link the molecules, forming a supramolecular network structure. The nearest Ln \cdots Ln is 3.956(1) Å of 1 and 3.946(2) Å of 2, respectively.

Keywords: Crystal Structure, Lanthanide(III) Complex, Coordination Polymer, pyridine-2-carboxylate .

元雜劇《舉案齊眉》、《秋胡戲妻》所呈 現的女性自覺意識

Performance of Female Self-awareness in Two Yuan Drama: “a Humble Couple Liang Hong and Meng Guang” and “Chiou-hu Flirts His Wife”

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(Received March 07, 2019; Revised June 10, 2019; Accepted July 10, 2019)

摘要：男女兩性之間的關係，是人類最自然的關係；文學是表現人類情感的載體，愛情則是文學中永恆的主題。受到蒙古族草原文化的影響，元雜劇中描寫愛情的戲劇，既保有傳統文化的精神，也蘊藏著元代文化的新思維。我國古代因為封建禮教觀念的日益成熟，婚姻的當事人不能享有自主權，只能聽從父母之命、遵守媒妁之言；女子一旦到了夫家，自然成為生產勞動、傳宗接代的工具。元雜劇愛情婚姻劇塑造一些個性鮮明、敢愛敢恨的女子形象，他們勇於追求愛情的精神，以及對愛情的堅貞無悔，都是值得後人讚揚的。

本文嘗試從元雜劇中的女性自覺意識角度出發，考察無名氏的《舉案齊眉》以及石君寶的《秋胡戲妻》。選擇此二劇之原因有二：第一，兩劇都是以女性為主角的旦本戲，同樣都是勇於衝破禮教束縛，勇敢面對自己的感情。第二，描寫女性在家庭生活中，一旦遭遇外來阻礙時的堅毅不改變，不畏強權。第三，兩劇都以大團圓作結，表達婚姻關係中兩情相悅、生活美滿之理想。

關鍵字：愛情、元雜劇、封建道德觀念、傳統文化、自我意識

Abstract: The gender relation is essential in human nature. The literature all over the world has been the carrier of human emotion, and love has become one of its eternal subjects. Due to the Mongolian grassland culture of sovereign for Yuan dynasty, the love drama in Yuan drama not only inherited the spirit of Chinese traditional culture, but also implied new immigrated thinking from Yuan culture. Traditionally, due to the growing formatting thoughts of feudal ethics in ancient China, almost every marriage couple could not have the domination but only obeyed the arrangement of parents and matchmaker to their marriage. Fatedly, married women usually played the role of birth and home-labor as she stepped in her husband's family. The love and marriage plays in Yuan drama have shaped images of women with the distinctive personality and daring to love and hate. It is worthy of praise by the later generation that they were brave to pursue the spirit of love and no regrets to the true love.

This article tries to investigate two drama, "a Humble Couple Liang Hong and Meng Guang" and "Chiou-hu Flirts His Wife", at the point of view of female self-awareness. There are three reasons for the choice of these two plays. Firstly, both dramas focus on female characters, and they were brave to challenge the confinement of traditional ethics and to face their true feelings. Secondly, both female characters persistently kept their mind and were no fear of external obstruction on the family life as facing the injury outside of the family. Thirdly, happy endings in two drama came to the expression of ideal for loving each other and happy daily life in their marriage relation.

Keywords: Yuan drama, love, traditional culture, Self-awareness

學生幸福感之影響-以學生知覺教師正向領導、班級經營管理之探討

The Influence of Students' Well-Being -Discussion on Teachers' Positive Leadership and Class Management

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(Received July 15, 2019; Revised October 02, 2019; Accepted November 12, 2019)

摘要：本研究旨在瞭解技術型高級中等學校學生知覺教師正向領導、教師班級經營管理與學生幸福感之影響，採問卷調查法，以自編五點量尺之「技術型高級中等學校學生知覺教師正向領導、教師班級經營管理對學生幸福感影響之調查問卷」為施測工具。經立意取樣以新竹縣 A 技術型高級中等學校共 922 位學生為研究對象，探討學生知覺教師正向領導、教師班級經營管理與學生幸福感之相關與預測情形。經迴歸分析結果發現技術型高級中等學校學生知覺教師正向領導、教師班級經營管理與學生幸福感具顯著正相關，且具有正向影響力。綜合以上分析與結論，分別對教育行政主管機關、學校、教師及未來研究者提出相關建議。

關鍵字： 教師正向領導、班級經營管理、學生幸福感

Abstract: The purpose of this study is to understand the influence of technical senior middle school students on teachers' leadership, class management and well-being. The questionnaire survey method was used to self-develop five-point scale "technical advanced secondary school students' perception teachers. The questionnaire on the influence of positive leadership and teacher class management on students' well-being is a test tool. The judgmental sampling was used in this study, and then 922 students from the A-Technical Advanced Secondary School in Hsinchu County were

participated. Regression analysis was employed for test the correlation between students' perceived leadership, teacher class management and student happiness. The result shows the Technical high-level secondary school students perceived teachers' positive leadership, teacher class management and student well-being had a significant positive correlation. In addition, skilled senior secondary school students' perceived teachers to have positive influence on leadership, teacher class management and student well-being. Based on the above analysis and conclusions, relevant recommendations had provided to the education administrative authorities, schools, teachers and future researchers.

Keywords: teachers' positive leadership, teacher class management, student well-being