

THE APPLICATION OF THE REHABILITATION MODULE FOR ACADEMIC
ACHIEVEMENT AMONG TECHNICAL COLLEGE STUDENTS OF
PAHANG SKILLS DEVELOPMENT CENTER

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A thesis submitted in fulfillment of the requirements
For the award of Degree of
Master of Technology Management (Human Capital Resources)

Faculty of Manufacturing Engineering & Technology Management
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DECEMBER 2010

ABSTRACT

Engineering graduates and technical employees are playing an increasingly significant role in the economic development of Malaysia, especially under its current national economy transformation. How to enhance their related skills has become a heated issue. This research is trying to ascertain the application of rehabilitation module known as MCBE-REBT Module for academic achievement among technical college students that study at PSDC's College. The Treatment Module consists of three techniques which is mental technique, cognitive technique and behavior technique. All the techniques complement each other in health promotion to give a better environment and condition to all technical college students such as stress reduction technique and mind-body control technique. The module facilitate the students to learn self-regulation which is later the student have the ability to control their own behavior. By establishing the MCBE-REBT (Mental, Cognitive, Behavior Technique) Module, the relationship between personality types and academic achievements has been evaluated. The personality types as a part of the module are classified by using Credo Personality Profiling, while the academic achievements are measured in terms of GPA. Also by integrating the Biofeedback Computer Game-based Training into MCBE Techniques, a rehabilitation Module is developed to help the students to learn self-regulation and relaxation technique. Result from Spearman, r_s , correlation matrix of outcome measures improvement (delta changes scores) on the total sample showed that there is no significant correlation between improvement in GPA and biofeedback training as indicated by heart rate reduction. Result of Friedman test shows that the heart rate of subjects receiving biofeedback training significantly reduced from pre to post intervention ($\chi^2 (2) = 8.667, p = 0.011$). Therefore, it shows that by practicing the REBT_MECEB Module the students can learn the skills of relaxation and will be ready to manage their emotions, and good in self-regulation whenever facing stress and anxiety.

ABSTRAK

Graduan lulusan kejuruteraan dan pekerja teknikal memainkan peranan yang semakin penting dalam pembangunan ekonomi Malaysia terutama dalam menjayakan Program Transformasi Ekonomi Negara. Bagaimana meningkatkan kemahiran mereka telah menjadi isu utama yang diperbincangkan. Penyelidikan ini cuba untuk melihat penggunaan modul pemulihan yang dikenali sebagai Modul MCBE REBT di kalangan pelajar kolej teknikal di Kolej PSDC dari segi pencapaian akademik. Modul ini terdiri daripada tiga teknik iaitu teknik mental, teknik kognitif dan teknik tingkah laku. Ketiga-tiga teknik adalah saling melengkapi antara satu sama lain dalam meningkatkan kesihatan bagi memberikan persekitaran dan keadaan yang lebih baik kepada semua pelajar kolej teknikal seperti teknik pengurangan tekanan dan teknik kawalan minda dan badan. Modul ini membantu pelajar untuk belajar kawalan sendiri yang kemudian pelajar mempunyai keupayaan untuk mengawal kelakuan sendiri. Melalui modul MCBE-REBT (mental, Kognitif dan Tingkahlaku), hubungan antara jenis personaliti dan pencapaian akademik juga telah dinilai. Jenis-jenis personaliti iaitu sebahagian daripada modul dikelaskan dengan menggunakan Profail Personaliti Credo, manakala pencapaian akademik diukur dari segi PNG. Selain itu, pelajar juga dilatih untuk kawalan pembangunan sendiri dan teknik kawalan dalaman melalui latihan berasaskan Permainan Komputer Biofeedback. Keputusan dari Spearman r_s , korelasi matriks peningkatan hasil ujian (perubahan delta markah) pada jumlah sampel menunjukkan bahawa tiada hubungan yang signifikan antara peningkatan dalam PNG dan latihan biofeedback seperti yang ditunjukkan oleh pengurangan kadar degupan jantung. Keputusan ujian Friedman menunjukkan bahawa kadar jantung pelajar yang menerima latihan biofeedback semakin berkurangan dari mula hingga akhir latihan ($\chi^2(2) = 8.667, p = 0.011$). Oleh itu, ia menunjukkan bahawa dengan mengaplikasikan Modul MECB- REBT pelajar boleh mempelajari kemahiran menghadapi tekanan dan akan bersedia untuk mengurus emosi mereka serta secara tidak langsung berupaya dalam pengawalseliaan diri apabila menghadapi tekanan dan kebimbangan