



UNIVERSITI
TEKNOLOGI
MARA

Universiti Melaka

V-MIEX

28 JUNE
06 JULY
2022

VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

EDITORS AND COMPILERS:

Dr. Nur Hayati Abd Rahman
Dr Syukri Abdullah
Wan Hasmat Wan Hasan
Aini Qamariah Mohd Yusof
Norazlan Anual
Dr. Khairunnisa Abd Samad
Nordianah Jusoh @ Hussain
Rozana Othman
Norlela Abas
Azira Rahim

COVER DESIGN:

Adi Hakim Talib

PUBLISHED BY:

Division of Research and Industrial Linkages
UiTM Cawangan Melaka
KM26 Jalan Lendu,
78000 Alor Gajah, Melaka
Tel: +606-5582094 / +0606-5582190 / +606-5582113
Email: miixuitm@gmail.com
Website: <https://www.miiex.my/>
ISBN: 978-967-2846-04-8

All right reserved. No parts of this publication may be produces, stored in retrieval system or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise without permission of the copyright holder.

FOREWORD

ASSOC. PROF TS. DR MOHD RASDI ZAINI
Rector
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Welcome to Virtual-Melaka International Intellectual Exposition 2022 (V-MIIEEX 2022). It is an honour for me on behalf of UiTM Melaka Branch to thank all of you for joining the programme and we are proud to inform you that this is the 12th year consecutively, UiTM Melaka Branch is organizing this exposition.

V-MIIEEX 2022 is a platform to improve the commercialization collaboration among industries and communities and at the same time, we also give the opportunity to academicians and students to share ideas and increase their potential innovation products with the industries and communities through their projects. This exposition also serves as a platform to cultivate and upload the nation's innovation culture by presenting new ideas and research by young people, especially from academia, universities, college, high schools, and primary school students.

The economy and development of the country faced a challenging phase in 2021 due to the Covid-19 pandemic. We faced changes in business, education, society, and lifestyle. However, the pandemic proved to be a blessing in disguise as it somehow gave people ideas which would be beneficial to improve their lifestyle and solve problems that might occur in the future. Besides, the new digital landscape also inspires more innovation and new ideas that contribute to various activities such as business and industries. As a university that encourages the "Research, Innovation and Commercialization", this exhibition is organized to encourage more commercialization of products that are beneficial to scholars, industries, and communities to tackle such issues to improve our present and future life.

Since 2009, UiTM Melaka Branch has successfully become the organizer for this innovation exposition. We are not only successful in organizing the exposition, but I would proudly say that we have also successfully embarked on commercialized products. With the number of participants for this year's exhibition, we believe that more commercialized products will be produced in line with the theme for this year, "Road to Commercialisation".

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams as the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition, we hope that this collaboration never ends here.

Thank you.



DR. NUR HAYATI BINTI ABD RAHMAN
Deputy Rector Research & Industrial Linkages
Universiti Teknologi MARA (UiTM) Cawangan Melaka

It is a great pleasure to welcome all the participants and presenters to the Virtual Melaka International Intellectual Exposition (VMIIEX 22). I am delighted that through this periodic event, we managed to bring together scholars and professionals from various fields to engage through this virtual platform where ideas and breakthrough are discovered and leveraged for commercialization potential.

Since 2009 UiTM Cawangan Melaka has held twelve Invention and Innovation Design competitions and this year we are very honoured to have the second year of VMIIEX organized in digital platform. This has proven that despite the global challenges due to the recent pandemic, it is never an issue for UiTM Melaka to continuously organize this yearly prestigious event and to support the ministry's aspiration in leveraging creativity and innovation in the new norm.

VMIIEX 22 is organized with no sole objectives of accomplishing the University's KPI but instead we are determined to make this programme as the place to help heighten commercialization collaboration in research and innovation with the industry and community through joint exhibitions from various external organizations.

Our aspiration is to also provide exposure and opportunities to academic staff as well as students from public and private universities to engage in direct excellent scholarly activities with the industry and community through activities that can be measured and assessed. As for the Research and Industrial Linkages Office of UiTM Melaka, this exhibition is seen as the platform that can encourage active collaboration and knowledge transfer with industries; objectively to support various activities that will benefit all stakeholders from the various government agencies, local and international universities, industries and communities.

Through the theme of "Road to Commercialization" this year, V-MIIEX 22 is committed to have this event as a boulevard to inspire and cultivate creativity and innovation to the numerous levels of inventors through exposure on latest technologies, astonishing ideas and creative designs with great potential to be commercialized. For this year, we proudly introduce a special category which is the "Endemic Challenge" as the provision to the government of Malaysia's goal of moving towards the endemic.

To ensure that the competing products in this exhibition is not exclusively for the purpose of competition, V-MIIEX 22 is dedicated for the commercialization of highly potential innovation products, which is attained through its active collaboration with tailored needs industries. The commercialization effort was not for income generation purpose only but it aimed to spearhead the development of quality products in line with industrial needs and community benefit.

Therefore, it is a great honour for me on behalf of the Research and Industrial Linkages Office as well as the organizing committee to have all participants in this competition and I would like to express my highest gratitude especially to the Rector of UiTM Melaka and all strategic partners and sponsors for supporting the event.

To finish, I sincerely wish VMIIEX 22 a remarkable success. I believe that this will not be the only collaboration between UiTM Melaka and the respective partners and linkages, but a beginning of a long and fruitful cooperation in future.

Thank you very much.

road to commercialisation...

WAN HASMAT WAN HASAN
Project Director V-MIIEEX 2022
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Assalamualaikum and Warmest Greetings.

It gives me an enormous pleasure, on behalf of the organizing committee to welcome all participants and presenters to the Virtual -Melaka International Intellectual Exposition 2022 (VMIIEX '22) with the theme "Road to Commercialisation". We are honoured and glad to welcome all participants to this biennial event.

This is the second time that we have organized this biennial event virtually. V-MIIEEX 22 is an innovation competition, in which, innovation products, ideas and systems related to various science and technological fields are exhibited as a solution for the presented problems.

V-MIIEEX22 expectantly will be a platform that gathers experts from academies, scientists, and researchers, locally and internationally, to contribute towards the growth of scientific and technological knowledge in each participant's specialisation and expertise.

The competition also serves as a platform to give fresh exposure to the various level of inventors, as well as to encourage the culture of innovation design focused on latest technologies and related to new norms technologies and inventions due to COVID-19.

V-MIIEEX 22 is also hoped to be an avenue for gathering and disseminating the latest knowledge on ideas and acquisition of innovation among the participants. It is hoped that the competition will be able to open the mind of the participants towards latest technologies and design. It is also in line with the government's aspiration to encourage innovation activities in Malaysia.

As a final note, I would like to congratulate my fellow committee members for their tremendous effort, which have been critical to the event's success. In addition, I would like to thank our co-organizer, event sponsors and supporters. Optimistically, we wish that all new knowledge that is discovered, invented, or innovated will drive towards our future sustainability.

Thank you.

ABOUT V-MIIEEX

The world after COVID-19 is unlikely to return to the world that was. Despite the challenging pace during the pandemic, the strong rebound is expecting in this exciting year 2022. Malaysia is welcoming the great prospects ahead with positive impact on the country's economy and development. Hence, the hope for greater opportunities motivates for more creative thinkers to come up with innovative ideas that can be put forward to be harnessed to overcome similar problems in the future. V-MIIEEx 2022 is one of these platforms which contribute relevant ideas that could help communities of all walks of life cope with this pandemic.

UiTM has identified research, innovation, and commercialization to be among the core components and strategic effort towards becoming a well-known and prominent university. Aside from realizing this goal, with these components and efforts, fostering the development of knowledge, generating financial stability of the university, and producing knowledgeable academicians are also potentially achievable.

By having invention and innovation competition yearly, UiTM Cawangan Melaka is confident that it could further enhance creative and innovative abilities among staff and students. In support of the government notion which upholds the importance of innovation, UiTM Cawangan Melaka has taken the initiative of organising the Virtual Melaka International Intellectual Exposition (V-MIIEEx).

In instigating and nurturing the continuous culture of inventing and innovating, this event is an ideal platform for lecturers, administrative staff, students, and the public to showcase and commercialize their products or prototypes as well as novel ideas. The first IID which was held nationally in UiTM Cawangan Melaka in 2009, has successfully gathered and displayed more than 37 inventions and innovations. Accordingly, to continue this strong passion towards inventing and innovating, the IID competition should be continued and celebrated.

With that, the Division of Research and Industrial Linkages will be organising its 12th IID competition, the Virtual - Melaka International Intellectual Exposition (V-MIIEEx 2022) with the theme, 'Road To Commercialisation'. V-MIIEEx 2022 hopes to welcome 200 competing products to be showcased and commercialized, at the same time, attract attention of related and matching industry.

Objectives

1. Encourage and instill passion towards inventing and innovating among UiTM Cawangan Melaka staff, students and academicians of local and international higher education institutions;
2. Highlight distinguished talents of skillful inventors and exhibit intellectual products, inventions and innovations among local and private tertiary institutions, government and private agencies, including international participants;
3. Become an effective Business Matching platform for participating research products, matching industries and partnering government agencies;
4. Recognise, inspire and promote invention and innovation products to be patented and commercialized;
5. Increase passion towards inventing and innovating through research and boost interests of government and non-government agencies to obtain consultancy services from a line up experts of higher education institutions and UiTM Cawangan Melaka.

Determinants of Psychological Wellbeing Among Malaysian Tertiary Students

Hainnuraqma Rahim¹, Mohamed Saladin Abdul Rasool², and Maimunah Johari³
1,2,3 Faculty of Business and Management (FBM) & Centre of Islamic Philanthropy
and Social Finance (CIPSF), Universiti Teknologi MARA, Melaka

hainnuraqma@uitm.edu.my

Abstract

There is a need for our higher learning institutions to have good intervention strategies in place to improve students' psychological well-being (PWB). PWB is an important aspect of a student's life that has been garnering a lot of attention lately. Under the recent Covid-19 pandemic condition and the mandatory quarantine, depression, anxiety, stress and other psychological illness have been reported to have escalated among adults and children alike. Malaysian National Institute of Health in their National Morbidity & Health survey report 2019 stated that 2.3% of population is found to be displaying symptoms of depression and a whopping number of 424,000 children were also found to be the same. PWB is considered an important variable since it correlates with many other important variables, particularly in mental health. Nevertheless, studies on PWB among university undergraduates are limited. This in turn, limits our ability to provide interventions to increase their PWB. As such, the purpose of this study is to assess levels of psychological well-being among undergraduates and to suggest which variable can contribute to the enhancement of PWB. A sample of 385 students from private and public higher learning institutions in Malaysia were selected using a simple random sampling technique. Data was collected online using google form and analysed using SPSS and Smart-PLS. Expected findings show that creativity as a mediator in this study is seen to be significant in influencing PWB students in Malaysia.

Keywords: Psychological wellbeing, depression, anxiety, stress, higher learning institutions

1. INTRODUCTION

Psychological well-being (PWB) or mental well-being is a representation of an individual's psychological health based on positive psychological function. Researchers have revealed that PWB is supported by life happiness and satisfaction (Holliman et al., 2021). Besides, psychological well-being is an aspect that supports someone's future happiness, which is affected by their experience and education background. This is relevant from the perspective of students in higher learning education who are an important element of the society (Rubia et al., 2020). As mentioned by the literature, it plays a vital role in the development of students' mind from the perspective of academics. However, the emergence of the recent covid 19 pandemic have poised challenges and obstacles to students learning environment. Specifically, depression, anxiety and other psychological illness have been reported to have increased significantly among students (Dodd & et al., 2021). Thus, the present study aims to present this issues from the perspective of higher learning institutions. In addition, the state of psychological wellbeing among students in higher learning institutions would be examined. In general, this study seeks to examine the influence of family function, social support, emotional intelligence, and technostress in towards the psychological wellbeing among students in tertiary level. In addition, the mediating role of creativity would be

also be determined. Figure 1 below depicts the conceptual framework of our psychological wellbeing model.

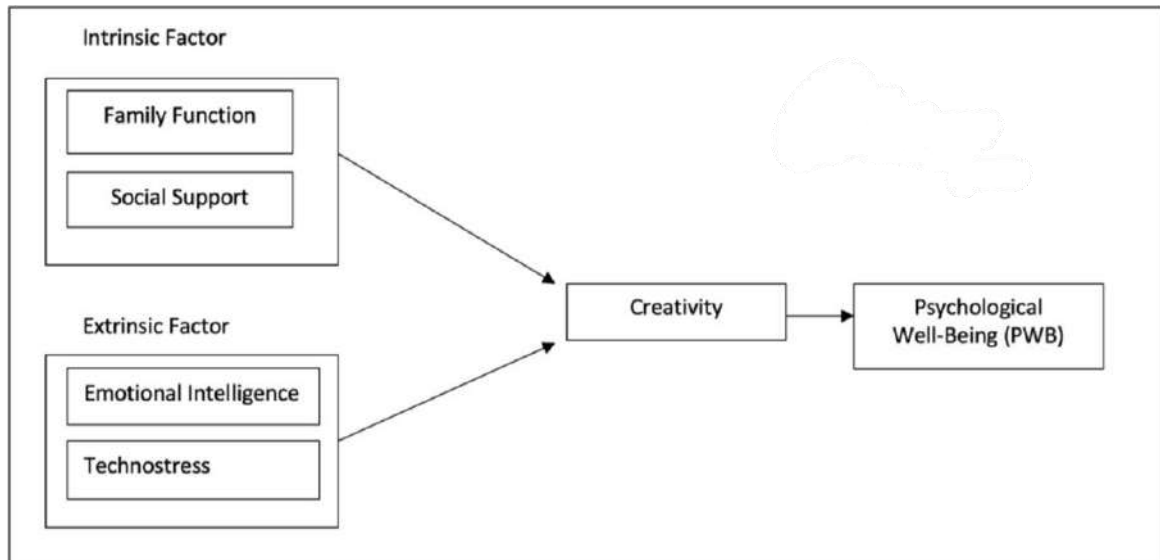


Figure 1: Conceptual framework of Psychological well-being among tertiary students

2. OBJECTIVES

Objective 1: To assess levels of psychological well-being among undergraduates

Objective 2: To determine which variable can contribute to the enhancement of PWB among undergraduates

3. NOVELTY & INVENTIVENESS

In our study, we discuss the key components and potential of the internal factors such as family function and family support and the external factors emotional intelligent and technostress related to psychological wellbeing among students of tertiary level. Besides, we propose a creativity factor that we believe to enhance psychological wellbeing. Therefore, our study is significant to the society in the sense of promoting ideas to observe mental health among our younger generations specifically students of tertiary level. This is because, mental health problems early in life are associated with adverse academic, occupational, health, and social outcomes suggesting that timely and effective treatment may offer substantial long-term benefits.

4. PRACTICALITY & USEFULNESS

Our study is significant to the society in the sense of promoting ideas to observe mental health among our younger generations specifically students of tertiary level. This is because, mental health problems early in life are associated with adverse academic, occupational, health, and social outcomes suggesting that timely and effective treatment may offer substantial long-term benefits. Covid-19 pandemic has created significant challenges for higher education

institutions and major disruptions in teaching and learning. The scenario has created distress among students and educators as both groups need to adapt with the new norm of teaching and learning process. Moreover, supporting the health, wellbeing, and learning experiences of all students and lecturers should be given a priority now and post-pandemic. Since the positive effect of psychological wellbeing in the academic industry is tantamount to resilience, enjoyment, engagement, lack of depression and interest; thus, our study is beneficial to the universities as students have been identified as a “very high-risk population” for mental health difficulties. Psychological distress could negatively impact student learning, participation, and their experience of university life; thus, it is important for universities to understand the student experience of stressors to better support their psychological wellbeing.

5. CONCLUSION

This study is expected to develop a comprehensive PWB framework for students in institutions in higher learning. The finding of this research is envisaged to highlight the significant factors contributing to PWB of the students. Specifically, the role of creativity was examined. Thus, this study was able to contribute the body of knowledge in the field of education management. Hence, further works in understanding the PWB of students in institutions in higher learning could be identified.

REFERENCES

- Dodd, Rachael H., Kevin Dadaczynski, Orkan Okan, Kirsten J. McCaffery, and Kristen Pickles. (2021). Psychological Wellbeing and Academic Experience of University Students in Australia during COVID-19. *International Journal of Environmental Research and Public Health* 18, no. 3: 866. <https://doi.org/10.3390/ijerph18030866>
- Holliman AJ, Waldeck D, Jay B, Murphy S, Atkinson E, Collie RJ and Martin A. (2021). Adaptability and Social Support: Examining Links With Psychological Wellbeing Among UK Students and Non-students. *Front. Psychol.* 12:636520. doi: 10.3389/fpsyg.2021.636520
- Rubia Cobo-Rendón, María V. Pérez-Villalobos, Darío Páez-Rovira, Marcela Gracia-Leiva. (2020). A longitudinal study: Affective wellbeing, psychological wellbeing, self-efficacy and academic performance among first-year undergraduate students. *Scandinavian Journal of Psychology*. 61(4)518-526 Doi: doi.org/10.1111/sjop.12