



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

Faculty of Social Sciences  
and Humanities

**SHARPS**  
SCHOOL OF HUMAN RESOURCE DEVELOPMENT  
& PSYCHOLOGY

# CONFERENCE PROCEEDING

# IconPsy<sup>2022</sup>

International Conference on Psychology

**THE ROLE OF PSYCHOLOGY IN THE IR 5.0:  
EMPOWERING HUMAN  
INTELLIGENCE AND WELL-BEING**

4<sup>th</sup> – 5<sup>th</sup> DECEMBER 2022 | Hybrid : Physical and Virtual

*Organized by:*

School of Human Resource Development and Psychology  
Faculty of Social Sciences and Humanities, UTM

<https://humanities.utm.my/iconpsy2022/>



First Edition 2022  
© School of HRD & Psychology 2022

All copyrights are preserved. No part of this publication may be reproduced or exchanged in any form by any means, whether electronically and/or mechanically including photocopy, recording or any means of storage of information and retrieval system, without the written consent of Chair, School of Human Resource Development & Psychology (SHARPS), Universiti Teknologi Malaysia 81310 Johor Bahru, Johor Darul Takzim, Malaysia.

Perpustakaan Negara Malaysia  
Data

Cataloguing-in-Publication

PROCEEDING OF THE INTERNATIONAL CONFERENCE ON PSYCHOLOGY  
(IConPsy 2022) / School of Human Resource Development & Psychology  
(SHARPS)

ISBN 978-967-15950-6-0

*Published by:*

School of Human Resource Development & Psychology (SHARPS),  
Faculty of Social Sciences & Humanities,  
Universiti Teknologi Malaysia,  
81310 Johor Bahru,  
Johor.  
MALAYSIA

*Electronic publication* - <https://humanities.utm.my/iconpsy2022/>

## CONTENT

Foreword

List of Proceeding Comitee

List of Articles

<b>Hubungan Kecerdasan Emosi Dan Prestasi Kerja Dalam Kalangan Kakitangan Sokongan Di Johor Bahru</b>	1-8
<i>Alyiah binti Mohamad Yunos dan Amalina Ibrahim</i>	
<b>A Conceptual Model of Women Employee Health Outcomes During Work from Home</b>	9-15
<i>R Zirwatul Aida R Ibrahim, Mazidah Mohd Dagang and Siti Nazilah Mat Ali</i>	
<b>Body Image Dissatisfaction and Self-Esteem Among Female Students</b>	16-30
<i>Vaina Shafana, Nor Akmar Nordin, Siti Aisyah Panatik and Irmawati Norazman</i>	
<b>A Systematic Review of Resilience as Moderator in the Relationship Between Technostress and Turnover Intention Among Academicians</b>	31-45
<i>Noor Rabiah Razali, Siti Aisyah binti Panatik and Ruzanna Shahrin</i>	
<b>The Relationship Between Self-Esteem, Fear of COVID-19 and Instagram Addiction Among Undergraduates in Malaysia</b>	46-54
<i>Lee Jia Jie, Loon Ling Lee, Thio Kai Qi and Ooh Seow Ling</i>	
<b>Challenges and Coping Strategies in Mothers of Children with Autism Spectrum Disorder (ASD)</b>	55-64
<i>Sofia Faricha Azizah and Mohd Nasir Bin Masroom</i>	
<b>Social Media and Job Performance among Human Resource Officers in Terengganu</b>	65-76
<i>Noor Athirah Syazana Mat Noor, Zulkifli Khair, Ana Haziqah A. Rashid, Noorsidi Aizuddin Mat Noor and Farhana Diana Deris</i>	
<b>Hubungan Antara Persekitaran Ergonomik Dengan Prestasi Kerja</b>	77-86
<i>Muhammad Nazri Norhajidin, Irmawati binti Norazman, Siti Aisyah binti Abdul Rahman dan Nor Akmar binti Nordin</i>	
<b>Women's perception on drivers and its association with Road Safety Environment in Malaysia: Using Confidence Interval-Based Estimation of Relevance</b>	87-91
<i>Irza Hanie Abu Samah, Nur Syafiqah A. Rahim, Abdul Shukor Shamsudin, Saraih Ummi Naiemah, Intan Maizura Abd Rashid and Mas Idayu Saidi</i>	

## **FOREWORD**

Proceeding of the International Conference on Psychology (IConPsy2022)

The International Conference on Psychology (IConPsy2022) was organized by the School of Human Resource Development & Psychology (SHARPS), Faculty of Social Sciences and Humanities (FSSH), UTM. This conference was held on the 4<sup>th</sup> and 5<sup>th</sup> of December 2022 through a hybrid method (physically and virtually).

IConPsy2022 particularly aims to provide a platform for academicians, researchers, and practitioners across the globe to exchange new ideas and findings as well as to discuss key issues pertinent to psychology, social sciences, and humanities.

The conference's main theme "The Role of Psychology in The IR 5.0: Empowering Human Intelligence and Well-Being" is soliciting high and original papers on the following strands of Mental Health; Clinical Psychology; Industrial and Organizational Psychology Abnormal Psychology; Cognitive Psychology; Cyber Psychology; Social Psychology; Educational Psychology; Islamic Psychology; Counselling Psychology; Psychometric; Personality Psychology; Positive Psychology; Health Psychology; Consumer Psychology; Human Factors; Human Resource Development; Organizational Change and Development; Organizational Communication; Occupational Safety and Health; Leadership in Organization; Sociology; Other: Social Sciences and Behavioral Sciences.

This 2-days conference has several objectives. First, to provide a knowledge-sharing platform for researchers, academics, and industry to share their knowledge, experience, and research results, as well as to contribute and exchange information on trends, directions, and challenges in psychology and social sciences. Second, to foster and encourage smart collaboration from various disciplines in the fields of psychology and social sciences such as industries and international universities in accordance with the policy and national development goals. Latly, to discuss and evaluate the philosophies, policies, roles, and contributions of social science and human resources at various levels.

In addition to the contributed papers, UTM Professor Adjunct, Prof. Datuk Dr. Mohammed Hatta Shaharom, and Assoc. Prof. Dr. Wendong Li from The University of Hong Kong were invited as keynote speakers. Both successfully astonish IConPsy2022 audiences with their interesting keynote speeches.

The Publishing Committee Members of the IConPsy2022 reviewed 84 abstracts and accepted all these submissions to be orally presented at the conference. This Proceeding hope will furnish the academic scientists of the world with an excellent reference book. We trust also that this will be an impetus to stimulate further study and research in all these areas.

Special thanks to FSSH and SHARPS top management for their continuous support, Dean of FSSH, Prof. Dr. Arief Salleh Rosman; Chair of SHARPS, Prof. Dr. Siti Aisyah Abdul

Rahman; Director of Human Resource Development (HRD), Dr. Irmawati Norazman and not forgotten to all IConPsy2022 proceeding committee members. Preparation of this proceeding would not be possible without the assistance of many colleagues and reviewers. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We would like also to thank Dr. Amalina Ibrahim and her team for organizing a successful conference.

Lastly, we would like to express our gratitude to all authors and participants for their contributions. We hoped all of you had an enjoyable scientific gathering in IConPsy2022. May all of you continue to produce many more quality research articles in the future and look forward to welcoming all of you again to our future conferences and proceedings.

See you again.

**MOHD NASIR BIN MASROOM, PhD**

*Chief Editors of IConPsy 2022*

## **LIST OF PROCEEDING EDITORS**

Dr. Mohd Nasir Masroom  
Dr. Mas Idayu Saidi

## **LIST OF PROCEEDING REVIEWERS**

Prof. Dr. Siti Aisyah Panatik  
Assoc. Prof. Dr Mohd Azhar Abd Hamid  
Assoc. Prof. Dr. Norashikin Mahmud  
Dr Amalina Ibrahim  
Dr Mohd Sharial Bungsu  
Dr Nur Asyikin Yakub  
Dr Junaidah Yusof  
Dr Farah Adibah Ibrahim  
Dr Mohd Saipol bin Mohd Sukor  
Dr Nor Akmar Nordin  
Dr Nurul Farhana Mohd Noordin

# Hubungan Kecerdasan Emosi dan Prestasi Kerja Dalam Kalangan Kakitangan Sokongan Di Johor Bahru

(Relationship between Emotional Intelligence and Work Performance among support staffs at Johor Bahru)

Alyiah binti Mohamad Yunos dan Amalina Ibrahim

Sekolah Pembangunan Sumber Manusia dan Psikologi, Fakulti Sains Sosial dan Kemanusiaan, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

Corresponding author: amalina.ibrahim@utm.my

01

## Abstract

Kajian ini dijalankan untuk mengenal pasti hubungan kecerdasan emosi dan prestasi kerja dalam kalangan kakitangan sokongan di Majlis Bandaraya Iskandar Puteri (MBIP), Johor Bahru. Objektif utama bagi kajian ini adalah untuk mengkaji hubungan kecerdasan emosi dan prestasi kerja dalam kalangan kakitangan sokongan. Kaedah pengumpulan data bagi kajian ini dijalankan menggunakan borang soal selidik yang dibangunkan oleh Salovey (1990) dan juga Koopmans (2014). Sampel kajian ini diperoleh daripada kakitangan sokongan MBIP, Johor Bahru. Sebanyak 87 orang responden telah diperoleh oleh pengkaji untuk diuji dalam kajian ini. Data yang diperolehi telah diuji dengan menggunakan perisian *Statistical Package for Social Sciences (SPSS)* versi 20.0. Hasil kajian berdasarkan analisis korelasi pearson, terdapat hubungan yang signifikan pada tahap tinggi, kuat dan sangat ketara antara pemboleh ubah kecerdasan emosi dengan pemboleh ubah prestasi kerja ( $r = 0.805$ ).

This study was conducted to identify the relationship between emotional intelligence and job performance among support staff in Iskandar Puteri City Council (MBIP), Johor Bahru. The main objective of this study was to examine the relationship between emotional intelligence and job performance among support staff. The data collection method for this study was conducted using a questionnaire developed by Salovey (1990) and also Koopmans (2014). The sample of this study was obtained from MBIP support staff, Johor Bahru. A total of 87 respondents were obtained by the researcher to be tested in this study. The data obtained were tested using Statistical Package for Social Sciences (SPSS) version 20.0. The results of the study based on pearson correlation analysis, there is a significant relationship at a high level, strong and very significant between the variables of emotional intelligence with the variables of job performance ( $r = 0.805$ ).

**Kata kunci:** Kecerdasan Emosi; Prestasi Kerja

## ■ 1.0 PENGENALAN

Prestasi seseorang pekerja penting terutamanya dalam memastikan struktur organisasi terus beroperasi bagi meningkatkan produktiviti yang lebih berkualiti. Dalam mencapai prestasi kerja yang maksima, ketekunan perlu diterapkan dalam diri setiap individu agar segala pencapaian yang melibatkan kejayaan dan keunggulan dapat menjadi kebanggaan sesebuah organisasi. Prestasi kerja individu disimpulkan tidak hanya diukur melalui jumlah produk yang dihasilkan, tetapi juga diukur dengan kehadiran, keterlibatan, kecekapan, kepimpinan dan rasa tanggungjawab. Prestasi kerja bagi organisasi awam diukur menggunakan petunjuk Prestasi Utama (*Key Performance Indicator*). Kejayaan sesebuah organisasi dilihat melalui cara pengukuran di dalam sistem petunjuk Prestasi Utama (Pekeliling Kemajuan Pentadbiran Awam Bilangan 2, 2005). Petunjuk prestasi utama merupakan instrumen pengukuran prestasi kakitangan sokongan yang dibangkitkan oleh Perdana Menteri Malaysia ke-6 dalam memantapkan "Budaya Kerja Pencapaian di Utamakan". Asas petunjuk prestasi utama adalah menetapkan tujuan, agar dapat dinilai dengan angka, dinilai dalam situasi stabil yang selaras dengan misi dan visi organisasi. Memandangkan prestasi kerja penting bagi sesebuah organisasi, oleh itu ia harus diberi perhatian. Hal ini kerana, kajian lepas menunjukkan terdapat

beberapa faktor yang memberi kesan prestasi kerja dalam organisasi. Menurut Ma *et al.*, (2013), pekerja berprestasi tinggi bukan sahaja menyelesaikan masalah secara aktif tetapi juga senang bekerja dengan pekerja lain. Apabila seseorang mempunyai kecerdasan emosi yang baik maka prestasi seseorang di persekitaran organisasi juga baik. Terdapat hubungan antara kecerdasan emosi terhadap prestasi kerja (Sudaryono, 2008; Erna Ariani, 2006). Manakala kajian yang dibuat oleh Akhtar, Ghufuran, Husnain, dan Shahid (2017), menerangkan kecerdasan emosi mempengaruhi secara positif prestasi pekerja. Malah Goleman (2001), juga mendapati bahawa kecerdasan emosi secara positif berkaitan dengan prestasi kerja. Menurut Bagshaw (2000), kecerdasan emosi dapat memanfaatkan emosi dengan berkesan, oleh itu ia adalah fungsi penting dalam kecemerlangan organisasi. Selain itu, kecerdasan emosi ialah keupayaan untuk mengatur dan menangani kehidupan emosi dengan kecerdasan, memelihara keseimbangan antara emosi dan pendedahan melalui kemahiran kesedaran diri, pengawalan diri, insentif diri, timbang rasa, dan kemahiran kemasyarakatan (Goleman, 2000). Sehubungan itu, matlamat utama kajian adalah untuk mengenal pasti hubungan kecerdasan emosi dan prestasi kerja dalam kalangan kakitangan sokongan di MBIP, Johor Bahru.

## ■ 2.0 KAJIAN LITERATUR

### *Kecerdasan Emosi*

Kecerdasan emosi didefinisikan sebagai satu bentuk kecerdasan sosial yang menyertakan kebolehan bagi mengawasi kata hati dan emosi diri sendiri dan orang lain, kelainan antara mereka dan memanfaatkan maklumat tersebut untuk mengarah perihai berfikir dan tindakan seseorang individu (Salovey & Mayer 1990). Abraham (2018) menyatakan bahawa emosi adalah semula jadi dan wujud dalam diri manusia. Menurut Abraham (2018), kecerdasan emosi ialah kemampuan seseorang untuk memahami dan mengurus diri sendiri atau emosi orang lain. Hubungan antara kecerdasan emosi, keupayaan sendiri, sikap dan kepuasan bekerja adalah penting dalam memberi kesan dan meningkatkan strategi individu semasa bekerja (Colomeischi, 2014). O'Boyle *et al.*, (2011) menyatakan, kecerdasan emosi merupakan komponen penting bagi sektor perkhidmatan dan lain-lain pekerjaan yang mengaitkan interaksi antara dua orang atau lebih. Berdasarkan beberapa pendapat tersebut, kecerdasan emosi dalam kajian ini dapat disimpulkan ia merupakan kemampuan untuk mengawasi emosi diri dengan orang lain, dapat membandingkan antara emosi tersebut, dan mengawal pemikiran dan tindakan diri dengan menggunakan kefahaman itu (Salovey & Mayer 1990). Kebolehan tersebut terbahagi kepada empat dimensi iaitu mengenal pasti emosi, memahami emosi, mengawal emosi dan pengurusan emosi. Oleh itu, berdasarkan pemahaman tersebut kecerdasan emosi juga dapat dirumuskan dengan prestasi kerja yang cemerlang dan persekitaran kerja berprinsip dilihat daripada tahap kecerdasan emosi yang tinggi (Farahbaksh, 2012).

Dimensi pertama ialah mengenal pasti emosi merujuk kepada kemahiran atau keupayaan bagi menentukan emosi diri dan emosi orang lain khususnya dari segi fizikal serta psikologi. Elemen ini juga mengaitkan kemahiran komunikasi emosi dan perasaan dengan betul dan mengekspresikan keperluan berdasarkan emosi. Contohnya, keupayaan seseorang dalam memahami ekspresi muka seseorang individu sama ada gembira atau bersedih. Dimensi kedua ialah memahami emosi merujuk kepada kemahiran bagi memproses maklumat emosi secara kognitif daripada diri sendiri mahupun orang lain. Ia juga dengan memahami hubungan yang kompleks dan mengenal pasti punca dan kesan emosi. Contohnya, emosi secara seiring seperti kekecewaan dan kemarahan. Elemen ini juga merujuk kepada kemahiran bagi mengenal pasti perubahan emosi. Sebagai contoh, daripada perasaan dikhianati kepada perasaan marah dan seterusnya kepada perasaan hiba.

Seterusnya, mengawal emosi merujuk kepada kemahiran individu untuk menghubungkan dan menghentikan emosi, bergantung kepada keperluan dan keadaan. Elemen ini pilihan dalam kajian, khususnya berkaitan stres dan ketahanan. Dimensi terakhir ialah pengurusan emosi iaitu kemahiran dalam menguruskan emosi diri dan emosi orang lain. Keperluan ini diperlukan bagi



menguruskan dan menyesuaikan tindak balas emosi bergantung kepada keadaan, mempunyai sikap terbuka terhadap perasaan, mempunyai pertimbangan dalam emosi dan menguruskan emosi dengan baik terhadap diri sendiri dan orang lain (Salovey & Mayer, 1997).

### **Prestasi Kerja**

Koopmans *et al.*, (2013, 2011) menyatakan prestasi kerja individu didefinisikan sebagai tingkah laku atau tindakan yang relevan yang dilakukan untuk mencapai matlamat dalam sesebuah organisasi. Prestasi kerja dikaitkan dengan keupayaan seseorang pekerja itu mencapai dan memenuhi matlamat kerja, jangkaan, sasaran dan piawaian yang diletakkan oleh sesebuah organisasi (Maathis & Jackson, 2000; Bohlander *et al.*, 2001). Selain itu, menurut Rajan (2015) prestasi kerja boleh dilihat sebagai satu aktiviti yang mampu dilakukan oleh individu untuk menyelesaikan tugas yang diberikan kepadanya melalui halangan yang dihadapinya menerusi sumber yang ada. Koopmans *et al.*, (2013, 2011) menyatakan tiga dimensi prestasi kerja iaitu prestasi tugas, prestasi kontekstual dan tingkah laku tidak produktif.

Pertama prestasi tugas merujuk kepada kemahiran individu melaksanakan tugas hakiki atau tugas teknikal dimana ia menyumbang kepada teras organisasi. Prestasi tugas merangkumi tingkah laku yang menerangkan prestasi tugas menerusi elemen seperti yang dinyatakan dalam rajah iaitu menyelesaikan tugas, kualiti dan kuantiti kerja, pengetahuan sentiasa dikemaskini, bekerja dengan tepat dan kemas, merancang dan menganjur, pentadbiran, membuat keputusan, menyelesaikan masalah, lisan dan bertulis, komunikasi, memantau dan mengawal sumber. Prestasi tugas juga telah ditetapkan dan tingkah laku dibentuk dalam peranan.

Prestasi kontekstual pula merujuk kepada tingkah laku yang menunjang kepada persekitaran organisasi, sosial, psikologi dimana asas teknikal adalah fungsi dan matlamat organisasi yang perlu dilaksanakan. Tingkah laku yang menerangkan prestasi kontekstual adalah seperti kerja tambahan, usaha, inisiatif, bersemangat, perhatian terhadap tugas, kepintaran, kerajinan, ketekunan, motivasi, dedikasi, proaktiviti, kreativiti, bekerjasama dengan menolong orang lain, sopan, komunikasi berkesan, hubungan interpersonal, komitmen organisasi. Melalui elemen-elemen tersebut prestasi kontekstual adalah berhubung dengan personaliti dan motivasi individu.

Di samping itu, prestasi kontekstual lebih kearah peranan tambahan yang menyokong persekitaran organisasi. Seterusnya, tingkah laku kerja tidak produktif didefinisikan sebagai tingkah laku yang boleh merosakkan kesejahteraan sesebuah organisasi. Tingkah laku tidak produktif boleh dilihat menerusi elemen seperti tingkah laku di luar tugas, lebih lama rehat, tidak hadir, mengadu, melakukan tugas dengan salah, menghina atau mengumpat mengenai rakan sekerja, bergaduh atau bertengkar dengan rakan sekerja, mengabaikan keselamatan, menyalahgunakan kuasa, bersikap agresif dan penyalahgunaan dadah. Tingkah laku kerja tidak produktif ini bersifat negatif dan turut memberi kesan yang negatif kepada organisasi disebabkan oleh tingkah laku dan sikap pekerja yang sedekimian.

### **■ 3.0 METODOLOGI KAJIAN**

Kajian ini berbentuk kuantitatif menggunakan borang soal selidik untuk mengenalpasti hubungan di antara kecerdasan emosi dengan prestasi kerja. Kajian dijalankan di Majlis Bandaraya Iskandar Puteri (MBIP). Responden kajian ini melibatkan semua kakitangan sokongan di MBIP, Johor Bahru. Pemilihan sampel kajian ini adalah menggunakan kaedah persampelan secara rawak iaitu setiap populasi akan berpeluang untuk menjadi sampel kajian. Seramai 150 orang kakitangan sokongan daripada pelbagai Jabatan di MBIP menjadi populasi bagi kajian ini. Berdasarkan Krejcie dan Morgan (1970) saiz sampel minimum yang

diperlukan ialah seramai 108 orang. Namun begitu, soal selidik yang dikembalikan adalah hanya 80.56% iaitu seramai 87 responden.

Borang soal selidik terdiri daripada pengukuran Skala *Likert* telah digunakan sebagai instrumen dalam kajian ini. *Self-Rated Emotional Intelligence Scale* (SREIS) yang diadaptasi oleh Salovey dan Mayer (1990) digunakan untuk mengenal pasti tahap kecerdasan emosi. Manakala, *Individual Work Performance Questionnaire* (IWPQ) pula digunakan untuk mengukur tahap prestasi kerja yang diadaptasi oleh Koopmans *et al.* (2014). Terdapat tiga bahagian di dalam borang soal selidik ini iaitu bahagian A, B dan C. Bahagian A berkaitan demografi seperti jantina, umur, status, bangsa dan jabatan. Bahagian B pula berkenaan kecerdasan emosi iaitu mengenal pasti emosi, memahami emosi, mengawal emosi dan pengurusan emosi. Akhir sekali, bahagian C merangkumi tiga elemen iaitu prestasi tugas, prestasi kontekstual dan tingkah laku kerja tidak produktif. Kesemua maklumat dan data yang diperoleh melalui borang soal selidik dianalisis dengan menggunakan sistem komputer *Statistical Package for Social Science* (SPSS) versi 20. Berdasarkan objektif-objektif kajian yang telah ditetapkan, analisis deskriptif dan analisis korelasi *Pearson* digunakan.

#### ■ 4.0 DAPATAN KAJIAN

Hasil analisis demografi mendapati majoriti responden di dalam kajian ini adalah perempuan iaitu seramai 81 orang responden (93.1%) manakala enam orang bagi responden lelaki iaitu (6.9%). Didapati majoriti responden berumur antara 31 hingga 40 tahun iaitu seramai 45 orang responden (51.7%). Seterusnya, majoriti responden kajian ini telah berkahwin iaitu seramai 61 orang responden (70.1%). Manakala responden berbangsa Melayu memonopoli kajian ini dengan jumlah 85 orang responden (97.7%). Bilangan responden yang berkhidmat dalam Jabatan Khimat Pengurusan adalah paling tertinggi iaitu seramai 26 orang responden (29.9%). Selain itu, skor min keseluruhan bagi tahap kecerdasan emosi yang diamalkan oleh kakitangan sokongan di MBIP, Johor Bahru adalah tinggi iaitu 4.02. Terdapat 12 item berkaitan kecerdasan emosi yang dibahagi kepada empat dimensi iaitu terdiri daripada mengenal pasti emosi, memahami emosi, mengawal emosi dan pengurusan emosi. Hanya satu dimensi kecerdasan emosi yang menunjukkan nilai min tahap yang sederhana iaitu memahami emosi. Secara keseluruhan, nilai purata min bagi kesemua dimensi kecerdasan emosi ialah 4.02. Seterusnya, skor min keseluruhan bagi tahap prestasi kerja diamalkan oleh kakitangan sokongan MBIP, Johor Bahru adalah tinggi iaitu 3.88. Terdapat 21 item berkaitan prestasi kerja yang terdiri daripada tiga dimensi iaitu prestasi tugas, prestasi kontekstual dan tingkah laku kerja tidak produktif. Hanya satu dimensi prestasi kerja yang menunjukkan nilai min tahap yang tinggi iaitu tingkah laku kerja tidak produktif. Secara keseluruhan, kesemua dimensi dalam prestasi kerja berada pada tahap yang tinggi dengan nilai purata min sebanyak 3.88. Di samping itu, hasil analisis korelasi bagi kecerdasan emosi dan prestasi kerja di MBIP, Johor Bahru menggunakan kaedah korelasi *Pearson* mendapati terdapat hubungan korelasi yang sangat kuat antara kedua-dua pemboleh ubah kecerdasan emosi dan prestasi kerja iaitu nilai korelasi 0.805 ( $p < 0.000$ ).

#### ■ 5.0 PERBINCANGAN DAN KESIMPULAN

Kecerdasan emosi merupakan aspek penting pekerja dalam sesebuah organisasi. Menurut Parke *et al.* (2015), pekerja yang boleh menguruskan emosi mereka dan menggunakan maklumat emosi dengan berkesan menunjukkan prestasi yang lebih baik. Selain itu, Joseph (2010) juga berpendapat bahawa kecerdasan emosi bukan sahaja penting bahkan ia merupakan satu elemen yang penting bagi mencegah emosi negatif seperti marah dan ragu-ragu. Hasil kajian ini menunjukkan bahawa majoriti kakitangan sokongan MBIP, Johor Bahru mempunyai tahap kecerdasan emosi yang tinggi. Hal ini menunjukkan kakitangan sokongan di MBIP, Johor Bahru mempunyai kecerdasan emosi yang stabil dan sesuai dengan tahap pekerjaan mereka. Menurut Singh (2015), walaupun kecerdasan emosi yang diperlukan berbeza-beza mengikut skop kerja, memiliki kecerdasan emosi yang tinggi atau sederhana tidak menjamin bahawa ia adalah ukuran kerja yang baik atau buruk. Tambahan lagi, Singh

menjelaskan pekerja yang mempunyai kecerdasan emosi yang seimbang dari pelbagai aspek mampu membantu seseorang pekerja tersebut mencapai matlamat pekerjaannya. Oleh itu, untuk mencapai matlamat pekerjaan kakitangan sokongan MBIP perlulah menyeimbangkan emosi. Hal ini kerana jika emosi seseorang individu tidak seimbang ia akan memberi kesan buruk terhadap organisasi dan individu.

Seterusnya, prestasi kerja merupakan elemen yang penting dalam mengukur prestasi dan tahap pencapaian seseorang pekerja. Model Koopmans *et al.* (2014) yang terdiri daripada tiga dimensi prestasi kerja iaitu prestasi tugas, prestasi kontekstual dan tingkah laku kerja tidak produktif menjadi panduan bagi pengukuran tahap prestasi kerja dalam kalangan kakitangan sokongan MBIP, Johor Bahru. Hasil kajian ini menunjukkan tahap prestasi kerja kakitangan sokongan MBIP, Johor Bahru berada pada tahap yang tinggi. Hal ini menunjukkan kakitangan sokongan MBIP, Johor Bahru berjaya melaksanakan tugas yang diamanahkan dengan baik dan seterusnya mencapai matlamat organisasi. Justeru itu, ia dapat meningkatkan imej perkhidmatan awam di dalam organisasi. Apabila prestasi kerja seseorang itu tinggi mereka dapat melaksanakan tanggungjawab secara cekap dan berkesan. Ia selaras dengan misi MBIP iaitu menyampaikan perkhidmatan cekap dan mesra.

Selain itu, hasil kajian menunjukkan bahawa terdapat hubungan yang kuat dan signifikan di antara kecerdasan emosi dengan prestasi kerja kakitangan sokongan MBIP, Johor Bahru. Apabila seseorang pekerja mempunyai kecerdasan emosi yang tinggi pekerja tersebut stabil dari segi emosi maka tiada halangan bagi pekerja tersebut untuk melaksanakan tugasnya. Menurut Bhattacharyya (2007), pekerja yang mempunyai kecerdasan emosi yang tinggi ini adalah termasuk dalam kalangan yang bermotivasi. Bhattacharyya (2007) turut menyatakan motivasi sama ada intrinsik atau ekstrinsik ia menjadi penyumbang kepada kepuasan kerja sekali gus meningkatkan prestasi dan produktiviti kerja seseorang. Apabila seseorang pekerja dalam keadaan bermotivasi yang tinggi secara tidak langsung ia akan meningkatkan lagi prestasi kerja dalam kalangan pekerja. Hasil kajian ini, turut disokong oleh Farabaksh (2012) yang menyatakan prestasi kerja yang cemerlang dipengaruhi oleh kecerdasan emosi. Hal ini dapat dilihat dalam kalangan kakitangan sokongan MBIP, Johor Bahru. Tambahan lagi, kajian oleh Swanalatha (2013) juga menunjukkan terdapat hubungan yang positif terhadap kecerdasan emosi dan prestasi kerja.

## ■ 6.0 KESIMPULAN

Kajian ini menyimpulkan terdapat hubungan yang kuat dan signifikan di antara kecerdasan emosi dengan prestasi kerja dalam kalangan kakitangan sokongan di MBIP, Johor Bahru. Selain itu, kajian ini turut mendapati bahawa tahap kecerdasan emosi dan prestasi kerja dalam kalangan kakitangan sokongan di MBIP, Johor Bahru adalah tinggi. Kecerdasan emosi dan prestasi kerja yang tinggi adalah penting kepada pekerja kerana ia dapat menyumbang kepada kecemerlangan organisasi. Di samping itu, limitasi kajian ini adalah dilaksanakan dalam fasa Pandemik Covid-19 menggunakan kaedah persampelan bertujuan (*purposive sampling method*). Kajian ini turut mencadangkan pengkaji akan datang dengan mengukur aspek lain seperti kecerdasan mental, kecerdasan spiritual dan dimensi kecerdasan emosi yang lain supaya ia dapat diteliti dan memberi kesan positif terhadap prestasi pekerja.

## Rujukan

- Abu Hassan Kasim. (1998). *Panduan penyelidikan dalam sains sosial*. Skudai: Universiti Teknologi Malaysia.
- Abraham, J. L. (2018). The extent to which emotional intelligence, locus of control and self-efficacy contribute to the perception of online learning. Eastern Michigan University.
- Adawiyah Masruhan (2018). Reaksi pelatih terhadap prestasi kerja. *Universiti Teknologi Malaysia*
- Akhtar, W., Ghufuran, H., Husnain, M., & Shahid, A. (2017). The effect of emotional intelligence on employee's job performance: The moderating role of perceived organisational support. *Journal Accounting & Marketing*, 6(3), 1–8.

- Ariani, Erna. 15 Maret 2006. Hubungan Antara Kecerdasan Emosional dengan Prestasi Kerja Karyawan Pada Departemen Injection Pylon PT Feng Tang, *Skripsi Tidak Dipublikasikan*
- Azizi Yahaya. (2007). *Menguasai penyelidikan dalam pendidikan*. Kuala Lumpur: PTS Publications & Distributors Sdn. Bhd.
- Bagshaw M (2000). Emotional intelligence – training people to affective so they can be effective. *Ind.Com. Train.*, 32(2), 61-65.
- Bhattacharyya, N. (2007). Dividend policy: a review. *Managerial Finance*.
- Berita Harian (2010). *Penjawat awam bermasalah perlu di atasi segera*. Retrieved from [cuepac.blogspot.com/2010/11/penjawar-awam-bermasalah-perlu-diatasisegera.html](http://cuepac.blogspot.com/2010/11/penjawar-awam-bermasalah-perlu-diatasisegera.html)
- Bradberry, T. (2003). *Emotional Intelligence Quick Book*. Mc Edition
- Carrillo, E. (2019). *Emotional intelligence as a predictor of job satisfaction, job burnout and job performance* (Order No. 22620454). Available from ProQuest Dissertations & Theses Global. (2307396696). Retrieved from <https://vpn.utm.my/dissertations-theses/emotional-intelligence-as-predictor-job/docview/2307396696/se-2?accountid=41678>
- Chaudhry, Amjad and Usman, Abid, An Investigation of the Relationship between Employees' Emotional Intelligence and Performance (2011). *African Journal of Business Management*, 5(9), 3556-3562, 2011
- Creswell, J., W. (2008). *Educational research planning, conducting, and evaluating quantitative and qualitative research (3th ed.)*. USA: Pearson Prentice Hall.
- Colomeischi, A. A. (2014). Emotional life as influence on work satisfaction. *Procedia-Social and Behavioral Sciences*, 159, 350-354.
- Davies, J. A. (1971). *Elementary Survey Analysis*. New Jersey: Prentice Hall.
- Dhiliwayo, P., & Coetzee, M. (2020). Cognitive intelligence, emotional intelligence and personality types as predictors of job performance: Exploring a model for personnel selection. *SA Journal of Human Resource Management*, 18 doi:<http://dx.doi.org.ezproxy.utm.my/10.4102/sajhrm.v18i0.1348>
- Dizer, Y. (2019). *Effects of job stress and emotional intelligence on job performance of employees* (Order No. 28242750). Available from ProQuest Dissertations & Theses Global. (2473780519). Retrieved from <https://vpn.utm.my/dissertations-theses/effects-job-stress-emotional-intelligence-on/docview/2473780519/se-2?accountid=41678>
- Dwight, H. (1992). Supervising the marginal employee. Dilemma and opportunity. *Management Quarterly*, 32(4): 23-30
- Farahbakhsh, S. (2012). The role of emotional intelligence in increasing quality of work life in school principals. *Procedia-Social and Behavioral Sciences*, 46, 31-35.
- Fiori, M. (2015). Emotional intelligence compensates for low IQ and boosts low emotionality individuals in a self-presentation task. *Personality and Individual Differences*, 81, 169-173.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). The emotional reality of teams. *Journal of Organizational Excellence*, 21(2), 55-65.
- Goleman, D. (2001). An EI-based theory of performance, in Cherniss, C. and Goleman, D. (Eds). *The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. Jossey-Bass. San Francisco. CA; 27-44.
- Goleman, D. (2006). *Emotional intelligence*. Jakarta: PT Gramedia Pustaka Utama.
- Goleman, Daniel (2000). *Working with Emotional Intelligence*. New York: Bantam Books
- Hernaus, T., & Mikulić, J. (2014). Work characteristics and work performance of knowledge workers. *EuroMed Journal of Business*.
- INTAN. (2014) *Urus tadbir sektor awam*. Slideshare. Retrieved from (9 Oktober 2013/2014) <http://www.slideshare.net/ctmz/pentadbiran-awam-korporat>
- Ishak, N. M., Iskandar, I. P., & Ramli, R. (2010). Emotional intelligence of Malaysian teachers: a comparative study on teachers in daily and residential schools. *Procedia-Social and Behavioral Sciences*, 9, 604-612.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: an integrative meta-analysis and cascading model. *Journal of applied psychology*, 95(1), 54.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. W., dan van der Beek, A. J. (2011). Conceptual Frameworks of Individual Work Performance: A systematic Review. *Journal of Occupational and Environmental Medicine*, 8-11.

- Koopmans, L., Bernaards, C., Hildebrandt, V., Van Buuren, S., Van der Beek, A. J., & De Vet, H. C. (2013). Development of an individual work performance questionnaire. *International journal of productivity and performance management*.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Vet, H. C. W. De, & Beek, A. J. Van Der. (2014). *Construct Validity of the Individual Work Performance Questionnaire*. 56(3), 331–337. <https://doi.org/10.1097/JOM.0000000000000113>
- Krejcie, V.R., & Morgan, W.D. (1970). *Determining Sampel Size for Research Activities, Educational and Psychological Measurement*. Duluth: University of Minnesota
- Ma, L., Xing, Y., Wang, Y., Chen, H. T. (2013). Research on the relationship among enterprise employee's job satisfaction, organizational commitment and job performance. *In Applied Mechanics and Materials*, 411, 2477–2480.
- Mangkunegara, Anwar Prabu. (2005). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung. PT. REMAJA ROSDAKARYA
- Mathis, R. L., & Jackson, J. H. (2000). *Human resource management*. South-Western College Pub..
- Mayer, J. D. & Salovey, P. (1990). Emotional Intelligence. *Journal of Imagination, Cognition and Personality*. Vol. 9, No. 3, 185-211. Baywood Publishing Co. Inc. Retrieved from: [http://www.unh.edu/emotional\\_intelligence/EIAssets/EmotionalIntelligenceProper/EI1990%20Emotional%20Intelligence.pdf](http://www.unh.edu/emotional_intelligence/EIAssets/EmotionalIntelligenceProper/EI1990%20Emotional%20Intelligence.pdf).
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). *Emotional intelligence: Theory, findings, and implications*. *Psychological inquiry*, 197-215.
- Mohd Majid Konting. (2000). *Kaedah penyelidikan pendidikan (5th ed.)*. Dewan Bahasa dan Pustaka. Kuala Lumpur.
- Mohd Najib Abdul Ghafar. (1999). *Penyelidikan pendidikan*. Skudai: Universiti Teknologi Malaysia.
- Naimah Md. Khalil. (2008). *Penilaian keberkesanan program latihan industri sangkutan ke industri pensyarah politeknik*. Tesis PhD (tidak diterbitkan), Universiti Kebangsaan Malaysia.
- Noel, T. W. (2009). The Impact of Knowledge Resource on New Venture Performance. *Journal of Small Business Management*, 47 (1), 1-22.
- Noraini Idris. (2010). *Penyelidikan dalam pendidikan*. Kuala Lumpur: Mc Graw Hill.
- O'Boyle Jr, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32(5), 788-818.
- O'Reilly, C.A. 111, & Weitz, B.A. 1980. Managing marginal employees: The use of warnings and dismissals. *Administrative Science Quarterly*, 25: 467-484
- Paais, M. (2018). Effect of Work Stress, Organization Culture and Job Satisfaction Toward Employee Performance in Bank Maluku. *Academy of Strategic Management Journal*, 17(5), 1-12
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS, (4th ed.)*. Australia: Allen & Unwin.
- Parke, M. R., Seo, M. G., & Sherf, E. N. (2015). Regulating and facilitating: the role of emotional intelligence in maintaining and using positive affect for creativity. *Journal of Applied Psychology*, 100(3), 917.
- Pekelliling Kemajuan Pentadbiran Awam, Bilangan 2. 2005. *Garis panduan bagi mewujudkan petunjuk-petunjuk prestasi utam atau key performance indicators (KPI) dan melaksanakan pengukuran prestasi di agensi kerajaan*. Jabatan Perdana Menteri Malaysia.
- Phillips, S. (2019). How emotional intelligence and job performance are impacted by various employee factors (Order No. 13901416). Available from ProQuest Dissertations & Theses Global. (2282534106). Retrieved from <https://vpn.utm.my/dissertations-theses/how-emotional-intelligence-job-performance-are/docview/2282534106/se-2?accountid=41678>
- Rajan, M.Phil., 2015. Motivation and Job Satisfaction: A Study of Pharmacists in Private Hospitals. *International Journal of Business and Management*. 1(5): h: 87-100
- Rosenthal, R. (1977). The PONS Test: Measuring sensitivity to nonverbal cues. In P. McReynolds (Ed.), *Advances in psychological assessment*. San Francisco, CA: Jossey- Bass.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: a policy-capturing approach. *The Journal of Applied Psychology*, 87(1), 66–80.
- Salovey, P., & Mayer, J. (1997). Emotional development and emotional intelligence : *Educational Implication: Basic Books*.

- Schutte, N.S., Malouff, J.M., Hall, L.E., Haggerty, D.J., Cooper, J.T., Golden, C.J., et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167-177.
- Shooshtarian, Z., Ameli, F., & Aminilari, M. (2013). The effect of labor's emotional intelligence on their job satisfaction, job performance and commitment. *Iranian Journal of Management Studies*, 6(1), 29-45A. Retrieved from <https://vpn.utm.my/scholarly-journals/effect-labors-emotional-intelligence-on-their-job/docview/1400455717/se-2?accountid=41678>
- Singh (2015). *Emotional Intelligence at Work: A Professional Guide*. New Delhi: Sage Publications.
- Srivastava, S. (2005). "You're calling me a racist?" The Moral and Emotional Regulation of Antiracism and Feminism. *Signs: Journal of Women in Culture and Society*, 31(1), 29-62.
- Sonnentag, S., Volmer, J., & Spychala, A. (2008). Job performance. *The Sage handbook of organizational behavior*, 1, 427-447.
- Sudaryono, H. Robert. 15 Februari 2008. Hubungan Antara Kecerdasan Emosional, Kompetensi Kerja dan Budaya Organisasi dengan Prestasi Kerja di PT Bina Sinar Amity Jakarta, *Disertasi yang dipertahankan di depan senat terbuka Universitas Negeri Jakarta*.
- Sy, T., Tram, S., & O'hara, L. A. (2006). Relation of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior*, 68(3), 461-473.
- Swarnalatha, C., & Sureshkrishna, G. (2013). Emotional intelligence and job satisfaction: A study among employees of automotive industries in India. *International Business Management*, 7(1), 46-49.
- Thorndike, R. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34(5), 275.
- Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8(4), 216-226.
- Winarno, J. (2010). Emotional Intelegence Sebagai Salah Satu Faktor Penunjang Prestasi Kerja. *Jurnal Manajemen Maranatha*, 8(1), pp. 12-19.

# A Conceptual Model of Women Employee Health Outcomes During Work from Home

R Zirwatul Aida R Ibrahim<sup>1</sup>, Mazidah Mohd Dagang<sup>1</sup>, Siti Nazilah Mat Ali<sup>1</sup>

<sup>1</sup>Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia

<sup>1</sup>Corresponding author: [zirwatul@umt.edu.my](mailto:zirwatul@umt.edu.my)

02

## Abstract

Since the spread of COVID-19, Work-From-Home (WFH) has been considered as the "new normal" for most employees globally. Most women, bear an increasingly disproportionate burden with multiple workloads during WFH, which constitutes a significant threat to their well-being. Based on the Demand-Induced Strain Compensation-Recovery (DISC-R) Model, the current study aims to examine the determinants of women employees' health outcomes during WFH, investigate the impact of associated factors (e.g. job demands, Work-Family- Conflict, Family-Work-Conflict, psychological detachment) towards women employees health outcomes during WFH and develop a comprehensive model of women employees health outcomes. The research is expected to provide an insight on a crucial role of psychological detachment and modelling a new model of employee health outcomes during WFH to ensure the participation of women in a healthy work environment thus enhance their health and wellbeing especially during WFH.

**Keywords:** women, employee health, work from home

## Abstrak

Sejak penularan COVID-19, Bekerja Dari Rumah (BDR) telah dianggap sebagai "normal baharu" bagi kebanyakan pekerja di seluruh dunia. Kebanyakan wanita, menanggung beban yang semakin tidak seimbang dengan pelbagai beban kerja semasa BDR, yang merupakan ancaman besar kepada kesejahteraan mereka. Berdasarkan Model Demand-Induced Strain Compensation-Recovery (DISC-R), kajian ini mengkaji penentu terhadap kesihatan pekerja wanita semasa BDR, menyiasat kesan faktor yang berkaitan (tuntutan kerja, konflik kerja-keluarga, konflik keluarga-kerja, detasmen psikologi) terhadap kesihatan pekerja wanita semasa BDR dan membangunkan model komprehensif terhadap kesihatan pekerja wanita. Penyelidikan itu dijangka memberi gambaran tentang peranan penting dalam detasmen psikologi dan memodelkan model baharu terhadap kesihatan pekerja semasa BDR untuk memastikan penyertaan wanita dalam persekitaran kerja yang sihat sekali gus meningkatkan kesihatan dan kesejahteraan mereka terutamanya semasa BDR.

**Kata kunci:** wanita, kesihatan pekerja, bekerja dari rumah

## ■1.0 INTRODUCTION

Since the spread of COVID-19, WFH has been considered the "new normal" for most employees globally. Nevertheless, WFH has posed a major challenge to parents in managing household burdens and WFH arrangements. As reported by UN Women (2020), 30 percent of women and 20 percent of men in Asia and the Pacific region experienced increases in unpaid domestic and care work intensity. For instance, school closures prompted parents to spend more time teaching, instructing and training their children. As a result of working from home, employees experience role blurring besides role conflict, which is the integration of behaviours and thoughts related to work and home roles, such as attempting to multitask on work and family tasks while at home (Schieman & Badawy, 2020). In other words, employees are unable to determine work demand and family demand.

Women are challenged more profoundly by blurring these roles than men with increased workloads due to confinement and quarantine. As a result of WFH, United Nations Development Programme (2020) reported that Malaysian women between 35-44 were twice



as likely as men more difficult to manage domestic responsibilities, even while holding full-time employment. The implementation of WFH has disproportionately affected women's physical, mental and emotional health. Workers who shifted to WFH are reported felt less connected to their colleagues (67.0%), taking less exercise (46.0%) and experienced musculoskeletal problems (39.0%) as well as disturbed sleep (37.0%) (Royal Society for Public Health, 2021).

In similar vein, 68.0 percent of Malaysian worker in various industries are feel pressured to manage a multiple roles simultaneously while WFH (Michael Page Malaysia, 2020). The shifted from the office to home has jeopardised the capacity to achieve the SDGs Agenda by 2030, especially to ensure healthy lives and promote well-being for all ages. To recover from the negative effects of multiple workloads, psychological detachment from work has been identified as a protection mechanism that restores the energy drain that occurs due to stress and strain at work (Nasharudin, Idris, Loh & Tuckey, 2020; Sianoja, Kinnunen, Makikangas & Tolvanen, 2018). Psychological detachment from work refers to the experience of recovery where individuals mentally disengage and cease thinking about job-related problems and opportunities (Sonnentag & Fritz, 2015). As stressed by Fauzi, Yusoff, Robat, Saruan, Ismail and Haris (2020), psychological detachment is a key element of recovering and replenishing vital mental energy during WFH.

In addition, studies have so far proven that workers experience negative outcomes when dealing with demanding tasks in workplaces (Beta, Zulkifli, Rahim, Ahmad & Mohamad, 2019; Koon & Pun, 2018). Studies determining whether this is due to emotional or physical demands are limited in Malaysia (Nasharudin, Idris, Loh & Tuckey, 2020; Nasharudin, Idris & Young, 2020).

## ■2.0 LITERATURE REVIEW

### 2.1 Overview: Work-From-Home

The implementation of the Work-From-Home (WFH) directive during the Movement Control Order (MCO) is the world's strategy for breaking the chain of Covid-19 outbreaks and Malaysia is no exception. Employees from the non-essential sector are instructed to WFH. WFH can be seen as provides the quality time for employees to enjoy time with family and save time in completing work and renders a comfortable new work environment in which they get a balance of work and life (Magnusson, 2019; Susilo, 2020). In different perspective, WFH creates conflicts within the family by facilitating greater intrusion into non-work domains (Dockery & Bawa, 2014; McCloskey, 2018).

In reality, from a gender perspective, married women receive more negative impacts as a result of the implementation of WFH, where they have to multitask office and homework. Women have high domestic work standards and strive to ensure those duties are completed before commencing WFH (Mustajab, Bauw, Rasyid, Irawan, Akbar & Hamid, 2020). Individual employees perform better when their colleagues do not WFH (van der Lippe & Lippényi, 2020). As reported, the WFH environment has changed significantly with thousands of jobs lost and women being affected at higher rates than men (Alon, Doepke, Olmstead-Rumsey & Tertilt, 2020; Oakman, Kinsman, Stuckey, Graham & Weale, 2020; Wenham, Smith & Morgan, 2020). In the context of Malaysian studies, research of WFH is scarce. Even though the idea of WFH is a fantasy to many people, its implementation among organisations is almost non-existent despite the nation moving towards Vision 2020 (Saludin, Karia & Hassan, 2020).

### 2.2 Job Demands and Health Outcomes

As defined by Karasek (1979), the psychological stressors involved in accomplishing the workload, stressors related to unexpected tasks, and stressors of job-related personal conflict are considered as job demands. Studies have illustrated that high demands and workloads are significant predictors of employees' health and well-being, such as sleep problems (Martins, Vasconcelos, Skene, Lowden & de Castro Moreno, 2016). Numerous studies have examined



the sub-constructs of job demands and its relationship to employees' health and well-being (Nahrgang, Morgeson & Hofmann, 2010; Park & Kim, 2013; Tuxford & Bradley, 2015).

Besides that, some scholars have consistently posited that the risk of developing musculoskeletal complaints increased with augmenting of physical demands (Oliv, Noor, Gustafsson & Hagberg, 2017; Stomberg, Tronstad, Hedberg, Bengtsson, Jonsson, Johansen & Lindvall, 2010). Apart from musculoskeletal disorders, physically demanding jobs may lead to psychosomatic complaints such as stomach or cardiac complaints, sleep problems, sweating, or bodily agitation (Sonnentag, Binnewies & Mojza, 2010; Warr, 2007). Subsequently, scholars discovered that emotional job demands play a vital role in creating emotional exhaustion by enhancing the feelings of inauthenticity and exhausting the employees' self-regulation resources (Azharudeen & Arulrajah, 2018; de Jonge, Le Blanc, Peeters & Noordam, 2008). In contrast, some studies found no relationship between emotional job demands and stress reactions such as emotional exhaustion (Van de Ven, van den Tooren & Vlerick, 2013; Peeters & Le Blanc, 2001).

Next, Meyer and Hunefeld (2018) state that empirical studies on cognitive job demands are scarce and little is known about its impact on employees' well-being. However, Fisher, Stachowski, Infurna, Faul, Grosch and Tetrick (2014) revealed that cognitive demands can slow down the rate of change of the brain's cognitive function. In a similar vein, the longitudinal study by Park and Kim (2013) exposed job demand as one of the subareas in job stress with an indirect effect on accidents through cognitive failures.

### 2.3 Work-Family Conflict and Health Outcomes

Work-family conflict (WFC) occurs when job demands impinge domestic and family commitments (Oakman et al., 2020). High WFC levels are associated with negative health outcomes, including both physical and emotional health (Jacobsen, Reme, Sembajwe, Hopcia, Stoddard, Kenwood, Stiles, Sorensen & Buxton, 2014; Leineweber, Westerlund, Chungkham, Lindqvist, Runesdotter & Tishelman, 2014). Case in point, scholars have consistently posited that both work-family-conflict (WFC) and family-work-conflict (FWC) positively related to lower-back pain, tension headache, sleeping problems, chronic fatigue, stomach pyrosis, tension diarrhoea and heart palpitation (Bettac & Probst, 2019; Piko & Mihalka, 2018). In addition, WFC stems from demands on both the work and family domains, which can lead to emotional exhaustion (Galletta, Portoghesi, Melis, Gonzalez, Finco, D'Aloja, Contu & Campagna, 2019; Wang, Tsai, Lee & Ko, 2019). Also, resources lost in the process of juggling work and family demands (WFC) can result in greater cognitive strain or failures (Lapierre, Hammer, Truxillo & Murphy, 2012; Panatik, Rajab, Shah, Rahman, Yusoff & Badri, 2012).

### 2.4 Psychological Detachment and Health Outcomes

Psychological detachment has been described as the process of 'switching off' when individuals mentally distance themselves from one's work while being away from the actual work situation, for instance, during a free evening or weekend (Sonnentag & Schiffner, 2019; Sonnentag & Bayer, 2005). Teachers reported increased in psychosomatic and musculoskeletal complaints whenever they experienced difficulties in psychological detachment (Varol, Weiher, Wendsche & Lohmaan-Haislah, 2021). In addition, another studies have demonstrated a link between greater degrees of burnout, particularly emotional exhaustion, and a lack of psychological separation from work during free time (Fritz, Yankelevich, Zarubin, & Barger, 2010; Siltaloppi, Kinnunen, & Feldt, 2009), lack of psychological detachment predicts an increase in exhaustion over time (Söderström, Jeding, Ekstedt, Perski, & Akerstedt, 2012; Sonnentag, Binnewies, & Mojza, 2010).

Thus, the following hypothesis were developed;

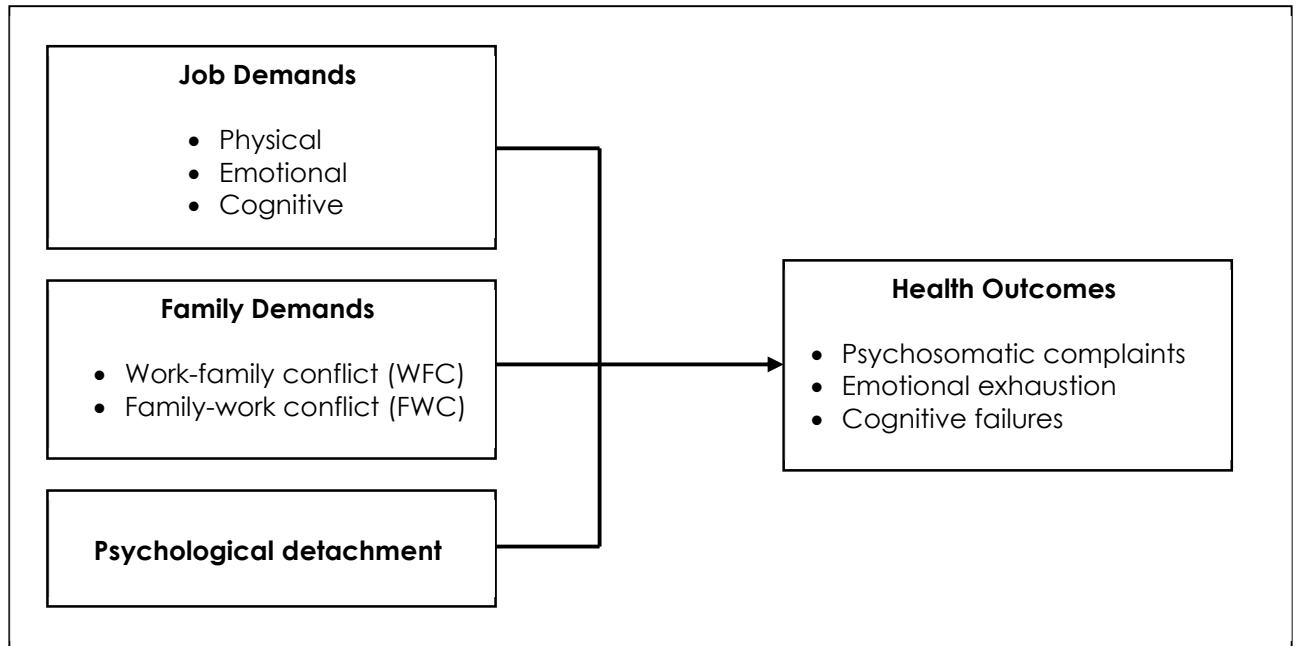
**Hypothesis 1:** Job demands effect the health outcomes of women employees during WFH.

**Hypothesis 2:** Work-family conflict effects the health outcomes of women employees during WFH.

**Hypothesis 3:** Psychological detachment effects the health outcomes of women employees during WFH.

### ■3.0 PROPOSED FRAMEWORK

As shown in Figure 1, a conceptual framework has been developed, that highlights the relationships between the job demands, work-family and psychological detachment as determinants of employee health outcomes.



**Figure 1** A conceptual framework of women employee health outcomes during work from home

### ■6.0 CONCLUSION

In conclusion, the study will fill the gap in knowledge as this literature review reveal a lack of significant extant literature on the specifics of the topic of investigation in this research. There is still a problem that hasn't been addressed or answered in previous studies for example there is very least number of studies examined about the impact of incorporation constructs i.e. job demands, work family conflict and psychological detachment employee health outcomes particularly focusing during WFH. With regards to the practical contribution, this study attempt to highlight the prosper work environment regardless the setting.

### Acknowledgment

This research has been funded by the Ministry of Higher Education (MOHE), Malaysia through Fundamental Research Grant Scheme (FRGS), Project Code (FRGS/1/2021/SS0/UMT/02/8). Also our gratitude to the Research Management Office (RMO), Universiti Malaysia Terengganu.

### References

- Alon, T.M., Doepke, M., Olmstead-Rumsey, J. & Tertilt, M. (2020). The impact of COVID-19 on gender equality (No. w26947). National Bureau of Economic Research.
- Azharudeen, N. T., & Arulrajah, A. A. (2018). The relationships among emotional demand, job demand, emotional exhaustion and turnover intention. *International Business Research*, 11(10), 8-18.

- Beta, R. M. D. M., Zulkifli, N., Rahim, N. H. A., Ahmad, M., & Mohamad, M. (2019). The effect of the job demand and perceived job burnout in the context of academicians' role performance. *Journal of Academia*, 7, 57-71.
- Bettac, E. L., & Probst, T. M. (2019). Work-family conflict, sleep, and health: A comparison of traditional and self-employed workers. *International Journal of Manpower*, 42(2), 240-259.
- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics*, 130(1), 165-218.
- de Jonge, J., Le Blanc, P. M., Peeters, M. C. W., & Noordam, H. (2008). Emotional job demands and the role of matching job resources: A cross-sectional survey study among health care workers. *International Journal of Nursing Studies*, 45, 1460-1469.
- de Jonge, J., Spoor, E. M. B., Sonnentag, S., Dormann, C., & van den Tooren, M. (2012). "Take a break?!" Off-job recovery, job demands, and job resources as predictors of health, active learning, and creativity. *The European Journal of Work and Organizational Psychology*, 21(3), 321-348.
- de Jonge, J., van den Tooren, M., von Nordheim, T., van Vegchel, N., Dormann, C., Dollard, M., & Cotton, S. (2009). *The DISC questionnaire: English version 2.1*. Eindhoven: University of Eindhoven.
- de Vos, D., Meijers, E., & van Ham, M. (2018). Working from home and the willingness to accept a longer commute. *The Annals of Regional Science*, 61(2), 375-398.
- Dockery, A. M., & Bawa, S. (2014). Is working from home good work or bad work? Evidence from Australian employees. *Australian Journal of Labour Economics*, 17(2), 163-190.
- Fauzi, M. F. M., Yusoff, H. M., Robat, R. M., Saruan, N. A. M., Ismail, K. I., & Haris, A. F. M. (2020). Doctors' mental health in the midst of covid-19 pandemic: The roles of work demands and recovery experiences. *International Journal of Environmental Research and Public Health*, 17(19), 7340.
- Fisher, G. G., Stachowski, A., Infurna, F. J., Faul, J. D., Grosch, J., & Tetrick, L. E. (2014). Mental work demands, retirement, and longitudinal trajectories of cognitive functioning. *Journal of Occupational Health Psychology*, 19(2), 231-242.
- Fotiadis, A., Abdulrahman, K., & Spyridou, A. (2019). The mediating roles of psychological autonomy, competence and relatedness on work-life balance and well-being. *Frontiers in Psychology*, 10(1267), 1-7.
- Galletta, M., Portoghese, I., Melis, P., Gonzalez, C. I. A., Finco, G., D'Aloja, E., Contu, P., & Campagna, M. (2019). The role of collective affective commitment in the relationship between work-family conflict and emotional exhaustion among nurses: A multilevel modeling approach. *BMC Nursing*, 18(5), 1-9.
- Idris, M. A., Dollard, M. F., & Winefield, A. H. (2010). Lay theory explanations of occupational stress: The Malaysian context. *Cross Cultural Management: An International Journal*, 17(2), 135-153.
- Karasek J. R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308.
- Kinman, G., & Jones, F. (2005). Lay representations of workplace stress: What do people really mean when they say they are stressed? *Work & Stress*, 19, 101-120.
- Koon, V. Y., & Pun, P. Y. (2017). The mediating role of emotional exhaustion and job satisfaction on the relationship between job demands and instigated workplace incivility. *The Journal of Applied Behavioral Science*, 54(2), 187-207.
- Kossek, E. E., & Thompson, R. J. (2016). Workplace flexibility: Integrating employer and employee perspectives to close the research-practice implementation gap. *The Oxford Handbook of Work and Family*, 255, 1-38.
- Lapierre, L. M., Hammer, L. B., Truxillo, D. M., & Murphy, L. A. (2012). Family interference with work and workplace cognitive failure: The mitigating role of recovery experiences. *Journal of Vocational Behavior*, 81(2), 227-235.
- Leineweber, C., Westerlund, H., Chungkham, H. S., Lindqvist, R., Runesdotter, S., & Tishelman, C. (2014). Nurses' practice environment and work-family conflict in relation to burn out: A multilevel modelling approach. *PLoS One*, 9(5), 1-9.
- Lu, L., Gilmour, R., Kao, S. F., & Huang, M. T. (2006). A cross-cultural study of work/family demands, work/family conflict, and well-being: The Taiwanese vs. British. *Career Development International*, 11, 9-27.
- Ma, X. (2018, July). The effect mechanism of work flexibility on employee job satisfaction. In *Journal of Physics: Conference Series* (Vol. 1053, No. 1, p. 012105). IOP Publishing.
- Magnusson, C. (2019). Flexible time—but is the time owned? Family friendly and family unfriendly work arrangements, occupational gender composition and wages: A test of the mother-friendly job hypothesis in Sweden. *Community, Work & Family*, 24(3), 291-314.
- Martins, A. J., Vasconcelos, S. P., Skene, D. J., Lowden, A., & de Castro Moreno, C. R. (2016). Effects of physical activity at work and lifestyle on sleep in workers from an Amazonian Extractivist Reserve. *Sleep Science*, 9(4), 289-294.

- McCloskey, D. W. (2018). An examination of the boundary between work and home for knowledge workers. *International Journal of Human Capital and Information Technology Professionals*, 9(3), 25-41.
- Meyer, S. C., & Hunefeld, L. (2018). Challenging cognitive demands at work, related working conditions, and employee well-being. *International Journal of Environmental Research and Public Health*, 15(12), 2911.
- Mierswa, T., & Kellmann, M. (2017). Psychological detachment as moderator between psychosocial work conditions and low back pain development. *International Journal of Occupational Medicine and Environmental Health*, 30(2), 313-327.
- Mustajab, D., Bauw, A., Rasyid, A., Irawan, A., Akbar, M. A., & Hamid, M. A. (2020). Working from home phenomenon as an effort to prevent COVID-19 attacks and its impacts on work productivity. *TIJAB (The International Journal of Applied Business)*, 4(1), 13-21.
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D.A. (2010). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 1-24.
- Naring, G., Vlerick, P., & Van de Ven, B. (2012). Emotion work and emotional exhaustion in teachers: The job and individual perspective. *Educational Studies*, 38, 63-72.
- Neto, M., Carvalho, V. S., Chambel, M. J., Manuel, S., Miguel, J. P., & de Fátima Reis, M. (2016). Work-family conflict and employee well-being over time: The loss spiral effect. *Journal of Occupational and Environmental Medicine*, 58(5), 429-435.
- Oakman, J., Kinsman, N., Stuckey, R., Graham, M., & Weale, V. (2020). A rapid review of mental and physical health effects of working at home: How do we optimise health?. *BMC Public Health*, 20(1), 1-13.
- Oliv, S., Noor, A., Gustafsson, E., & Hagberg, M. (2017). A lower level of physically demanding work is associated with excellent work ability in men and women with neck pain in different age groups. *Safety and Health at Work*, 8(4), 356-363.
- Panatik, S. A. B., Rajab, A., Shah, I. M., Rahman, H. A., Yusoff, R. M., & Badri, S. K. B. Z. (2012). Work-family conflict, stress and psychological strain in higher education. In *International Conference on Education and Management Innovation* (Vol. 30, No. 1, pp. 67-71).
- Peeters, M. C., & Le Blanc, P. M. (2001). Towards a match between job demands and sources of social support: A study among oncology care providers. *European Journal of Work and Organizational Psychology*, 10(1), 53-72.
- Piko, B., & Mihalka, M. (2018). Study of work-family conflict (WFC), burnout and psychosocial health among hungarian educators. *Central European Journal of Occupational and Environmental Medicine*, 24(1-2), 83-95.
- Raišienė, A. G., Rapuano, V., Varkulevičiūtė, K., & Stachová, K. (2020). Working from Home-Who is Happy? A Survey of Lithuania's employees during the COVID-19 quarantine period. *Sustainability*, 12(13), 5332.
- Raju, S., & Kumar, V. K. (2020). Quality of life of women working from home in COVID-19 lockdown: A questionnaire survey. *International Journal of Community Medicine and Public Health*, 7(10), 3947-3951.
- Saludin, N. A., Karia, N., & Hassan, H. (2020). Working from Home (WFH): Is Malaysia ready for digital society. *Entrepreneurship Vision*, 981-989.
- Schieman, S., & Badawy, P. J. (2020). The status dynamics of role blurring in the time of COVID-19. *Socius*, 6, 1-14.
- Sianoja, M., Kinnunen, U., Makikangas, A., & Tolvanen, A. (2018). Testing the direct and moderator effects of the stressor-detachment model over one year: A latent change perspective. *Work & Stress*, 32(4), 357-378.
- Stomberg, M. W., Tronstad, S. E., Hedberg, K., Bengtsson, J., Jonsson, P., Johansen, L., & Lindvall, B. (2010). Work-related Musculoskeletal disorders when performing laparoscopic surgery. *Surgical Laparoscopy Endoscopy & Percutaneous Techniques*, 20(1), 49-53.
- Susilo, D. (2020). Revealing the effect of work-from-home on job performance during the Covid-19 crisis: Empirical evidence from Indonesia. *The Journal of Contemporary Issues in Business and Government*, 26(1), 23-40.
- Tuxford, L. M., & Bradley, G. L. (2015). Emotional job demands and emotional exhaustion in teachers. *Educational Psychology*, 35(8), 1006-1024.
- UN Women. (2020). *Rapid Assessment Surveys on the Consequences of COVID-19 in Asia and the Pacific*. United Nations Development Programme. (2020). *How we worked from home: Findings from the WFH experience in response to the COVID-19 global health crisis in Malaysia*.
- Van de Ven, B., van den Tooren, M., & Vlerick, P. (2013). Emotional job resources and emotional support seeking as moderators of the relation between emotional job demands and emotional exhaustion: A two-wave panel study. *Journal of Occupational Health Psychology*, 18(1), 1-8.

- van der Lippe, T., & Lippényi, Z. (2020). Co-workers working from home and individual and team performance. *New Technology, Work and Employment*, 35(1), 60-79.
- Wang, I. A., Tsai, H. Y., Lee, M. H. & Ko, R. C. (2019). The effect of work-family conflict on emotional exhaustion and job performance among service workers: The cross-level moderating effects of organisational reward and caring. *The International Journal of Human Resource Management*, 32(14), 3112-3133.
- Warr, P. B. (2007). *Work, happiness, and unhappiness*. Mahwah, NJ: Erlbaum.
- Wenham, C., Smith, J. & Morgan, R. (2020). COVID-19: The gendered impacts of the outbreak. *The Lancet*, 395(10227), 846-848.

# Body Image Dissatisfaction and Self-Esteem Among Female Students

Vaina Shafana<sup>a</sup>, Nor Akmar Nordin<sup>b</sup>, Siti Aisyah Panatik<sup>c</sup>, Irmawati Norazman<sup>d</sup>

<sup>1</sup>Sekolah Pembangunan Sumber Manusia dan Psikologi, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

<sup>2</sup>Fakulti Sains Sosial dan Kemanusiaan, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

<sup>3</sup>Pusat Sains Kemanusiaan, Universiti Malaysia Pahang, 26300 Gambang Kuantan, Pahang

<sup>1</sup>Corresponding author: [akmar.nordin@utm.my](mailto:akmar.nordin@utm.my)

03

## Abstract

This study examined the relationship between body image dissatisfaction, body mass index, and self-esteem among female early adult. Participants were 255 female diploma aged between 17-23, recruited from active students at Poltekkes Kemenkes Aceh. The respondents completed an online questionnaire assessing body image dissatisfaction, self-esteem, and a range of demography information such as age, faculty, year of study, also numeric data of body weight and body height for assessing BMI. Descriptive analysis and Spearman Rank Test were used to analyse the data obtained. Cross-sectionally, we found that lower body image dissatisfaction was related with higher self-esteem, a significant negative relationship was found between body image dissatisfaction and self-esteem. Whereby, the BMI was significantly positive correlated with self-esteem among the samples while the level of body image dissatisfaction and self-esteem were indicated in low and moderate level, respectively. This paper ends with several limitations and recommendations of the study.

**Keywords:** *Body Image Dissatisfaction, Body Mass Index, Self-esteem, Female Students.*

## 1.0 INTRODUCTION

Early adulthood is a transition period in life from adolescence to the complete adult that may allow disruption of an individual's existing habits (Winpenny et al., 2018). People in their early adulthood, at the most, marks with the peak of physical changes. From about 18 to 25 years old, people's strength is at the greatest, some changes in the reproductive capabilities and their reflexes are the quickest (Feldman & Stephen, 2010). Other characteristics would also develop in this stage, such as becoming an independent individual, no longer financially relying on parents, and trying to mingle and build many relationships with more people in the broader area. Feldman & Stephen (2010) also stated that in early adulthood is a stage for young adult of the search for identity. Some questions such as "Who am I?" "How do I fit into the world?" or "What is life about?" assume unique concerns during early adulthood. In the stage of search self-identity, self-esteem plays a significant role.

Self-esteem most generally refers to an individuals' subjective evaluation about an overall sense of self-value (Cast & Burke, 2002). A person with positive self-esteem will be more comfortable to find her identity compared to another one who has a low level of self-esteem. However, as a matter of fact, low self-esteem is still a problem that is somewhat alarming among young Indonesian adult, in particular, early adult female. The existence of low self-esteem issue among young adults will disrupt them in finding ways to discover their identities. Female will be spending more to covers their issues, primarily because they want others to acknowledge their identities. One of the ways that considerably adopted by young female adult to incline and equilibrate their level of self-esteem is by putting more attention towards their physical appearance.

Nowadays, physical appearance has become an essential part of everyday life. Many early adult females are expected to have a distinct look and shape that considers as an 'attractive-ideal body image' (El Ansari et al., 2010). Having a particular physical look that meets society's criteria will unconsciously generate feelings of self-worth, which results in an increase in self-esteem. The picture of the body created can be both interpreted positively or negatively, the individual's feeling about her body relates to the amount of satisfaction or dissatisfaction feeling of own body shape, body weight and body parts. Hence, body image dissatisfaction defines as negative feelings and perceptions one's have towards their bodies (Shahyad et al., 2015).

According to statistic data obtained from IAPS (*Indonesian Association of Plastic Surgeon*) in 2016. The data demonstrated that 5 to 6 persons who are mainly young adult and adult are found visiting plastic and reconstructive surgery centre. It showed that 32-33% of the young adult and adult female visitors are doing nose job (*rhinoplasty*), double eyelid job (*blepharoplasty*) stand on 28%, and another is performing the fat-related surgery.

The body mass index (BMI) was first introduced in the early 19th century by Quetelet. BMI has been widely accepted among population-based research to define and classify body mass as a personal, social, and medical issues. BMI can be explained as one of the indexes use for defining fat percentage and estimating persons' health of body weight based on a their heights (Blackburn & Jacobs, 2014). Further, Nuttall, (2015) added that BMI are commonly interpreted as an index of a person's fatness. Body fatness, for decades, has become an important physiology and social issues for humans, this can be seen from the ancient Egypt heritage such as murals and statues where 'full-figured' man and woman were never exhibit on it, this suggested that body fatness among both gender were not considered to be a desirable trait on that time (Arnold, D., Green, L., & Allen, 1997). Moreover, fatness among women also has been depicted before the 1920s in which females with hourglass body shape were considered ideal. Continues to the 1920s era, when the high-cut dresses are introduced results in the thinness was not only desirable but required among females. These concepts are still give impact on the views of body especially females' body figures until today, the importance of body mass index are found affected personal and society issues as well as medical-related issues (Nuttall, 2015).

The rates of weight problems has escalated in many developing countries (Rachmi et al., 2017). The Basic Health Survey (Riskesdas) that involved more than 1.2 million people in 2018, reported that 1 out of the 3 adults in Indonesia are having weight problems. The survey further showed that overweight cases among Indonesian adult aged  $\geq 18$  continues to increase, in 2010, 11.5% adults were reported having overweight and increase to 13.6% in 2018. Globally, obesity rates and risks are more pronounce among women rather than men (Hamdy & Khardori, 2020) the same trends also found among women in Indonesia (Rachmi et al., 2017).

Recently, transition of lifestyle in Indonesia such as increased number of junk food restaurants consumptions of high sugar and calorie beverages, along with increase of physical inactivity are the reason behind the grow of obesity and over rates (Roemling & Qaim, 2012). Aside from obesity rates are having higher risks of acquiring non-communicable disease, youngers including those in the college-aged with high weight problems were reported suffering from behavioural problems and poor body satisfaction (Shloim et al., 2014) also significantly related to self-esteem (AlAhmari et al., 2019). Moreover, data from Behavioural Risk Factor Surveillance System in Lavrakas, (2013) demonstrated that rates of people in overweight and obese group are increasing at the fastest among early adults and adulthood aged between 18 to 30 years old. This data showed that weight increment among early adults are more common than weight loss or stability. One of the possible factor of this situation is the early adult perception of themselves, positive or negative perception which refers to the level of self-esteem.

The arising issue of self-esteem among young female Indonesian is because there are still many young females who make physical appearances as the root of their concernment. According to a survey conducted by The Dove Girl Beauty Confidence reported that 54% of young

females in the world have low self-esteem. Additionally, 7 out of 10 young females in Indonesia are withdrawn from attending important activities. Because of having lack self-confidence about their appearances, also they were reportedly reluctant to join the family gathering, group-based activities, and other critical public events that may help them to reach their full potential.

The increasing phenomenon of the consideration and desire to have an attractive body among young female adults is vital to be given attention. This phenomenon can be seen through the proliferation of, slimming centre, fitness centre, and beauty saloon and aesthetic centre in Indonesia (Henggaryadi, 2012). Accordingly, people with low level of body image dissatisfaction would start feeling of self-worth and confidence, feeling more valuable, being socially active, and can appear more convincing in variety of situations. Of all the personal attributes that influence the development of body image, Cash (2002) in Baker & Gringart (2009) reported that self-esteem as the most pivotal influence. Hence, the most common factor that has a significant relationship with self-esteem was body image dissatisfaction (Gatti et al., 2014; Van Den Berg et al., 2010) and body mass index (AlAhmari et al., 2019; Kiviruusu et al., 2016; Pilafova et al., 2007).

Female early adult was chosen as the respondents of the present study, the reason is female in this phase are experiencing physical changes and disruption (Feldman & Stephen, 2010), involve in the diet and weight loss program (Paxton et al., 1991), greater concern about physical appearance (Mellor et al., 2010), high expenditure to reach a goal of having an 'ideal appearance' (Hesse-Biber et al., 2006), and often involve in the body image distress (T. F. Cash, 2012). Also, previous studies reported a consistent on gender differences towards level of body image, which reported that female exhibit greater negative body image than male (Mellor et al., 2010). Then, respondents are those who pursuing study in the healthcare field in which respondents are expected to have good evaluation towards their body images and body mass according to health sciences.

Presently, there is a lack of study that focused on the relationship between body image and self-esteem among female diploma students in Indonesia, especially Aceh. Similarly, lack of existed literature about relationship of body mass index and self-esteem especially among female students in Aceh emerges the present study. Therefore, the significance relationship between the variables is still unidentified, as well as, the level of body image and self-esteem among female diploma students in Aceh is also still unknown up to this point.

Based on the discussion, studying the relationship between body image dissatisfaction and self-esteem were relevant for the benefit of many parties, including the students themselves, the institutions, and future researchers.

The research objectives are as follows:

- i. To determine the level of body image among female students.
- ii. To determine the frequency of body mass index among early adult female diploma students in Poltekkes Kemenkes Aceh.
- iii. To determine the level of self-esteem among female students.
- iv. To identify the relationship between body image and self-esteem among female students.
- v. To identify the relationship between body mass index and self-esteem among female students.

## ■2.0 LITERATURE REVIEW

### *Body Image Dissatisfaction*

Body image is an attitude that a person has towards her body; the attitude can be judgements in either positive or negative about her body (Thomas F. Cash, 2004). Body image also refers as the form of the mental image towards the body. It associates with the feelings people have



about their bodies, whether it is satisfied or unsatisfied feelings. Body image dissatisfaction is the picture of body image disturbance that result from the negative thoughts and feelings of body appearance (Quittkat et al., 2019). Body image dissatisfaction, according to Cash, (2004) is an individual's negative attitude of her body which resulted from the discrepancy between perceptions, thoughts, and feelings of body and the body concern. The discrepancy also formed because there is differences between how body image perceived by individual and how body appearance perceived in the society and culture (Heider et al., 2018).

In this study, body image dissatisfaction refers to individuals' negative behaviours toward their own bodies resulted from how they view and perceive their bodies. The level of body image dissatisfaction will be measured through the *Body Shape Questionnaire (BSQ-34)*, a unidimensionality self-report scale consists of thirty-four items related to body shape (Cooper et al., 1987).

#### **Body Mass Index (BMI)**

Body mass index refers to the indicator of thickness or thinness of an individual (Nuttall, 2015). Body mass index is reliable metric used for defining the body mass of one's derived from a person's body height and weight the categorizing it into groups which be the index of one's fatness or body fat (Ricciotti & Hye-Chun, 2016).

In this study, BMI refers to an index or an indicator of an individual's body fatness. Measure of body fat derived from the individual's body weight and body height. Body Mass Index classified into four: underweight group, normal weight group, overweight group, and obese group. The body mass index ( $\text{kg}/\text{m}^2$ ) determined from the ratio of the individual's body weight in kilograms (kg) to the square of individual's body height in meters ( $\text{m}^2$ ) (Keys et al., 1972).

#### **Self-esteem**

Research in self-esteem had a great, prolific history in the field of psychology. The word of Self-esteem itself, according to Rosenberg, (1965) is a totality of oneself both negative and positive orientation, thoughts and feelings he or she has regarding herself as an object. Generally, self-esteem is a stable trait over time, with some are having a high level of self-esteem while others are not.

In this study, self-esteem refers to overall self-esteem, in which how female diploma students apprehend their self. The level of self-esteem will be measured through ten items in the *Rosenberg Self-esteem Scale (RSES)* (Rosenberg, 1965)

#### **Relationship between Body Image Dissatisfaction and Self-esteem**

A number of authors have revealed the relationship between body image dissatisfaction and self-esteem. Data from several studies are most suggested that there are significant negative relationship between body image dissatisfaction and self-esteem (AlAhmari et al., 2019; Nugroho, 2017; Pratiwi & Sawitri, 2020; Shahyad et al., 2015; Van Den Berg et al., 2010).

A recent study was conducted in Indonesia examined the relationship between body image dissatisfaction and self-esteem among female early adults. Research by (Pratiwi & Sawitri, 2020) revealed that there is a significant negative relationship between the two variables. Similarly, another research from Indonesia regarding the two variables was done by (Nugroho, 2017), also showed similar result. Another similar results was found conducted in Saudi Arabia by (AlAhmari et al., 2019; Shahyad et al., 2015).

**Hypothesis 1: There is a significant negative relationship between body image dissatisfaction and self-esteem among early adult female diploma students in Poltekkes Kemenkes Aceh.**

#### **Relationship between Body Mass Index and Self-esteem**

Several studies related to establishing the relationship between body mass index and self-esteem has been done. Existing literature regarding the two variables are most common from

western countries such as United States (Kaminsky & Dewey, 2014; McClure et al., 2010; Pritchard, 2010), in Finlandia, Europe by Kiviruusu et al., (2016) and eastern countries, Saudi Arabia (Al-shehri et al., 2016), however, few existed literature that explore the relationship between BMI and self-esteem among early adult or college aged (AlAhmari et al., 2019). Most of the studies indicated a negative relationship between BMI and self-esteem.

Some research has been done in middle east country, among college-aged female Saudi Arabian (AlAhmari et al., 2019), with the same variable involved, also included adolescents and male respondents (Al-shehri et al., 2016). Even with that, the finding was consistent among the variables, which negative and significant correlation. Similarly, several studies conducted in Indonesia that included dissimilar characteristic (age group and gender) with the present study also highlighted similar result (Nugroho, 2017).

**H2. There is a negative relationship between Body Mass Index and Self-esteem among early adult female diploma students in Poltekkes Kemenkes Aceh.**

### ■3.0 METHODOLOGY

#### *Research Design*

This study is a quantitative correlational study aimed to identify the relationship between body image dissatisfaction and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh. The independent variable was body image, while self-esteem was the dependent variable in this study. Figure 1 illustrates the conceptual framework of this study.

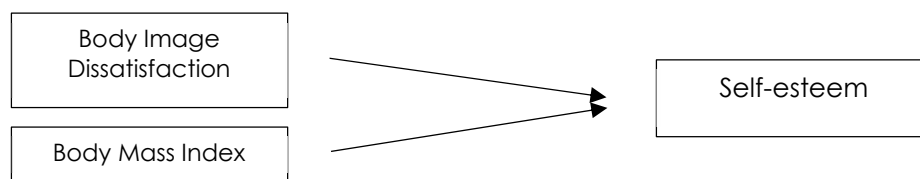


Figure 1 Conceptual Framework

#### *Population and Sample*

In this study, the population is active female diploma students at Poltekkes Kemenkes Aceh. Samples are chosen from the study population. The sampling method adopted in this study is non-probability sampling, specifically, convenience sampling. The ground of choosing a convenience sampling method to be applied in this study is because it allows the researcher to use any potential participants who fit the research criteria that required in the study, easy accessibility, and immediate approval for undertaking and being part of the present study (Kumar, 2019). This sampling method had allowed the researcher to choose only respondents who were meet the study criteria, which are early adult female and currently pursuing a diploma (D3) degree at Poltekkes Kemenkes Aceh.

#### *Research Instruments*

The instrument used in the study was adopted from well-known measurement instruments related to the variables. The instrument used in this study is a self-administered questionnaire, which comprises of three sections. Section A for respondents' demographic information, Section B, on the other hand, contains a questionnaire measuring for body image of the respondents, and Section C, the last Section, which is a questionnaire of self-esteem. The total number of items was 48, including the demographic items and the instrument items. Half of the items on the demographic section were open questions or numeric data (body height and body weight measurement). While others were close-ended questions that required the respondents to tick on the answer that described them best (Kumar, 2019).

In section A: Demography, participants are required to provide their demographic information based on four classifications. The answers for faculty and year of study were in multiple choices to help respondents to answer promptly. Meanwhile, the measurement for age and body mass index (BMI) will use self-report numeric data in which participants will report the exact number of their age, body weight in kilograms and body height in centimetres. Then, value derived from the body height and weight of the respondents will be calculated using BMI formula.

Section B of the questionnaire was used to measure body image, BSQ-34 (The Body Shape Questionnaire) developed by Cooper et al., (1987) was used in this study. This questionnaire is uni-dimension, focusing on body shape, which consists of thirty-four items. These items assess the participants' level of negative body image over the past four weeks. The Body Shape (BSQ-34) Questionnaires' items are open-ended questions to determine the level of body image, the Indonesian version of BSQ-34 will be employed. Likert-scale ranging from 1 (never) to 6 (always) used in the questionnaire.

Lastly, in the last section, Rosenberg's Self-esteem Scale (RSES) used by the researcher to determine the level of participants' self-esteem. This questionnaire is consists of ten items that measure both positive and negative feelings about the self. All items are answered using a 4-point Likert scale format ranging from strongly disagree to strongly agree. Similarly, with the body image instrument, the Indonesian version of RSES also will be used in this study for the ease of participants to understand each item better.

The questionnaire used in this study had been tested among Indonesian participants for reliability. According to Table 1, both of the questionnaires are reliable since all the Cronbach's alpha values exceeded 0.70. Hence, a pilot study had also been done among 30 female diploma student in Poltekkes Kemenkes Aceh to determine the reliability of the questionnaires. Then, these 30 students are excluded from the primary research. Table 2 presented the Cronbach's alpha value from the pilot analysis, which 0.978 was gotten from body image questionnaire, and Cronbach's alpha value of 0.844 was gotten from self-esteem questionnaire.

Table 1 Cronbach's alpha result from past studies

Variables	Cronbach's Alpha Value	References
Body Image	.978	(Paratmanitya et al., 2012)
Self-esteem	.844	(Lannakita, 2012)

Table 2 Cronbach's alpha result from the pilot study

Variables	Cronbach's Alpha Value
Body Image	.975
Self-esteem	.885

### Data Analysis

Demographic analysis, preliminary analysis, descriptive analysis, and Spearman Correlation were used to analyse the data and achieved the study objectives with International Business Machines Statistical Package for Social Science (IBM SPSS) version 26.0 as the data processor.

The demographic data of this study interpreted based on each of the factors included in the research, which were age, faculty, year of study, body weight, and body height. Those factors analysed based on the frequency and the percentage to describe the distribution of all the participants. Then, there are two kinds pf preliminary analysis run in this study, which were

normality test and reliability test. Lastly, Spearman Rank Test was used to fulfilled the third and fourth study objectives and determined the significance of the relationship between variables. Total of 255 sets of questionnaire were distributed through Google form to the participant and were used for the final analysis.

#### ■4.0 RESEARCH FINDINGS

##### *Demographic Analysis*

Table 3 reveals the demographic analysis findings on this study. It shows that majority of the respondents' age were 19 years old with a percentage of 28.2%, followed by the second-highest which were those who aged 18 years old with 23.5%. In contrast, the lowest percentage among all age were 0.8% for those who were 23 years old. As for the year of study at Poltekkes Kemenkes Aceh, it revealed that 30.6% of respondents were in the first year of study. Respondents who were in the second year was the second-highest with the percentage of 27.1%, further the table shows the last two categories were third year with 22.7% and fourth year with 19.6%. Additionally, there are six courses offered at Poltekkes Kemenkes Aceh as stated in the table under category of faculty. Majority of the respondents were dental health diploma students with 28.2% and the 11.4% of respondents were studying nutrition which is the lowest percentage among all faculties.

Table 3: Respondents' Demography (n=255 respondents)

Factor	Category	Frequency	Percentage
<b>Age</b>	17	20	7.8
	18	60	23.5
	19	72	28.2
	20	54	21.2
	21	38	14.9
	22	9	3.5
	23	2	0.8
<b>Year of Study</b>	First year	78	30.6
	Second year	69	27.1
	Third year	58	22.7
	Fourth year	50	19.6
<b>Faculty</b>	Nursing	36	14.1
	Nutrition	29	11.4
	Pharmacy	16	16.1
	Obstetrics	61	23.9
	Sanitation	41	14.1
	Dental Health	72	28.2
<b>Total Respondents</b>		255	

##### *Level of Body Image Dissatisfaction among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh*

Table 4 shows the descriptive statistics of body image dissatisfy obtained from 255 respondents. The overall mean score of BSQ items obtained was 2.38, which categorised into low level. Of all thirty-four items, the ranged of mean scores were vary from 1.25 to 3.92. Also, the table showed no items of body image dissatisfaction measurement indicated high level.

The highest mean value of the items was still among the moderate level of body dissatisfaction, was from the item 15 (Mean=3.92), "Have you avoided wearing clothes which make you particularly aware of the shape of your body?", most of the respondent were claimed that they always choose to avoid wearing tight clothes that can expose their body shapes. The assumption of respondent chose 'always' on this item was also due to value they hold as a

female moslem in which females are advised to cover their bodies and to avoid wearing "wrap" clothes that may expose the body curves, moreover, the respondents are mostly comes from Aceh, in which Aceh is a province that be known as Islamic city where the historical, cultural, also moral and value were highly related with Islamic cultures and beliefs.

Besides, item 26, "Have you vomited in order to feel thinner?" was found has the lowest mean value (Mean=1.25,level=low). Followed by item 32 "Have you taken laxatives in order to feel thinner?" with (M = 1.28,level=low), 220 (86.3%) respondents are claimed that they were not consume laxatives to be thinner.

Table 4 Level of Body Image Dissatisfaction

BSQ Item	Mean	Level
Item 1	2.65	Low
Item 2	2.78	Moderate
Item 3	2.59	Low
Item 4	3.23	Moderate
Item 5	3.11	Moderate
Item 6	3.17	Moderate
Item 7	2.09	Low
Item 8	1.41	Low
Item 9	2.59	Low
Item 10	2.57	Low
Item 11	1.90	Low
Item 12	2.69	Moderate
Item 13	1.75	Low
Item 14	1.97	Low
Item 15	3.92	Moderate
Item 16	2.84	Moderate
Item 17	2.43	Low
Item 18	1.53	Low
Item 19	2.10	Low
Item 20	2.25	Low
Item 21	2.60	Low
Item 22	2.28	Low
Item 23	3.01	Moderate
Item 24	2.62	Low
Item 25	2.11	Low
Item 26	1.25	Low
Item 27	1.67	Low
Item 28	21.4	Low
Item 29	2.13	Low
Item 30	2.67	Moderate
Item 31	2.71	Moderate
Item 32	1.28	Low
Item 33	2.20	Low
Item 34	2.96	Moderate

#### **Frequency of Body Mass Index among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh**

Adding to the findings, table 5 presents the four group of BMI which were determined from the numeric data of respondents' body weight and body height obtained. More than half of the respondents were having normal weight according to BMI with 58%. Furthermore, the respondents' with underweight BMI were the second-highest with 23.5%, while 14.1% of respondents were overweight, and the lowest BMI distribution from this study belonged to those who were obese with 4.4%.

Table 5 Frequency of Respondents according to BMI Classification

BMI Classification	Frequency
	Percentage (%)
Underweight	60 (23.5%)
Normal weight	148 (58%)
Over weight	36 (14.1%)
Obese	11 (4.4%)
<b>Total</b>	<b>255 (100%)</b>

### **Level of Self-esteem among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh**

Table 6 illustrates level of self-esteem among the respondents with the overall mean score was (Mean=2.97, level=moderate). This score was found from the calculation of the 10 self-esteem items. Further, from the 10 items, the means were ranged from lowest mean score 1.31 to the highest mean score 3.45. The highest mean score from this variable was found in item six, the reverse item, which is "I certainly feel useless at times" with (Mean = 3.45, level=high), as showed in the table above, more than half of the respondents (60.0%) picked they were strongly disagree felt useless at times, meaning that the respondents has positive sense of overall value indicated high level of self-esteem in that item. Whereas, the lowest score was found in item number eight, "I wish I could have more respect for myself.", (Mean = 1.31, level=low). which indicated most of respondents (74.5%) were having low level of self-esteem because the undervalued themselves by claiming that they strongly agree of wishing to respect themselves more.

Table 6 Level of Self-esteem

RSES Item	Mean	Level
Item 1	3.01	High
Item 2	2.88	Moderate
Item 3	3.09	High
Item 4	3.32	High
Item 5	3.06	High
Item 6	3.45	High
Item 7	3.31	High
Item 8	1.31	Low
Item 9	2.89	Moderate
Item 10	3.41	High

### **The Relationship between Body Image Dissatisfaction and Self-esteem among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh**

Table 7 shows the relationship between body image dissatisfaction and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh using Spearman Test. The r-value of this study was -.154\*, which means there was a significant negative relationship between body image and self-esteem among early adult female diploma student in Poltekkes Kemenkes Aceh. The r-value obtained also indicated that there is a positive but weak relationship between the two variables based on the classification from Elmes et al., (2011). The p-value (p=.000) signifies that the relationship is significant at the two-tailed. This showed that the higher score of body image dissatisfaction among the respondents the lower score of self-

esteem they have. Then, the less they dissatisfy with their body images, the higher level of self-esteem the feel.

Table 7 Correlations between body image dissatisfaction and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh

Variable	Self-esteem	
	r-value	p-value
Body Image Dissatisfaction	-.154*	.000

### ***The Relationship between Body Mass Index (BMI) and Self-esteem among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh***

Table 8 presents that there was a significant positive relationship between body mass index (BMI) and self-esteem among early adult female diploma student in Poltekkes Kemenkes Aceh. This denotes that the higher the BMI, the higher will be the self-esteem among the early adult female diploma student at Poltekkes Kemenkes Aceh. The r-value of this study was .502\*\*, which means there was a medium positive relationship between two variables based on correlation coefficient interpretation from Elmes et al., (2011). As for the p-value ( $p = .000$ ), it signifies that the relationship is significant at two-tailed.

Table 8 Correlations between body mass index and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh

Variable	Self-esteem	
	r-value	p-value
Body Mass Index (BMI)	.502**	.000

## **5.0 DISCUSSIONS, LIMITATIONS AND RECOMMENDATION**

### ***The Level of Body Image Dissatisfaction among Early Adult Female Diploma Student at Poltekkes Kemenkes Aceh***

The result of this research showed an overall low level of body image dissatisfaction among the samples, with twenty three items indicated low level of body image dissatisfaction. This means the respondents are generally have positive attitudes towards their body image. It was similar to some studies conducted in Indonesia among female early adult and late adolescents by (Nugroho, 2017; Pratiwi & Sawitri, 2020) and a study conducted in Iran among high-schoolers (Shahyad et al., 2015).

From the descriptive findings, low body image dissatisfaction indicated female early adults in Poltekkes Kemenkes Aceh have positive thoughts and feelings towards their physical appearances. Although, society has standard for 'ideal' female physique that may reflected on how female defined their own body or female's concept of how their bodies should look and even the individual has not fulfilled that standard, the respondents were still indicated a low level of body image dissatisfaction. This is due the view that individuals have about their physical condition was positively constructed in their minds and feelings also resulted from how much the individuals are able to love themselves (Baker & Gringart, 2009; Grogan, 2016).

Low level of body image dissatisfaction on this study was correlated with certain socioenvironmental factors, in which the respondents are all Muslims. Example, showed in item 15 where, respondents are agree to avoid wear clothes that can reveal their bodies more, this is due to Islamic beliefs where females are advised to cover their bodies and to avoid wearing "wrap" clothes that may expose the body curves, moreover, the respondents are mostly comes from Aceh, in which Aceh is a province that be known as Islamic city where the historical, cultural, also moral and value were highly related with Islamic cultures and beliefs,



aligned with study comparison study conducted among female and women muslim and non-muslim by (Dunkel et al., 2010), where indicated that young women that dress in non-western clothing including those who wear hijab were significantly less likely to have high level of body dissatisfaction and less drive for attaining ideal beauty standard than women non-muslim or those who wear western clothing and without head veil. Particularly, this finding also effect from the parental and peer attitudes where they highly support environment with high positive body image and healthy diet and lifestyle and encouraging respondents with Islamic studies as the Holy Quran has guided female to wear loose-fitting clothes as well as head veils that cover their bodies and avoid unnecessary attraction from males, also protected from sexuality within social interactions the Qur'an provides guidelines that require women to wear loose-fitting garments that cover their entire bodies without attracting unnecessary attention (Droogsma, 2007; Dunkel et al., 2010).

### ***Frequency of Body Mass Index among Early Adult Female Diploma Student in Poltekkes Kemenkes Aceh***

From the analysis, out of four body mass index classification, normal weight group represents the most among the sample. This finding is expected because the respondents are those who pursuing study in the health care school, more than half of the respondents having normal weight portrays that they aware about health concern. As BMI already used as the indicator of healthy weight, this finding can assume that respondents are somehow having lower level contracting with chronic medical risk such as diabetes and cardiovascular disease (Jastreboff et al., 2019).

### ***The Level of Self-Esteem among Early Adult Female Diploma Student at Poltekkes Kemenkes Aceh***

The finding shows a moderate level of respondents' self-esteem indicates that respondents somehow had a positive thoughts and feelings towards themselves. This finding similar with studies by (Mostafavi et al., 2013; Pratiwi & Sawitri, 2020). Age, maturity, stability also predicted moderate level of self-esteem supported by Pratiwi & Sawitri, (2020) examined the correlation between age and self-esteem among females. The finding showed a significant positive relationship between two variables, meaning that, the mature females are, the higher self-esteem they have which somehow align with the study finding in the present study. Individual's life lessons particularly affect one's level of self-esteem, where the more older females are, the more life events and experiences she gained (Ornstein, 2013). Those life events provide females higher maturity in dealing with another life events that affect females' self-esteem level and stability.

### ***The Relationship of Body Image Dissatisfaction and Self-Esteem among Early Adult Female Diploma Student at Poltekkes Kemenkes Aceh***

The main objective of this study was to identify the relationship between body image and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh. Body Image here is focusing on negative body image or body image dissatisfaction. The finding showed that there is a significant negative relationship between body image dissatisfaction and self-esteem among the respondents. Thus, hypothesis 1 is accepted. The findings mean, if an early adult female has a lower level of body image dissatisfaction, the she will has higher level of self-esteem. On the contrary, if female has higher level of body image negativity, the lower self-esteem level she will has.

The study finding that exhibits a significant and negative relationship between body image dissatisfaction and self-esteem conforms to those of other studies conducted in several countries, including Indonesia (AlAhmari et al., 2019; Mostafavi et al., 2013; Nugroho, 2017; Pratiwi & Sawitri, 2020; Shahyad et al., 2015; Van Den Berg et al., 2010), where the Islamic countries were found most. The similar participant characteristic in which females in their productive ages could be the reason of the resembling results even when the study place was



different. Another reason could be the beliefs of Islam, where Indonesia and Middle-east countries are both Islamic countries where majority of both of the populations in the countries were Muslims and may have similar attitudes and characteristics. Similar culture which also based on the Islamic teachings particularly be the reason for the similarity of the study findings.

Moreover, the study result also similar with some studies that included some dissimilar participant characteristics, such as children and adolescents aged 9-15 (Monteiro et al., 2014) and including male (Van Den Berg et al., 2010). The similarities could be because of youth's body dissatisfaction can also be influenced by age, family and peer influences towards body positivity.

However, the current study results were dissimilar with the research conducted among Australian female adolescents by (Tiggemann, 2005). It found a significant but positive relationship between body image dissatisfaction and self-esteem among the respondents. In overall, body image dissatisfaction is significantly negative correlated with self-esteem. This findings were in line with most of the previous studies that had been conducted (AlAhmari et al., 2019; Mostafavi et al., 2013; Nugroho, 2017; Pratiwi & Sawitri, 2020; Shahyad et al., 2015; Van Den Berg et al., 2010; You et al., 2017).

### ***The Relationship of Body Mass Index and Self-Esteem among Early Adult Female Diploma Student at Poltekkes Kemenkes Aceh***

The following hypothesis was to find the relationship between body mass index (BMI) and self-esteem among early adult female diploma student at Poltekkes Kemenkes Aceh. The BMI on this study was classified into four different categories distinguished by the result of index of body mass of each respondent. The four classification was underweight group, normal weight group, over weight group, and obese group.

Interestingly, the result indicated the significant positive relationship between body mass index and self-esteem. Positive relationship indicating that the lower the BMI score the lower chances of having self-esteem. In contrast, the higher BMI the better level of self-esteem indicated. Thus, hypothesis 2 is rejected. Although, the results from the present study is different from some published studies (AlAhmari et al., 2019; Kaminsky & Dewey, 2014; Kiviruusu et al., 2016; McClure et al., 2010; Pritchard, 2010), however, they are in line with those of past studies by (Flores et al., 2017; Shloim et al., 2014).

### ***Limitation and Recommendation***

There are few limitations that must be taken into consideration for the purpose of future research even though all the objectives are fulfilled. First, is the present study only identified the level of body image dissatisfaction and self-esteem, as well as, relationship of body image dissatisfaction, BMI, and self-esteem among female early adult in one institution. Thus, the findings of this study do not represents the whole population of female early adult in Aceh. The findings may not applicable to other female students in other colleges due to the difference in the social environment and study program. Secondly, the self-report instruments are used in this study such as BSQ and RSES as well as self-reported body height and body weight for measuring body mass index are advantageous on examining a large number of variable. However, the limitation existed as some respondent might not being honest and not really reveal their thoughts feelings in answering the self-report questionnaire and it resulting in lack of accuracy for the study.

On the other hand, the limitations create an opportunity for future research to broaden the research population by the use of probability sampling, to allow the result to be generalized. The body mass index which measured from the body weight and body height of respondents that reported independently by themselves may result inaccuracy. For the future studies, it is recommended to find another method to collect the body weight and height of the sample.

Then, testing more variable related to the study also encouraged since it can provide a different point of view of the context.

## 6.0 CONCLUSION

The result of this study presents that the body image dissatisfaction and body mass index can be used to predict the self-esteem of early adult female in Poltekkes Kemenkes Aceh. It also showed that body image dissatisfaction among the respondents was low, whereas the self-esteem level was on moderate level. Consistent with previous studies, body image dissatisfaction was found significantly negative associate with self-esteem. Whereby, In contrast to earlier findings, BMI was found positively significant related with self-esteem among the sample of early adult female diploma student in Poltekkes Kemenkes Aceh.

## References

- Al-shehri, A. D., Aljuaid, T. A., Alzaid, A. B. A., Alasmari, H. D., & Alswat, K. A. (2016). Relation between body mass index and self esteem in adolescents. *International Journal of Current Research*, 8(2), 26116–26121.
- AlAhmari, T., Alomar, A. Z., ALBeeybe, J., Asiri, N., ALAjaji, R., ALMasoud, R., & Al-Hazzaa, H. M. (2019). Associations of self-esteem with body mass index and body image among Saudi college-age females. *Eating and Weight Disorders*, 24(6), 1199–1207.
- Arnold, D., Green, L., & Allen, J. P. (1997). The royal women of Amarna: images of beauty from ancient Egypt. In *Choice Reviews Online*. Metropolitan Museum of Art.
- Baker, L., & Gringart, E. (2009). Body image and self-esteem in older adulthood. *Ageing and Society*, 29(6), 977–995.
- Blackburn, H., & Jacobs, D. (2014). Commentary: Origins and evolution of Body Mass Index (BMI): Continuing saga. *International Journal of Epidemiology*, 43(3), 665–669.
- Cash, T. F. (2012). Cognitive-behavioral perspectives on body image. In *Encyclopedia of Body Image and Human Appearance* (pp. 334–342). Elsevier.
- Cash, Thomas F. (2004). Body image: Past, present, and future. *Body Image*, 1(1), 1–5.
- Cast, A. D., & Burke, P. J. (2002). A Theory of Self-Esteem. *Social Forces*, 80(3), 1041–1068.
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairbum, C. G. (1987). The development and validation of the body shape questionnaire. *International Journal of Eating Disorders*, 6(4), 485–494.
- Droogsma, R. A. (2007). Redefining hijab: American muslim women's standpoints on veiling. *Journal of Applied Communication Research*, 35(3), 294–319.
- Dunkel, T. M., Davidson, D., & Qurashi, S. (2010). Body satisfaction and pressure to be thin in younger and older Muslim and non-Muslim women: The role of Western and non-Western dress preferences. *Body Image*, 7(1), 56–65.
- El Ansari, W., Clausen, S. V., Mabhala, A., & Stock, C. (2010). How do i look? Body image perceptions among university students from England and Denmark. *International Journal of Environmental Research and Public Health*, 7(2), 583–595. <https://doi.org/10.3390/ijerph7020583>
- Elmes, D. G., Kantowitz, B. H., & Roediger III, H. L. (2011). *Research methods in psychology*. Cengage Learning.
- Feldman, R. S., & Stephen, R. (2010). *Psychology and your life* (2e ed.). McGraw/Hill.
- Flores, J. A. S., Fragante, J. F., Francisco, J. J. M., Dipasupila, J. P. P., Damaso, P. S. D., Gutierrez, L., Kent, K., Guerra, T. Dela, Escudero, M. M., Estella, R. A. G., Evasco, M. K. A., Gayle, S., Galang, S., Humarang, J. M., Villavicencio, M. L., & Sison, R. S. (2017). The Correlation between Body Mass Index and Self- Esteem Among Children Ages 9-12 Years Old in A Public Elementary School in Makati City , Philippines. *Paediatrics and Primary Care Physicians*, 1(1), 13–17.
- Gatti, E., Ionio, C., Traficante, D., & Confalonieri, E. (2014). "I like my body; therefore, i like myself": how body image influences self-esteem-A cross-sectional study on Italian adolescents. *Europe's Journal of Psychology*, 10(2), 301–317.
- Grogan, S. (2016). Body image: Understanding body dissatisfaction in men, women and children, third edition. In *Body Image: Understanding Body Dissatisfaction in Men, Women and Children, Third Edition*. Psychology PRESS.
- Hamdy, O. P., & Khardori, R. P. (2020). *Is obesity more common in women or men?* Medscape.
- Heider, N., Spruyt, A., & De Houwer, J. (2018). Body dissatisfaction revisited: On the importance of implicit beliefs about actual and ideal body image. *Psychologica Belgica*, 57(4), 158–173.
- Henggaryadi, G. (2012). Hubungan antara body image dengan harga diri pada remaja pria yang mengikuti latihan fitness/kebugaran. *Jurnal Universitas Gunadarma*, 1–23.

- Hesse-Biber, S., Leavy, P., Quinn, C. E., & Zoino, J. (2006). The mass marketing of disordered eating and eating disorders: The social psychology of women, thinness and culture. *Women's Studies International Forum*, 29(2), 208–244.
- Jastreboff, A. M., Kotz, C. M., Kahan, S., Kelly, A. S., & Heymsfield, S. B. (2019). Obesity as a disease: The obesity society 2018 position statement. *Obesity*, 27(1), 7–9.
- Kaminsky, L. A., & Dewey, D. (2014). The association between body mass index and physical activity, and body image, self esteem and social support in adolescents with type 1 diabetes. *Canadian Journal of Diabetes*, 38(4), 244–249.
- Keys, A., Fidanza, F., Karvonen, M. J., Kimura, N., & Taylor, H. L. (1972). Indices of relative weight and obesity. *Journal of Chronic Diseases*, 25(6), 329–343.
- Kiviruusu, O., Konttinen, H., Huurre, T., Aro, H., Marttunen, M., & Haukka, A. (2016). Self-esteem and body mass index from adolescence to mid-adulthood. A 26-year follow-up. *International Journal of Behavioral Medicine*, 23(3), 355–363.
- Kumar, R. (2019). Research methodology: A step-by-step guide for beginners. In SAGE (5th ed.). SAGE.
- Lannakita, S. (2012). *Relationship between self-esteem and mate-selection preferences of young adult women in Jabodetabek*. Universitas Indonesia.
- Lavrakas, P. (2013). Behavioral Risk Factor Surveillance System (BRFSS). In *Encyclopedia of Survey Research Methods*.
- McClure, A. C., Tanski, S. E., Kingsbury, J., Gerrard, M., & Sargent, J. D. (2010). Characteristics associated with low self-esteem among US adolescents. *Academic Pediatrics*, 10(4), 238–244.e2.
- Mellor, D., Fuller-Tyszkiewicz, M., McCabe, M. P., & Ricciardelli, L. A. (2010). Body Image and self-esteem across age and gender: a short-term longitudinal study. *Sex Roles*, 63(9–10), 672–681.
- Monteiro, L. A., Novaes, J. S., Santos, M. L., & Fernandes, H. M. (2014). Body dissatisfaction and self-esteem in female students aged 9-15: The effects of age, family income, body mass index levels and dance practice. *Journal of Human Kinetics*, 43(1), 25–32.
- Mostafavi, F., Azadbakht, L., & Daniali, S. (2013). Relationship between body satisfaction with self esteem and unhealthy body weight management. *Journal of Education and Health Promotion*, 2(1), 29.
- Nugroho, S. K. (2017). *Hubungan antara Harga Diri Dengan Ketidakpuasan Bentuk Tubuh Pada Remaja Putri di SMA Islam Hidayatullah Semarang*. UNIDP.
- Nuttall, F. Q. (2015). Body mass index: Obesity, BMI, and health: A critical review. *Nutrition Today*, 50(3), 117–128.
- Ornstein, P. (2013). *Schoolgirls: Young women, self-esteem, and the confidence gap*. Knopf Doubleday Publishing Group.
- Paratmanitya, Y., Hadi, H., & Susetyowati, S. (2012). Citra tubuh, asupan makan, dan status gizi wanita usia subur pranikah. *Jurnal Gizi Klinik Indonesia*, 8(3), 126.
- Paxton, S. J., Wertheim, E. H., Gibbons, K., Szmukler, G. I., Hillier, L., & Petrovich, J. L. (1991). Body image satisfaction, dieting beliefs, and weight loss behaviors in adolescent girls and boys. *Journal of Youth and Adolescence*, 20(3), 361–379.
- Pilafova, A., Angelone, D. J., & Bledsoe, K. (2007). The relationship between gender, BMI, self-esteem, and body esteem in college students. *Psi Chi Journal of Undergraduate Research*, 12(1), 24–30.
- Pratiwi, M. V., & Sawitri, D. R. (2020). *Hubungan antara ketidakpuasan pada tubuh dengan harga diri pada wanita dewasa awal anggota pusat kebugaran Moethya*. 9(4), 306–312.
- Pritchard, M. (2010). Does self esteem moderate the relation between gender and weight preoccupation in undergraduates? *Personality and Individual Differences*, 48(2), 224–227. <https://doi.org/10.1016/j.paid.2009.10.015>
- Quittkat, H. L., Hartmann, A. S., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body dissatisfaction, importance of appearance, and body appreciation in men and women over the lifespan. *Frontiers in Psychiatry*, 10, 1–12.
- Rachmi, C. N., Li, M., & Alison Baur, L. (2017). Overweight and obesity in Indonesia: prevalence and risk factors—a literature review. In *Public Health*.
- Ricciotti, H., & Hye-Chun, H. (2016). *Is body mass index (BMI) still the best measure of body fat?* Harvard Health Publishing. <https://www.health.harvard.edu/womens-health/is-body-mass-index-bmi-still-the-best-measure-of-body-fat>
- Roemling, C., & Qaim, M. (2012). Obesity trends and determinants in Indonesia. *Appetite*, 58(3), 1005–1013.
- Rosenberg, (1965). Rosenberg self esteem scale (RSES). *Acceptance and Commitment Therapy*, 61(52), 18.
- Shahyad, S., Pakdaman, S., & Shokri, O. (2015). Prediction of Body Image Dissatisfaction from Self-esteem, Thin-ideal Internalization and Appearance-related Social Comparison. *International Journal of Travel Medicine and Global Health*, 3(2), 59–63.
- Shloim, N., Rudolf, M., Feltbower, R., & Hetherington, M. (2014). Adjusting to motherhood. The importance of BMI in predicting maternal well-being, eating behaviour and feeding practice within a cross cultural setting. *Appetite*, 81, 261–268.

- Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image*, 2(2), 129–135.
- Van Den Berg, P. A., Mond, J., Eisenberg, M., Ackard, D., & Neumark-Sztainer, D. (2010). The link between body dissatisfaction and self-esteem in adolescents: Similarities across gender, age, weight status, race/ethnicity, and socioeconomic status. *Journal of Adolescent Health*, 47(3), 290–296.
- Winpenny, E. M., van Sluijs, E. M. F., White, M., Klepp, K. I., Wold, B., & Lien, N. (2018). Changes in diet through adolescence and early adulthood: longitudinal trajectories and association with key life transitions. *The International Journal of Behavioral Nutrition and Physical Activity*, 15(1), 86.
- You, S., Shin, K., & Kim, A. Y. (2017). Body Image, self-esteem, and depression in Korean adolescents. *Child Indicators Research*, 10(1), 231–245.

# A Systematic Review of Resilience as Moderator in the Relationship Between Technostress and Turnover Intention Among Academicians

Noor Rabiah Razali<sup>1</sup>, Siti Aisyah binti Panatik<sup>2</sup>, Ruzanna Shahrin<sup>3</sup>

<sup>1,2,3</sup>School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

<sup>1</sup>Corresponding author: ([noorrabiah@graduate.utm.my](mailto:noorrabiah@graduate.utm.my) [saisyah@utm.my](mailto:saisyah@utm.my) [ruzanna@utm.my](mailto:ruzanna@utm.my))

04

## Abstract

Information and communication technologies (ICTs) have an impact on all levels of education, including higher education and the majority of economic sectors. The adoption of ICTs by the university sector has enabled the modification of teaching methods, the improvement of teaching quality, and the expansion of online training to academicians. The role of technology in teaching and learning is increasingly becoming one of the most significant and generally discussed problems in current education policy. Moreover, ICT has dynamically altered education. It has academicians to utilize technology tools both practically and theoretically. However, all these ICT usages have its own dark side, and brings huge impact towards the academicians, in terms of their quality of life, work life balance, and even influenced their work-related attitude like turnover intention, work engagement and others. Thus, this study emphasized the relationship between technostress factors and turnover intention from the perspectives of literature review. This study uses systematic literature review approach to explore the relationship between the variables. The finding found that there is a positive relationship between technostress and turnover intention. In addition, the moderator role of resilience is explored. The findings would provide future direction of research related to the role of technostress on work related attitudes especially turnover intention in organization.

Keywords: Technostress, Turnover Intention, Resilience, Academicians

## Abstrak

Teknologi maklumat dan komunikasi (ICT) mempunyai kesan ke atas setiap peringkat pendidikan, termasuk pendidikan tinggi dan sebahagian besar sektor ekonomi. Penerimaan ICT oleh sektor universiti telah membolehkan penambahbaikan terhadap kaedah pengajaran, peningkatan kualiti pengajaran, dan memperluaskan lagi latihan dalam talian kepada ahli akademik. Peranan teknologi dalam pendidikan dan pembelajaran semakin menjadi antara masalah yang paling ketara dan umum dibincangkan dalam dasar pendidikan semasa. Tambahan pula, ICT telah mengubah pendidikan secara lebih dinamik, dimana ahli akademik boleh menggunakan teknologi secara teori dan praktikal. Walaubagaimanapun, setiap penggunaan ICT ini mempunyai kekurangan dan keburukannya yang tersendiri, yang boleh mendatangkan kesan yang besar terhadap ahli akademik dari segi kualiti hidup, keseimbangan antara kehidupan peribadi dan kerja, malah mempengaruhi niat untuk berhenti kerja serta masalah penglibatan kerja yang lain. Oleh yang demikian, kajian ini menekankan hubungan antara faktor teknostress dan niat berhenti kerja dari perspektif kajian literatur. Kajian ini menggunakan pendekatan tinjauan literatur sistematik bagi meneroka hubungan antara setiap pembolehubah. Dapatan kajian mendapati bahawa, terdapat hubungan positif antara teknostress dan niat untuk berhenti kerja. Disamping itu, peranan moderator daya tahan turut dikaji. Dapatan kajian ini bagaimanapun memberikan hala tuju terhadap penyelidikan dimasa hadapan berkaitan teknostress terhadap sikap berkaitan kerja dalam sesebuah organisasi.

Kata kunci: Teknostress, Niat Berhenti Kerja, Daya Tahan, Ahli Akademik.

## 1.0 INTRODUCTION

Turnover is a worldwide phenomenon. In recent years, turnover has become a prevalent practice or pattern in nearly all businesses. High turnover has become a crucial and challenging issue for all businesses as it is one of the key factors that indicates poor organizational performance (Mohammad et al, 2014; Falahat et al., 2019). According to Islam and Mohamed (2020), employee turnover may incur unnecessary monetary and non-monetary expenditures, such as costs of separation, training, recruitment, and job search, and have a detrimental impact on the effectiveness of an organization (Islam & Mohamed, 2020). As what had been stated in previous studies, people will change or leave their jobs and organizations in order to be more comfortable. The condition for leaving a job or organization is the intention to quit, often known as the turn over intention. Turnover intention of employees refers to the possibility that an employee will leave their existing position. (AK, 2018). This global issue is not only happening to certain industries, but also involving the education sector. Ainer et al (2018) mentioned in their research that, turnover of academicians is one of the most important issues that the administration of a higher education institution should emphasize. Added that, sustaining in the education industry with ongoing progress in research and teaching is a top objective for any private institution of higher education, and the key in achieving this goal is by retaining the academic staff (Ainer et al., 2018).

The educational landscape has transformed tremendously, with the astounding rise of virtual learning, where teaching and learning sessions are performed remotely and on digital platforms. This technological advancement in education sector particularly had become one of the contributing factors for this issue, looking at how technology has changed businesses work. Furthermore, with the implementation of Industrial Revolution 4.0 (IR4.0), it is anticipated that the workplace will continue to be more unpredictable, unclear, complex, and confusing (Chang, 2019). Based on previous studies, the implementation of information and communication technology (ICT) tools into work design has increased dramatically, and it has become an essential part of employees' working time, especially during the current COVID-19 pandemic, which has brought significant benefits for workers. Most scholars had agreed that, the advancements in ICT have facilitated more access to information, enhanced communication, enhanced cooperation and collaboration, increased cost-effectiveness, and provided employees with greater control and flexibility. However, according to Day et al, (2019), ICT has had unforeseen detrimental consequences on the health of the employees. According to studies, heavy ICT use at work exposes employees to ICT demand. ICT demand can occur when ICT use needs more physical and mental effort at work (Day et al, 2019; Stadin et al, 2019; Abu Farha et al., 2022).

The transition to the new economic paradigm that related with the new IR 4.0 job profiles, that is, workers with new skills and digital capabilities. Retraining and reskilling are essential components that will enable the workforce to meet the increased demands of expanding digital economy industries. However, the potential demand for a digital workforce may be accompanied with a digital knowledge gap, as a significant proportion of the workforce may lack adequate digital competencies (Caparrós Ruiz, 2022). As stated by Abo Mokh et al, (2021) due the rapid evolution of technology and its pervasiveness have led academics to significantly rely on technology in their teaching methods, as it offers numerous advantages, where it may save paperwork, increase transparency, and facilitate distant learning (Abo Mokh et al., 2021). Unfortunately, regardless of the numerous benefits of technology, there has been an ongoing debate regarding the disadvantages of technology for end-users. Past studies claimed that, academics suffer from a condition known as "technostress."

Technostress can impair academics' productivity if they are not accustomed to incorporating technology into their teaching methods. The research showed in the literature that academics struggle to implement instructional strategies and methodologies in e-learning, particularly in remote learning using digital media such as zoom. Moreover, some teachers have little or no technological knowledge. According to studies, it takes time for academics to become familiar with computer hardware and software. Even if academics become adapted to computers and software in the classroom, they believe that teaching with them is less effective

than traditional approaches. Besides that, lack of technical support is another factor that could lead to technostress. Apart from that, it is also stated in previous literature that, some academics lack the technological skills necessary to manage e-learning and remote learning efficiently and effectively (Abo Mokh et al., 2021). All these things had increased the academics' work burden, which then could result in higher turnover intention.

During the COVID-19 pandemic, researchers are increasingly questioning the implications of technology on academics. According to Wang et al (2020), academics are required to implement online learning in their instruction and assessment of students. A mismatch between an academics and a virtual learning environment may result in technostress, leading to negative emotions, health issues, and discontentment. In addition, the academics or lecturers are prone to technostress when they are unable to manage technology. Due to their excessive use of technology, they will experience technostress as a result of being required to teach efficiently online. Munandar et al (2020) had stated that, technostress causes negative effects on attitudes, thought, behavior, and human psychology that are inevitable consequences of technology use (Wang et al, 2020; Munandar et al, 2020; Ya'acob & Abd Aziz, 2021). This research findings also consistent with a research conducted by Mushtaque et al (2022) which also stated that, the incorporation of technology in education has had an impact on not only academics' perspectives and expertise, but also on their time, workload, attitudes toward technology, and pedagogy. Academics are expected to properly integrate technology into their classroom training, despite the fact that they are continuously stretched for time in order to keep up with new technology and pedagogical advancements. Despite the use of technology in education is encouraged, studies have identified a number of challenges to overcome, including a lack of training, poor infrastructure, and an insufficient amount of assistance from technology specialists. These obstacles may cause teachers to become anxious and agitated, resulting in mental and physical stress as a consequence of technology use (Mushtaque et al., 2022). All this will then lead to turnover intention.

Based on Job Demand and Resources Model, all these challenges can be considered as job demand, where it could initiate a health impairment process that leads to undesirable outcomes such as burnout, job dissatisfaction, and turnover intentions (Bakker & Demerouti, 2017; Wang et al., 2022). Other than that, prior study also found that IT-related stress influences a number of attitudes and behaviors, including organizational commitment and intentions to leave (Moqbel & Bartelt, 2018). Apart from this, educational management and social psychology researchers have commonly hypothesized that stress, which is an intrinsic component of rapidly changing surroundings and modern educational technologies, can promote job burnout and even turnover intention among academic staff (Jin et al., 2020). Research findings by Harris et al (2022) found that, the time and effort required to understand and use new technology (techno-overload) and the intrusion of being always connected to work are positively correlated with employee turnover intentions. This is consistent with theory and earlier empirical findings regarding the relationship between technology and employee turnover intentions (Harris et al., 2022). Globally, employee turnover is a significant issue for many organizations. Indeed, the research of employee turnover intentions has been a management priority for many years. In today's era of globalization, turnover is a major issue for businesses. Recent research indicates that employee turnover is an ongoing issue for businesses. That would significantly impact the organization's performance and profitability. Nevertheless, staff turnover raises the likelihood of losing good employees (Al-Suraihi et al., 2021). Hence, it is important to figure out a method that could prevent this problem.

Regardless, Singh et al (2020) had identify resilience as a coping mechanism for technostress and/or its detrimental effects. While the detrimental impact of stresses on individual's physiological and psychological state has been well-documented, research has also examined how a person's resistance to these stressors can help them to cope with external pressures and navigate through disruptive situations in various ways. Added that, as a key personal resource for coping with the consequences of distress, individuals with high levels of resilience are better able to regulate the influence of stresses on their wellbeing. This resilience mitigates the detrimental effects of technology exhaustion, hence reducing stress in the

workplace. Literature shows that resilient people can overcome or manage obstacles and use organizational learning for better work engagement (Ponomarov & Holcomb, 2009; Jin et al., 2020; Chen & Bonanno, 2020; Tarafdar et al., 2019; Torres & Augusto, 2019; Crane & Searle, 2016; Malik & Garg, 2020; Singh et al., 2022).

Hence, the main research objectives of this systematic research review are to outline various descriptive by examining the available empirical literature on the relationship between technostress and turnover intention and the role of resilience as moderating variable.

The current study aims to answer two main research question.

**RQ1:** To analyze the relationship between technostress and turnover intention among academicians.

**RQ2:** To analyze the role of resilience as moderator in the relationship between technostress and turnover intention.

## ■2.0 METHODOLOGY

The systematic literature review method has been employed to explore the literature on the relationship between technostress and turnover intention and the role of resilience as moderator. According to Lame (2019), systematic literature reviews are a method for synthesizing scientific evidence to address a specific research question in a transparent and reliable way, while aiming to include all published information related to the topic and evaluating the quality of this evidence (Lame, 2019). As what had been stated by Kushwah et al (2019), previous research has demonstrated that comprehensive literature review reduces bias and the chance effect, hence enhancing the validity of data analysis. All of these advantages enhance the research outcome, which then serve as the basis for drawing conclusions (Kushwah et al., 2019). This systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA- see Figure 1). Electronic databases were used to conduct literature searches with a variety of keywords to identify articles (see Figure 1). Further articles were identified through scanning the reference lists of publications recovered through the databases to ensure relevant studies were not missed. Researcher limited the search to articles published between 2018 and 2022. Each study was assessed against a set of inclusion and exclusion criteria. Excluded studies were tabulated against reasons for exclusion (see Figure 1) A full-text review was conducted for eligible studies.



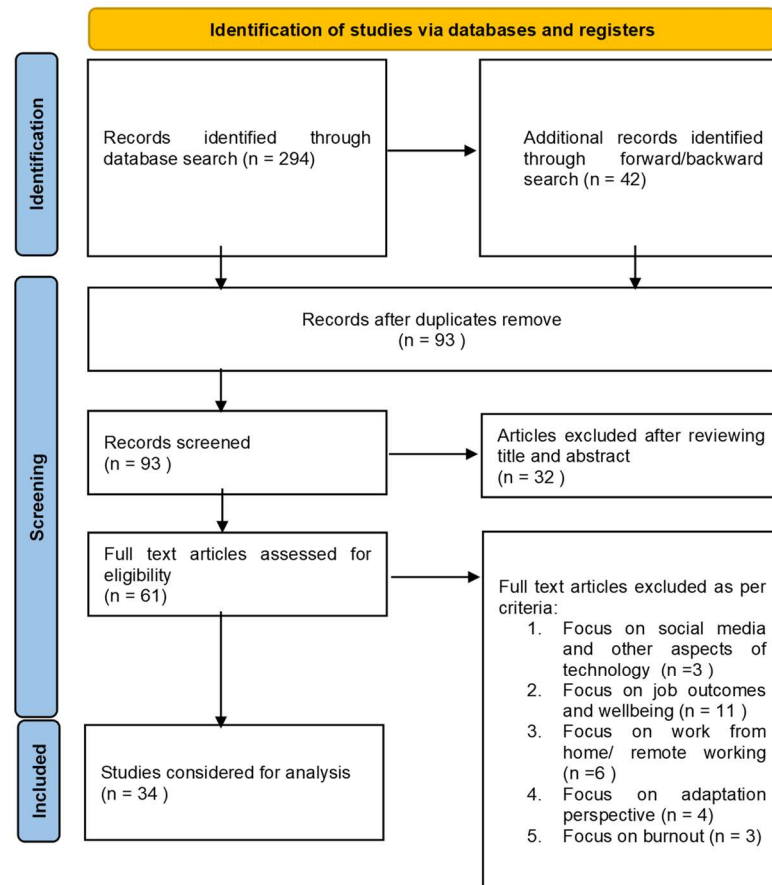


Figure 1: The article selection procedure

## ■2.1 Inclusion and exclusion criteria

The inclusion and exclusion criteria applied in this systematic literature review are discussed below:

### 2.1.1 Inclusion criteria

This systematic literature review utilized five (5) inclusion criteria: a) studies should focus on technostress and technological advancement, b) studies published during 2018-2022 (studied selected for publishing in the coming year also included), c) studies published in English language, d) only peer review journal articles, e) title, abstract, keyword and sometimes, introduction were examined to evaluate for the eligibility.

### 2.1.2 Exclusion criteria

This systematic literature review utilized four (4) exclusion criteria: a) relevance, b) review, conference papers and thesis dissertation were ignored, c) duplicate studies and d) studies before 2018 were ignored.

## ■2.2 Databases

This systematic literature review utilized three different academic databases, including Scopus, Emerald Insight, Science Direct, and Google Scholar, considering that these databases are robust and cover more than 256 fields of studies.

## ■2.3 Review protocol and outcomes

This systematic literature review started with SCOPUS database and the following search string was executed:

Database	Query string
Scopus	TITLE-ABS-KEY ( ( "resilience" OR "employee resilience" ) AND ( "turnover intention" OR "intention to quit" ) ) AND ( LIMIT-TO ( PUBYEAR , 2022 ) OR LIMIT-TO ( PUBYEAR , 2021 ) OR LIMIT-TO ( PUBYEAR , 2020 ) OR LIMIT-TO ( PUBYEAR , 2019 ) OR LIMIT-TO ( PUBYEAR , 2018 ) ) AND ( LIMIT-TO ( SUBJAREA , "BUSI" ) OR LIMIT-TO ( SUBJAREA , "SOCI" ) OR LIMIT-TO ( SUBJAREA , "PSYC" ) )
Scopus	TITLE-ABS-KEY ( ( "resilience" OR "employee resilience" ) AND ( "turnover intention" OR "intention to quit" ) ) AND ( LIMIT-TO ( PUBYEAR , 2022 ) OR LIMIT-TO ( PUBYEAR , 2021 ) OR LIMIT-TO ( PUBYEAR , 2020 ) OR LIMIT-TO ( PUBYEAR , 2019 ) OR LIMIT-TO ( PUBYEAR , 2018 ) ) AND ( LIMIT-TO ( SUBJAREA , "BUSI" ) OR LIMIT-TO ( SUBJAREA , "SOCI" ) OR LIMIT-TO ( SUBJAREA , "PSYC" ) ).

*Figure 1*

The remaining databases were then examined individually to find non-duplicate articles. Additionally, the relevant journals that publish empirical studies on technostress were investigated. In addition, the researcher

conducted forward and backward searches. The above iterative search yielded 294 studies via database search and 42 studies via forward and backward search. Thus, a total of 336 possible research was documented. After removing duplicates, researchers were left with 93 studies. Then, each of these studies was evaluated based on its inclusion and exclusion criteria. This step generated 34 studies. The article selection procedure is depicted in Figure 1.

### ■ 3.0 FINDINGS

#### 3.1 The relationship between technostress and turnover intention

Table 1

Reference	Country	Research design	Main findings
Boyer-Davis (2019)		Quantitative (Questionnaire and survey)	1. This study identified that a relationship exists between technostress and job turnover intention in the accounting profession.
Jiang et al (2022)	China	Cross sectional study	1. The key finding of this study was that occupational stress, in addition to directly affecting turnover intention, also indirectly affected turnover intention through job satisfaction.
Ram asamy and Abdullah (2020)	Malaysia	Quantitative (questionnaire)	1. Academics when encounter with high workload, their turnover intention are also high as well
Al- Suraihi et al (2021)	Malaysia		1. Key research findings indicate that employees have several reasons to leave their workplaces, such as job stress, job satisfaction, job security, work environment, motivation, wages, and rewards
Baseman et al. (2018)	United States	observational, prospective cohort	1. a technology change such as text-to-911 will create a "High Strain" work environment with TCs at higher risk for elevated stress and related health problems which would influence the likelihood of higher turnover intention and absenteeism and reduce job satisfaction and job performance.
Burki et al (2020)	Pakistan	The questionnaire survey	1. job stress and turnover intentions are positively related to each other whereas emotional intelligence has no moderating role between them.
- Caillier (2020)			2. job stress affects a person's job satisfaction, which further leads to poor performance, a low level of commitment, high anxiety, and the intention to quit
- Appebaum et al (2010)			3. found a favourable association between teacher stress and turnover intention
- Nizam et al (2007)			4. stress affects companies by diminishing dedication to work, increasing absenteeism, burnout, deviant behaviour, and staff turnover
- Boudrias et al (2020)			
- Jan al (2005)			

The workplace has witnessed the emergence of a new type of stress. This form of stress, known as technostress, is caused by interaction with information and communication technologies (ICTs). It is believed that the negative physiological and psychological effects of technostress influence job-turnover intentions similarly to other role stressors. Boyer-Davis (2019) stated that, if role stressors induce turnover intention and technostress causes role stress, then technostress may likewise induce job turnover intention, and this had been supported by their finding, which is, there is a correlation between technostress and turnover intention (Agervold, 1987; Brod, 1984; Agervold, 1987; Brod, 1984; Boyer-Davis, 2019). A cross sectional study by Jiang et al (2022) concluded that, in addition to directly influencing turnover intention, occupational stress also indirectly affected turnover intention via job satisfaction. It is also stated that, the emergence of turnover intent or action is a means of maintaining the stress equilibrium (Jiang et al., 2022).

Previous researchers discovered that work stress increases turnover intention and decreases organizational commitment. Academic workload is defined as the overall time an academic devotes to activities such as teaching, administration, research, and community service. In other words, an academic's workload is the total number of labor obligations that an academic has in a higher education institution. Furthermore, the online teaching method contributes to the increased burden. Academics are stressed and dissatisfied due to a lack of recognition for their increased workload. According to Ramasamy and Abdullah's (2020) research, there is a negative association between job security and turnover intention. There are multiple sources of work insecurity, which may be triggered by objective or subjective factors. The objective triggers, such as layoffs, mergers, or the implementation of new technologies, may occur as a result of the company's or nation's financial or economic situation. They emphasized that there is substantial evidence of a correlation between job security and staff retention, therefore it reduces employee turnover (Ramasamy & Abbudullah, 2020).

Besides that, Al-Suraihi et al (2021) had cited past studies, that is consistent with other findings regarding work stress and its association on turnover intention. Technostress, which can be consider as a technology-induced work stress is believed to have an association with employee's turnover intention, especially among academics (Al-Suraihi et al., 2021). According to Baseman et al. (2018), a technological change will likely result in a "high strain" work environment, which could increase the risk of elevated stress and related health issues, which would affect the likelihood of a higher turnover intention and increase absenteeism, as well as lower job satisfaction and performance (Baseman et al., 2018). Besides that, Burki et al (2020) had cited several prior studies, which supported the other findings on the relationship between technostress or technology stress with turnover intention. As stated by Caillier (2020) and Applebaum et al (2010), job stress affects a person's job satisfaction, which further leads to poor performance, a low level of commitment, high anxiety, and the intention to quit. Another research that was conducted by Nizam et al (2007) in Negeri Sembilan also found a favorable association between teacher stress and turnover intention. Leka & Cox (2008) and Boudrias et al (2020) also claimed that, stress affects companies by diminishing dedication to work, increasing absenteeism, burnout, deviant behavior, and staff turnover. Moreover, Jamal (2005) found that work stress was positively associated with turnover intention among Canadian and Chinese employees (Applebaum et al, 2010; Caillier, 2020; Nizam et al, 2007; leka & Cox, 2008; Boudrias et al, 2020; Jamal, 2005; Burki et al., 2020). In addition, the relationship between work role stressors and turnover intention is mediated by job stress, indicating that greater work role stressors directly contribute to the employees' job stress levels and result in an indirect increase in turnover intention (Chen et al, 2011; Dodanwala et al., 2022).

Hence, from the past literature, most of the findings is consistent with one another, where it is found that, technostress is associated with a variety of negative individual performance-related outcomes, such as decreased job performance, decreased organizational commitment, increased role overload and role conflict, decreased satisfaction with ICT, and increased turnover intentions (e.g., Fuglseth and Sorebo, 2014; Ragu-nathan et al., 2008; Tarafdar et al., 2010; Harris et al., 2022). Thus, it can be concluded that, there is a positive

association between technostress and turnover intention among academics in Malaysia's higher education.

### 3.2 The role of resilience as moderator in the relationship between technostress and turnover intention.

Table 2

Reference	Country	Research design	Main findings
Hidayah and Ardiansyah (2019)	Indonesia	Quantitative approach (Survey and questionnaire)	<ol style="list-style-type: none"> <li>1. Work stress can be minimized when employees have good resilience.</li> <li>2. There was significant relationship between resilience and turnover intention. Resilience on employee influenced turnover intention on employee.</li> <li>3. Result is also supported by the results of research conducted by Ghandi et al., (2017) which illustrated that resilience had significant effect on turnover intention</li> </ol>
Dahabiyeh et al (2022)	Jordan	Survey	<ol style="list-style-type: none"> <li>1. An individual's psychological capital, which consists of self-efficacy, optimism, hope and resilience, can help decrease stress. Accordingly, teaching staff that have high levels of psychological capital are expected to experience lower levels of stress</li> </ol>
Liu et al (2021) - Smith et al. (2020)	China	Cross-sectional survey	<ol style="list-style-type: none"> <li>1. The resilience of high school teachers had a significant negative predictive effect on job burnout and turnover intention</li> <li>2. Suggested that resilience has a significant indirect negative association with turnover intention</li> </ol>
Smith et al (2020)	United States	Cross-sectional survey	<ol style="list-style-type: none"> <li>1. Resilience has a significant direct negative association with stress arousal and burnout, a significant indirect positive association with job satisfaction and a significant indirect negative association with turnover intentions</li> </ol>
Srivastava et al (2022)	India	Survey	<ol style="list-style-type: none"> <li>1. The findings of the present study also suggest that stress is linked to greater burnout, which</li> </ol>

Srivastava et al (2022)	India	Survey	<ol style="list-style-type: none"> <li>1. The findings of the present study also suggest that stress is linked to greater burnout, which contributes to turnover intentions among those who report low level of resilience</li> <li>2. Studies done in the past indicated that individuals who exhibit resilience in their behavior tend to be psychologically healthy by buffering negative consequences from difficult times (Connor &amp; Davidson, 2003)</li> <li>3. Individuals high on resilience are able to overcome stress through the use of positive effect (Fredrickson et al., 2003; Ong et al., 2009; Tugade &amp; Fredrickson, 2002).</li> <li>4. Kjeldstadli et al. (2006) found that resilience has a significant role in controlling stress.</li> </ol>
Singh et al (2022)	United Kingdom	Survey-based quantitative research approach	<ol style="list-style-type: none"> <li>1. Resilience as a response mechanism to cope with technostress and/ or minimize its negative impacts</li> <li>2. People with high resilience can more effectively regulate the impact of stressors on their wellbeing. Such resilience negatively moderates the impact of technology exhaustion, and thus reduces stress levels in the work domain (Jin et al., 2020, Chen &amp; Bonanno, 2020; Tarafdar et al., 2019; Torres &amp; Augusto, 2019)</li> <li>3. Individuals with strong resilience are normally capable of overcoming or managing challenges (Crane &amp; Searle, 2016)</li> <li>4. Resilient individuals are more likely to be innovative and capable of exploring various means to cope with difficult situations, and they tend to</li> </ol>

Tomaszek et al (2018) defined resilience as a skill for coping with exceptionally stressful events; it takes place when an individual successfully overcomes a traumatic and very unfavorable experience. Resilience is the ability to do much better than expected based on objective evidence regarding a risk and a challenging situation with which one has been confronted

(Tomaszek et al., 2018). Apart from that, resilience could also be viewed as the process of adapting to adversity and stress. Upon prior research, it is affirmed that, employees with high resiliency can reduce workplace stress. On top of that, it is also demonstrated that, an individual's resilience influenced the degree of employee turnover, which, when an employee's resilience was low, the intensity of employee turnover would be high. A research finding by Hidayah and Ardiansyah (2019) had underlined that, when employees had high levels of resilience, their intention to leave would be low, however if they lacked resilience, they would have many unresolved issues, which would result in a high intention to leave. This is consistent with other prior studies which proves that, there is a significant relationship between resilience and turnover intention where the employee's resiliency influenced their intention to leave the company. The result is further confirmed by the findings of Ghandi et al. (2017), who demonstrated that resilience had a significant effect on turnover intention. When an individual has high resilience, he or she would be able to handle the stress of the workplace. Moreover, the individual would have high job satisfaction. Both of these were designed with the purpose of reducing employee turnover (Ghandi et al, 2017; Hidayah & Ardiansyah, 2019).

Another study by Sen et al. (2017) indicated that a person's psychological capital, which includes self-efficacy, optimism, hope, and resiliency, can help reduce stress. According to their study among teaching staff, teachers with high levels of psychological capital are anticipated to suffer reduced levels of stress (Sen et al, 2017; Dahabiyeh et al., 2022). Moreover, Liu et al. (2021) found that resilience and its characteristics of confidence, strength, and optimism showed a strong negative connection with intention to leave, and that resilience could predict turnover intention adversely. Thus, the higher the resilience levels of high school teachers, the lower their intention to leave the profession, and resilience levels influence intention to leave. According to the Price-Mueller turnover model, personal emotion, job satisfaction, job stress, and other factors influence intention to leave. Teachers with high levels of resilience are very adaptable and responsive. They experience more positive emotions and less negative emotions at work, are able to actively manage job-related stress, and increase their professional self-confidence. On the other hand, teachers with low resilience have a weak ability to adapt to the environment, avoid challenges, passively cope with tasks, lack job competence, and struggle to generate self-confidence. Their relationships with coworkers deteriorate, and they are more likely to sense loneliness, antagonism, and meaninglessness. They are unsure about how long their teaching profession can go, so their turnover intention is higher (Liu et al., 2021).

In a research by Smith et al (2020) on the role of resilience as a coping strategy for reducing the auditor turnover intention found out that, the negative association between role stresses and employment outcomes was mediated by stress arousal and burnout. However, it appears that greater levels of resilience mitigate these detrimental impacts. Resilience influences job satisfaction positively and turnover intentions negatively by mitigating both its direct and indirect negative associations with burnout through stress arousal (Smith et al., 2020). All this had been supported by many studies conducted in the past, which suggested that individuals who exhibit resilience in their behavior likely to be psychologically healthy because they are able to buffer the negative effects of adversity. Other scholars also pointed out that, individuals with a high level of resilience are able to overcome adversity by employing positive influence. According to Kjeldstadli et al (2006), resilience plays a crucial role in managing stress. In recent study by Srivastava et al (2022) it is reported that, stress is associated with more burnout, which adds to turnover intentions among people who report a low level of resilience, which is consistent with other prior studies (Connor & Davidson, 2003; Fredrickson et al., 2003; Ong et al., 2009; Tugade & Fredrickson, 2002; Kjeldstadli et al , 2006; Srivastava et al., 2022).

Based on the study by Singh et al (2022), they identify resilience as a technique for coping with technostress or mitigating its harmful effects. While the detrimental impact of stresses on a person's physiological and psychological state has been well-documented, research has also examined how a person's resistance to these stressors can help them to cope with external pressures and navigate through disruptive situations in various way. Resilience has proven a strong correlation with reactions to disruptive and excessive technology use. Moreover, from



their study, it is proven that resilience has a strong correlation with responses to disruptive and excessive technology use (Singh et al., 2022). Thus, based on past literature studies, it can be concluded that, resilience is a key personal resource for mitigating or moderating the effects of adversity at workplace. It is proven that, individuals with high levels of resilience are better able to regulate the influence of stresses on their health. It had been validated that resilience could mitigate the detrimental effects of technology exhaustion and at the same time reducing technology stress in the workplace, as technostress can eventually lead to turnover intention.

#### ■4.0 DISCUSSION

Based on the review of the article, it can be concluded that, there is a positive association between technostress and turn over intention. According to Tarafdar et al (2017), there is a growing number of employees that are having difficulty in adapting to the ongoing technological transformation practices at workplace. This may result in an increase of technostress, which has been demonstrated to lower employee job satisfaction, which may subsequently lead to turnover intention (Tarafdar et al, 2017; Pullins et a, 2020; Nuutinen et al., 2022). The implementation of technology in educational setting nowadays, make it vital for the educational leadership and management to carefully consider the well-being of those whose jobs involve ICT. Research indicated that, numerous academics in schools, colleges, and universities are already relying on various technology breakthroughs and modifying their pedagogical practices, teaching methods, and implementing Open Educational Resources (OER) and the Flipped Classroom (FC), blended learning, and Massive Open Online Courses (MOOCs) (Bal & Gupta, 2020). All these rapid changes in technology, and inability to cope with the technology related demand will eventually cause technostress. This had been proven by multiple studies which demonstrated that in recent years, technostress has emerged as a persistent concern for organizations, and turnover also had become a global phenomenon. Nevertheless, it is crucial for the organization to really understand the relationship between technostress and turnover intention in order to retain the employees.

The role of resilience as moderator in the relationship between technostress and turnover intention are also proven by prior scholars. Resilience contributes to higher job satisfaction, work pleasure, organizational commitment, and employee engagement. According to Cooper et al (2014) resilience is acknowledged as a coping mechanism against the difficulties they confront at work. Previous scholars agreed that, employees who possess a high level of resilience are best able to handle pressures. This is due to the fact that resilient personnel are characterized by their extreme openness, flexibility, and acceptance of change, as well as their extreme emotional stability (Cooper et al, 2014; Mustamil & Najam, 2020). Thus, it can be concluded based on the past literature review that, resilience act as moderator in mitigating the effect of technostress on turnover intention. Therefore, according to Kossek and Perrigino (2016), considering the continually shifting nature of both work and the workforce in a number of employment contexts, resilience research is particularly pertinent to organizations (Kossek & Perrigino, 2016; McCormac et al., 2018).

#### ■5.0 CONCLUSION

The findings of this systematic review suggest that, technostress is associated with a number of negative individual performance-related consequences, including lower job performance, lower organizational commitment, increased role overload and role conflict, lower satisfaction with ICT, and higher turnover intentions. Apart from that, a technological change will likely result in a "high strain" work environment, which could increase the risk of elevated stress and related health problems. Other than that, it is proven that, resilient employees are able to lessen workplace stress. Furthermore, it has been established that an individual's resilience affects the rate of staff turnover. It is claimed by the past scholars that resilience act as a coping mechanism in reducing employees' turnover intention. It is stated that, greater level of resilience mitigates the detrimental impacts of work stress.

## References

- Abo Mokh, A. J., Jameel Shayeb, S., Badah, A., Asim Ismail, I., Ahmed, Y., K. A. Dawoud, L., & Essam Ayoub, H. (2021). Levels of Technostress Resulting from Online Learning among Language Teachers in Palestine during Covid-19 Pandemic. *American Journal of Educational Research*, 9(5), 243–254. <https://doi.org/10.12691/education-9-5-1>
- Abu Farha, A. K., Obeidat, S. M., & Al-Kwafi, O. S. (2022). ICT effect on employees-related outcomes: higher education as a context. *Journal of Systems and Information Technology*, 24(1), 32–54. <https://doi.org/10.1108/JSIT-04-2021-0073>
- Ainer, C. D., Subramaniam, C., & Arokiasamy, L. (2018). Determinants of Turnover Intention in the Private Universities in Malaysia: A Conceptual Paper. *SHS Web of Conferences*, 56, 03004. <https://doi.org/10.1051/shsconf/20185603004>
- AK, B. (2018). Turnover Intention Influencing Factors of Employees: An Empirical Work Review. *Journal of Entrepreneurship & Organization Management*, 07(03), 3–7. <https://doi.org/10.4172/2169-026x.1000253>
- Al-Suraihi, W. A., Samikon, S. A., Al-Suraihi, A.-H. A., & Ibrahim, I. (2021). Employee Turnover: Causes, Importance and Retention Strategies. *European Journal of Business and Management Research*, 6(3), 1–10. <https://doi.org/10.24018/ejbmr.2021.6.3.893>
- Bal, S., & Gupta, M. (2020). *Technology and E-Learning in Higher Education Technology and E-Learning in Higher Education*. May.
- Baseman, J., Revere, D., Painter, I., Stangenes, S., Lilly, M., Beaton, R., Calhoun, R., & Meischke, H. (2018). Impact of new technologies on stress, attrition and well-being in emergency call centers: The NextGeneration 9-1-1 study protocol. *BMC Public Health*, 18(1), 1–9. <https://doi.org/10.1186/s12889-018-5510-x>
- Boyer-Davis, S. (2019). TECHNOSTRESS: AN ANTECEDENT OF JOB TURNOVER INTENTION IN THE ACCOUNTING PROFESSION Stacy Boyer-Davis. *Journal of Business and Accounting*, 12(1), 49–63.
- Burki, F. N., Khan, N. U., & Saeed, I. (2020). The Impact of Job Stress on Turnover Intentions–The Moderating Role of Emotional Intelligence. *NICE Research Journal*, 13(1), 100–121. <https://doi.org/10.51239/nrjss.v0i0.157>
- Caparrós Ruiz, A. (2022). Factors determining teleworking before and during COVID-19: some evidence from Spain and Andalusia. *Applied Economic Analysis*. <https://doi.org/10.1108/AEA-08-2021-0199>
- Chang, W. (2019). *Embracing for the disruptive impact of industrial revolution 4.0 in accounting*. Swinburne. <https://www.swinburne.edu.my/campus-beyond/embracing-disruptive-impact-industrial-revolution-4-0-accounting.php>
- Dahabiyeh, L., Najjar, M. S., & Wang, G. (2022). Online teaching during COVID-19 crisis: the role of technostress and emotional dissonance on online teaching exhaustion and teaching staff productivity. *International Journal of Information and Learning Technology*, 39(2), 97–121. <https://doi.org/10.1108/IJILT-09-2021-0147>
- Dodanwala, T. C., Santoso, D. S., & Yukongdi, V. (2022). Examining work role stressors, job satisfaction, job stress, and turnover intention of Sri Lanka's construction industry. *International Journal of Construction Management*, 0(0), 1–10. <https://doi.org/10.1080/15623599.2022.2080931>

Falahat, M., Gee, S. K., & Liew, C. M. (2019). A model for turnover intention: Banking industry in Malaysia. *Asian Academy of Management Journal*, 24, 79–91. <https://doi.org/10.21315/aamj2019.24.s2.6>

Harris, K. J., Harris, R. B., Valle, M., Carlson, J., Carlson, D. S., Zivnuska, S., & Wiley, B. (2022). Technostress and the entitled employee: impacts on work and family. *Information Technology and People*, 35(3), 1073–1095. <https://doi.org/10.1108/ITP-07-2019-0348>

Hidayah, F., & Ardiansyah, F. (2019). *If you can survive, then you will stay: Resilience and Turnover Intention on Employees*. 304(Acpch 2018), 76–80. <https://doi.org/10.2991/acpch-18.2019.19>

Islam, M., & Mohamed, S. F. (2020). Factors Influencing Staffs Turnover in Malaysia Construction Companies. *International Journal of Innovative Technology and Exploring Engineering*, 9(6), 201–206. <https://doi.org/10.35940/ijitee.f3544.049620>

Jiang, N., Zhang, H., Tan, Z., Gong, Y., Tian, M., Wu, Y., Zhang, J., Wang, J., Chen, Z., Wu, J., Lv, C., Zhou, X., Yang, F., & Yin, X. (2022). The Relationship Between Occupational Stress and Turnover Intention Among Emergency Physicians: A Mediation Analysis. *Frontiers in Public Health*, 10(June), 1–9. <https://doi.org/10.3389/fpubh.2022.901251>

Jin, C. L., Chen, T., Wu, S. Y., & Yang, Y. L. (2020). Exploring the Impact of Stress on Burnout: A Mathematical Model and Empirical Research. *Discrete Dynamics in Nature and Society*, 2020. <https://doi.org/10.1155/2020/3475324>

Kushwah, S., Dhir, A., Sagar, M., & Gupta, B. (2019). Determinants of organic food consumption. A systematic literature review on motives and barriers. *Appetite*, 143(August), 104402. <https://doi.org/10.1016/j.appet.2019.104402>

Lame, G. (2019). Systematic literature reviews: An introduction. *Proceedings of the International Conference on Engineering Design, ICED*, 2019-Augus(July), 1633–1642. <https://doi.org/10.1017/dsi.2019.169>

Liu, F., Chen, H., Xu, J., Wen, Y., & Fang, T. (2021). Exploring the relationships between resilience and turnover intention in chinese high school teachers: Considering the moderating role of job burnout. *International Journal of Environmental Research and Public Health*, 18(12). <https://doi.org/10.3390/ijerph18126418>

McCormac, A., Calic, D., Parsons, K., Butavicius, M., Pattinson, M., & Lillie, M. (2018). The effect of resilience and job stress on information security awareness. *Information and Computer Security*, 26(3), 277–289. <https://doi.org/10.1108/ICS-03-2018-0032>

Moqbel, M., & Bartelt, V. L. (2018). Social network sites in businesses: Combating technostress. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2018-Janua(January), 1846–1853. <https://doi.org/10.24251/hicss.2018.233>

Mushtaque, I., Waqas, H., & Awais-E-Yazdan, M. (2022). The effect of technostress on the teachers' willingness to use online teaching modes and the moderating role of job insecurity during COVID-19 pandemic in Pakistan. *International Journal of Educational Management*, 36(1), 63–80. <https://doi.org/10.1108/IJEM-07-2021-0291>

Mustamil, N., & Najam, U. (2020). The impact of servant leadership on follower turnover intentions: Mediating role of resilience. *Asian Journal of Business and Accounting*, 13(2), 125–145. <https://doi.org/10.22452/ajba.vol13no2.5>

- Nuutinen, S., Ahola, S., Eskelinen, J., & Kuula, M. (2022). How job resources influence employee productivity and technology-enabled performance in financial services: the job demands–resources model perspective. *Journal of Organizational Effectiveness*, 9(2), 233–252. <https://doi.org/10.1108/JOEPP-01-2021-0014>
- Ramasamy, V., & Abbudullah, N. H. (2020). Assessing turnover antecedent among academics at private universities in Malaysia. *International Journal of Scientific and Technology Research*, 9(3), 1642–1650.
- Singh, P., Bala, H., Dey, B. L., & Filieri, R. (2022). Enforced remote working: The impact of digital platform-induced stress and remote working experience on technology exhaustion and subjective wellbeing. *Journal of Business Research*, 151(August 2021), 269–286. <https://doi.org/10.1016/j.jbusres.2022.07.002>
- Smith, K. J., Emerson, D. J., Boster, C. R., & Everly, G. S. (2020). Resilience as a coping strategy for reducing auditor turnover intentions. *Accounting Research Journal*, 33(3), 483–498. <https://doi.org/10.1108/ARJ-09-2019-0177>
- Srivastava, S., Misra, R., & Tripathi, P. M. (2022). Coping Distress through Harvesting Resilience Among Indian Physicians: Role of Mediating–Moderating Variables. *Journal of Health Management*, 24(3), 414–422. <https://doi.org/10.1177/09720634221109307>
- Tomaszek, A., Zdankiewicz-Ścigata, E., Kosson, D., & Kosieradzki, M. (2018). Resilience as a Moderator of Extreme Stress Adaptation: Living Kidney Donor Analysis. *Transplantation Proceedings*, 50(6), 1640–1645. <https://doi.org/10.1016/j.transproceed.2018.04.057>
- Wang, H., Ding, H., & Kong, X. (2022). Understanding technostress and employee well-being in digital work: the roles of work exhaustion and workplace knowledge diversity. *International Journal of Manpower*. <https://doi.org/10.1108/IJM-08-2021-0480>
- Ya'acob, N. S., & Abd Aziz, N. N. (2021). The Technostress Creator on Educators' Job Burnout in the Virtual Learning Environment: A Pilot Study. *An International Journal*, 13(4s), 306–317.

# ***The Relationship Between Self-Esteem, Fear of COVID-19 and Instagram Addiction Among Undergraduates in Malaysia***

Lee Jia Jie<sup>1</sup>, Loon Ling Lee<sup>2</sup>, Thio Kai Qi<sup>3</sup>, Ooh Seow Ling<sup>4</sup>

<sup>1,2,3,4</sup>Department of Psychology and Counseling, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman, 31900 Kampar, Perak, Malaysia

<sup>1</sup>Corresponding author: leejiajie23@utar.my

05

## **Abstract**

Instagram addiction has become an alarming issue worldwide, and Malaysia is no exception. The percentage of Instagram users in Malaysia has increased from 57% in 2018 to 63.1% in 2020, and heavy users were reported among undergraduates who aged between 18 to 24 years. Studies claimed that individuals with low self-esteem are correlated with addiction due to the in-built enhancement filters and exclusion of "dislike" button in this visual-oriented platform. Studies also found that individuals tend to alleviate their fear of coronavirus disease (COVID-19) through intensive engagement in reinforcing online activities, such as using Instagram. The aims of the study are to investigate the predictive roles of self-esteem and fear of COVID-19 to Instagram addiction. A cross-sectional survey design was employed, whereby a total number of 183 Malaysian undergraduates ( $M = 21.91$ ) were involved in the present research by answering the online self-administered questionnaire. Among the participants, 74.9% were females ( $n = 137$ ). Purposive sampling method was applied to recruit Malaysian undergraduates, aged between 18 to 24 years, who were also Instagram users with personal accounts. Three instruments were used to measure the respective constructs, including Rosenberg Self-Esteem Scale, Fear of COVID-19 Scale, and The Instagram Addiction Scale. The results showed that self-esteem did not significantly predict Instagram addiction ( $\beta = -.049$ ,  $p = .424$ ). In contrast, fear of COVID-19 positively predicted Instagram addiction ( $\beta = .573$ ,  $p < .001$ ). Despite we are living with COVID-19 endemic now, the virus continues to pose a threat. Based on this study, we found that fear of COVID-19 will lead to Instagram addiction. If the issue is not addressed in the early stages, it may negatively affect undergraduates' psychological well-being and academic performance. Hence, this paper provided some practical implications to prevent further detrimental impacts.

**Keywords:** Instagram addiction, self-esteem, fear of COVID-19, undergraduates

## **1.0 INTRODUCTION**

Instagram is a visual-oriented social media platform that allows its users to share photos and videos, interact with other users by commenting and liking posts, as well as following others' profiles (Foroughi et al., 2021). With its unique photo-based culture and in-built photo-enhancing features, Instagram easily stood out from the other text-based social media platforms, such as Twitter and Facebook (Lee et al., 2015). Lim (2016) revealed that the number of active users of Instagram has reached almost four million in Malaysia. MCMC (2020) further supported that the percentage of Instagram users in Malaysia has increased from 57% in 2018 to 63.1% in 2020. Of the user population, undergraduates were heavy Instagram users (Ponnusamy et al., 2020). To illustrate, a local study conducted by Hassim et al. (2020) uncovered that 57% of the undergraduate population spend four to six hours on Instagram per day, and another 9% spend six hours and above per day. Besides, Jiang (2021) explained that undergraduates use Instagram more often to learn, acquire and communicate the latest pandemic-related information. Consequently, such an excessive use may result in dependency on social media, which in turn, leads to the development of addiction (Arora et al., 2020; Chung et al., 2019).

According to Rosenberg (1965), self-esteem can be conceptualized as an individual's overall assessment of self-worth. Since self-esteem is established during social interaction, social media, as a medium of virtual interaction, plays an unneglectable role on self-esteem (Putra, 2018). According to Festinger's Social Comparison Theory (1954), social comparison is the predisposition of individuals to judge their environment, skill, and general identity by comparing with others. Verduyn et al. (2020) depicted that, due to the positively biased contents on social media, individuals are more prone to making upward social comparison. In contrast to Facebook, Instagram, as a visual-oriented social media platform, encourages positively biased visual contents that create a false sense of realities among users; consequently, it poses higher tendency to prompt social comparison, which then jeopardizes their self-esteem (Putra, 2018). Not only that, as defined by Ümmet (2015), self-esteem is one's appraisal of the gap between the self they perceive and the self they want; hence, some users tend to view Instagram as a platform to display their ideal self by applying enhancement filters, thereby increasing the likelihood of developing Instagram addiction.

Moreover, social media plays a key role, especially since 2019 when the whole world encountered COVID-19 outbreak. González- Padilla and Tortolero-Blanco (2020) provided support that COVID-19 is the first health crisis where social media is highly used for the purpose of ensuring the public to stay vigilant about the course of the crisis from time to time. Several countries, including Malaysia, have declared national lockdown to minimize the infection (Shah et al., 2020). Aside from the visible fallout, individuals also developed psychological fear of being infected, dying, losing loved ones, and spreading the virus due to the high transmission rate (Ahorsu et al., 2020; Ornell et al., 2020). As a result, people tend to resort to social media use as a coping strategy to alleviate their stress and anxiety (Fernandes et al., 2020; Seyed Hashemi et al., 2020). Although the use of Instagram helps in reducing stress and escaping from difficult thoughts, abusive usage may put these individuals at a higher risk of developing Instagram addiction (Gao et al., 2020; Islam et al., 2020).

However, Instagram was under-studied as compared to other social media platforms, such as Facebook and Twitter, which then provides little generalization value to understand Instagram addiction in view of the differences in technological features and structures across different social media platforms (Alhabash & Ma, 2017). There is also a dearth of studies related to Instagram addiction, especially in the Malaysian context (Kircaburun & Griffiths, 2019). Moreover, to our knowledge, the correlation between fear of COVID-19 and Instagram addiction has yet to be investigated. Besides, mixed results were also reported on the linkage between self-esteem and Instagram addiction (Oducado et al., 2021). Therefore, the objectives of the present study are to investigate the predictive roles of self-esteem and fear of COVID-19 to Instagram addiction among undergraduates in Malaysia.

## ■2.0 LITERATURE REVIEW

Instagram addiction can be understood as an addictive use of Instagram by allocating too much time and concern due to an uncontrollable drive, which in turn, negatively impacts one's daily functioning. According to Griffiths (2005), all types of addiction, including social media addiction, share six common components, namely salience, mood modification, tolerance, withdrawal, conflict, and relapse. Salience refers to when the addictive activity is of utmost importance to the extent that it dominates one's thoughts, emotions, and behaviors. Moreover, mood modification occurs when an individual gains a mood-lifting experience by engaging in the addictive activity. Tolerance refers to the condition where an increase in the amount of addictive activity is needed to attain the desired result. Furthermore, withdrawal can be observed in individuals who experience uncomfortable states, both psychological and physiological, once they quit the addictive activity. Conflict is a process where the addict struggles between conflicting internal forces of irresistible crave and resistance. Lastly, relapse refers to the revival or recurrence of addictive patterns after a certain period of abstinence. In short, individuals who possess all these six characteristics are said to be addicted to Instagram.



Previous study unveiled a negative relationship between self-esteem and Instagram addiction (Treitel, 2020). To illustrate, Jiang and Ngien (2020) revealed that individuals with lower self-esteem tend to emphasize on extrinsic social approval to improve self-esteem. In this context, Instagram, which provides visible social approval via the numbers of likes and followers, became an irresistible temptation for those with lower self-esteem. Moreover, the exclusion of "dislike" button feature from Instagram has made it more favorable in comparison to other social media platforms as it calls a halt to the receipt of unpleasant feedback, and consequently, minimizes the threat to their self-esteem (Jiang & Ngien, 2020; Zywicki & Danowski, 2008). Apart from that, social compensation hypothesis, which explains one's tendency to compensate their inadequate real-life interactions by extensively seeking social approval via online, was reported at play (Hawi & Samaha, 2016). Those with lower self-esteem may be hesitant to establish face-to-face relationship due to their negative self-appraisal. As a result, they may find virtual platforms, characterized by anonymity, a safer place to reveal their true self and are thereafter motivated to use social media intensively (Gaddekar & Ang, 2020).

On the other hand, fear of COVID-19 was reported to relate with Instagram addiction as well. The novel contagious COVID-19 ravaged the globe since 2019, and Malaysia is no exception (Lin et al., 2020). The high rate of transmission and large-scale mortality caused individuals to develop remarkable fear towards COVID-19 (Ahorsu et al., 2020; Ornell et al., 2020; Seyed Hashemi et al., 2020). Fear can be understood as a functional reaction to threatening events (Kayis et al., 2021). However, an overly high fear level is maladaptive and may lead to psychological distress (Hossain et al., 2020; Mertens et al., 2020; Rahman et al., 2020; Ren et al., 2020; Saravanan et al., 2020). As a result, people tend to cling onto social media use, such as Instagram, as a coping strategy to alleviate their stress and anxiety (Duan et al., 2020; Fernandes et al., 2020; Islam et al., 2020; Seyed Hashemi et al., 2020). Aside from that, Arora et al. (2020) highlighted that negative sentiments, including anxiety and fear, will increase one's vulnerability to addictive use of social media, thereby further strengthening the correlation between fear of COVID-19 and Instagram addiction. The need for information could also explain the relationship between fear of COVID-19 and Instagram addiction. Lin et al. (2020) revealed that 90% of users learned pandemic-related information from the internet. This was also underpinned by Kayis et al. (2021), who claimed that such an easy access to internet may increase the risk of developing addiction.

In the present research, the uses and gratifications (U&G) theory served as the theoretical framework. This theory reflects how various social and psychological factors influence the preference of users to a particular social media platform (Whiting & Williams, 2013). In simple words, individuals are driven by specific needs to use social media. Consequently, the fulfillment of needs provides a strong incentive for the repetitive usage, which may then lead to addiction (Foroughi et al., 2021). To illustrate, recognition or esteem need substantially predicts Instagram addiction (Foroughi et al., 2021). Instagram, as a visual-oriented platform, was claimed to generate greater social presence as compared to text-based platform, such as Facebook and Twitter, because the vivid graphical cues shape concrete impression; consequently, it prompts social comparison and further influences self-esteem (Johnson & Knobloch-Westerwick, 2017; Lee et al., 2015). Apart from that, Fernandes et al. (2020) revealed that there is a significant increase in problematic internet use among those who perceive surfing internet as a form of avoidant coping to escape from stressful life events, thereby supporting the notion that fear makes escapism need to be more potent during the pandemic; consequently, such an increased usage may lead to addiction. Furthermore, fear may also trigger information need, whereby individuals engage in compulsive online behaviors to obtain pandemic-related information as an attempt to curb their fear (Oducado et al., 2021; Seyed Hashemi et al., 2020). The situation could be worse in the context of Instagram as this visual-oriented platform provides visual-intriguing infographics and videos related to COVID-19 (Foroughi et al., 2021).

### ■3.0 METHODOLOGY



This cross-sectional study utilized quantitative and correlational design. Purposive sampling method was applied to target 183 undergraduates ( $M = 21.91$ ) who met the following inclusion criteria: (i) Malaysian nationality, (ii) young adults aged between 18 to 24 years, (iii) currently pursuing undergraduate studies in Malaysia, and (iv) Instagram users with personal accounts. Among the participants, 74.9% were females ( $n = 137$ ). Furthermore, there were 89.1% of Chinese, 7.7% of Malay, 2.2% of Indian, and 1.1% of Punjabi. More than half of the sample were third-year undergraduates (65%), followed by second-year undergraduates (21.9%), fourth-year undergraduates (7.7%), first-year undergraduates (4.4%) and fifth-year undergraduates (1.1%).

Survey method was adopted, whereby participants answered the self-report questionnaire disseminated on several online platforms, such as Instagram and Facebook. The online questionnaire consisted of nine demographic questions, including age, gender, and undergraduate programs, as well as three instruments. The first instrument is the 10-item Rosenberg Self-Esteem Scale developed by Rosenberg (1965) to assess global self-esteem with ten items being rated on a four-point Likert scale, ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). This scale contained five negative items (items 2, 5, 6, 8, and 9), and achieved satisfactory reliability value of .87 (Rahardjo & Mulyani, 2020). The second instrument is the 7-item Fear of COVID-19 Scale established by Ahorsu et al. (2020) to measure one's fear level of COVID-19 with seven items being rated on a five-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). It also obtained reliability value of .72 (Ahorsu et al., 2020). Lastly, the 6-item The Instagram Addiction Scale (Sholeh & Rusdi, 2019) assessed the extent of Instagram addiction based on six components proposed by Griffiths' addiction model (2005) – salience, mood modification, tolerance, withdrawal, conflict, and relapse. It consisted of 12 items being rated on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). There were two subscales, namely Instagram Feed Addiction which examined the addictive behavior associated with Instagram feed, and Instagram Stories Addiction which assessed the addictive behavior related to Instagram stories. Both serve as main features on Instagram, in which Instagram feed allows its users to post photos and videos on newsfeed page to gain likes and comments; whereas Instagram stories enable its users to share their everyday moments in the forms of photos and videos that will disappear 24 hours after they were posted (Sholeh & Rusdi, 2019). Likewise, this scale also demonstrated satisfactory reliability (Sholeh & Rusdi, 2019). After removing five outliers and 22 incomplete responses, the Statistical Package for the Social Sciences (SPSS) software (IBM Corp., 2015) was administered to conduct data analysis.

#### ■4.0 RESULTS

Multiple Linear Regression (MLR) was conducted to test whether self-esteem and fear of COVID-19 significantly predict Instagram addiction. As shown in Table 1, the regression model was statistically significant,  $F(2, 180) = 46.112$ ,  $p < .001$ , and accounted for 33.1% of the variance. The effect size of  $f^2 = .51$  also indicated large effect size (Cohen, 1988). As shown in Table 2, self-esteem ( $\beta = -.049$ ,  $p = .424$ ) did not significantly predict Instagram addiction. Hence, the hypothesis was not supported. On the contrary, fear of COVID-19 was found to positively predict Instagram addiction ( $\beta = .573$ ,  $p < .001$ ). Hence, the hypothesis was supported.

**Table 1** Regression Model Summary

	<i>df</i>	<i>F</i>	<i>p</i>	Adj. $R^2$	$R^2$
Regression	2	46.112	.000	.331	.339
Residual	180				
Total	182				

**Table 2** Coefficients Among Variables

	<i>t</i>	Std. $\beta$	Unstd. $\beta$	<i>p</i>
Self-Esteem	-.802	-.049	-.124	.424
Fear of COVID-19	9.348	.573	.984	.000

## ■ 5.0 DISCUSSION AND RECOMMENDATION

The results reported that self-esteem did not significantly predict Instagram addiction. The present finding was in line with past studies (Wahyuni & Maksum, 2019). Past meta-analysis also revealed that, as compared to emotional factors, self-esteem was less associated with internet addiction (Fumero et al., 2018). Moreover, Saiphoo et al. (2020) pointed out that the association between self-esteem and social media addiction was dependent on the types of social media content encountered. To picture, previous study demonstrated that pandemic-related information, which was a neutral content that did not prompt social comparison and in turn affected self-esteem, was of great interest of up to 90% of social media users during the pandemic, thereby explaining the non-significant predictive role of self-esteem to Instagram addiction during times of distress (Kocabiyik, 2021). Aside from that, as compared to recognition need that contributed to self-esteem, social need might appear to be more salient to the young adults during the COVID-19 pandemic. This was supported by Pandya and Lodha (2021) that the Movement Control Order (MCO) had posed barriers to social interaction, thereby aggravating the need for socialization via social media. Furthermore, in line with Erikson's Stages of Psychosocial Development (Erikson, 1963), Foroughi et al. (2021) revealed that young adults were in the pivotal stage of relationship formation and maintenance to attain social support and sense of belonging; thus, social need appeared to be relatively salient than recognition need during the pandemic as the access to physical interaction was greatly obstructed. Therefore, the predictive role of self-esteem to Instagram addiction was non-significant among undergraduates in Malaysia.

In contrast, the present study found that fear of COVID-19 positively predicted Instagram addiction among undergraduates in Malaysia. This finding was consistent with past studies (Fumero et al., 2018; Ting & Essaub, 2021; Yam et al., 2021). A meta-analysis conducted by Fumero et al. (2018) also claimed that emotional factors, including fear, were more associated with addiction. Amidst the movement restriction, social media had apparently become the primary source of social support, information, as well as tool for work and education; as a result, such an increased usage might intensify the risk of addiction (Kocabiyik, 2021; Oducado et al., 2021; Yam et al., 2020). Apart from that, another justification could be escapism, whereby individuals engaged in compulsive Instagram use as a coping mechanism to escape from their real-life difficulties and undesirable emotions, such as fear towards COVID-19 (Kircaburun & Griffiths, 2019; Lee et al., 2015; Rodríguez-Hidalgo et al., 2020). Other than that, the present finding could also be explained by Self-Medication Theory that elucidated the tendency of seeking relief through addictive activities due to limited access to adaptive coping mechanism during stressful times, such as during the pandemic (Ting & Essaub, 2021). To support, numerous studies demonstrated a notable increase in addictive behaviors, such as using social media, playing online games, and online gambling, during the pandemic (Lippi et al., 2020). Likewise, it was also found that the use of social media, including Instagram, had escalated remarkably by 70% as compared to pre-pandemic time (Kocabiyik, 2021). Therefore, consistent with the present study, fear of COVID-19 positively predicted Instagram addiction among undergraduates in Malaysia.

Future researchers are recommended to adopt probability or random sampling techniques, where each sample in the population stands an equal chance to be selected in the study, to ensure the generalizability of the research findings to the target population (Acharya et al., 2013). Furthermore, it is recommended to include the measurements of both implicit and explicit self-esteem to obtain more valid research findings (Lannoy et al., 2020). For instance, the use of Implicit Association Test (IAT), along with Rosenberg Self-Esteem Scale which measures explicit self-esteem only, could be adopted in future studies to investigate its correlation with Instagram addiction. Additionally, another possible reason for the non-significant predictive role of self-esteem on Instagram addiction could be due to the types of social media contents encountered (Saiphoo et al., 2020). Hence, future researchers could explore this new research direction by involving this variable in the linkage between self-esteem and Instagram addiction. Lastly, since the present study was conducted during the COVID-19

pandemic, future researchers are recommended to replicate the study in different timelines, such as during the endemic phase to further explore how different contextual factors could influence the observed results.

## ■6.0 CONCLUSION

The present findings filled in the research gap by uncovering that fear of COVID-19 serves as a risk factor contributing to Instagram addiction. This is vital as it contributed to the dearth of literature about Instagram addiction, especially in the Malaysian context. It also provided empirical support for the policymakers and relevant authorities to design evidence-based initiatives in promoting the psychological well-being of undergraduates. For example, the tertiary educational institutions could pay more attention to this vulnerable group by providing them with proper resources to alleviate their fear and anxiety, such as more easily accessible mental health services. Moreover, the university counsellors could also organize workshops to support those who are at risk of developing addiction by educating them on healthy and adaptive strategies to cope with their fear and anxiety rather than engaging in excessive social media use, which in turn, may negatively affect their overall well-being.

## References

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialities*, 4(2). <https://doi.org/10.7713/ijms.2013.0032>
- Ahorsu, D. K., Lin, C., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: Development and initial validation. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-020-00270-8>
- Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society*, 3(1), 1-13. <https://doi.org/10.1177/2056305117691544>
- Arora, A., Chakraborty, P., & Bhatia, M. P. S. (2020). Problematic use of digital technologies and its impact on mental health during COVID-19 pandemic: Assessment using machine learning. *Emerging Technologies During the Era of COVID-19 Pandemic*, 348, 197-221. [https://doi.org/10.1007/978-3-030-67716-9\\_13](https://doi.org/10.1007/978-3-030-67716-9_13)
- Arora, A., Chakraborty, P., Bhatia, M. P., & Mittal, P. (2020). Role of emotion in excessive use of Twitter during COVID-19 imposed lockdown in India. *Journal of Technology in Behavioral Science*, 6(2), 370-377. <https://doi.org/10.1007/s41347-020-00174-3>
- Chung, K. L., Morshidi, I., Yoong, L. C., & Thian, K. N. (2019). The role of the dark tetrad and impulsivity in social media addiction: Findings from Malaysia. *Personality and Individual Differences*, 143, 62-67. <https://doi.org/10.1016/j.paid.2019.02.016>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Earlbaum.
- Erikson, E. (1963). *Childhood and society* (2nd ed.). Norton.
- Fernandes, B., Biswas, U. M., Tan-Mansukhani, R., Vallejo, A., & Essau, E. A. (2020). The impact of COVID-19 lockdown on internet use and escapism in adolescents. *Revista de Psicología Clínica con Niños y Adolescentes*, 7(3), 59-65. <https://doi.org/10.21134/rpcna.2020.mon.2056>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 117-140.
- Foroughi, B., Griffiths, M. D., Iranmanesh, M., & Salamzadeh, Y. (2021). Associations between Instagram addiction, academic performance, social anxiety, depression, and life satisfaction among university students. *International Journal of Mental Health and Addiction*, 1-22. <https://doi.org/10.1007/s11469-021-00510-5>
- Fumero, A., Marrero, R. J., Voltes, D., & Peñate, W. (2018). Personal and social factors involved in internet addiction among adolescents: A meta-analysis. *Computers in Human Behavior*, 86, 387-400. <https://doi.org/10.1016/j.chb.2018.05.005>
- Gadekar, R., & Ang, P. H. (2020). Is social media use socially enhancing or compensating? *Journal of Creative Communications*, 15(3), 269-288. <https://doi.org/10.1177/0973258620943705>

- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PLoS ONE*, 15(4), Article e0231924. <https://doi.org/10.1371/journal.pone.0231924>
- González-Padilla, D. A., & Tortolero-Blanco, L. (2020). Social media influence in the COVID-19 Pandemic. *International Brazilian Journal of Urology*, 46(1), 120-124. <https://doi.org/10.1590/s1677-5538.ibju.2020.s121>.
- Hassim, N., Hasmadi, M. H. N., & Sharipudin, M. N. S. (2020). Social media or social comparison? An analysis of Instagram use among Malaysian youth. *SEARCH: Journal of Media and Communication Research*, 33-45.
- Hawi, N. S., & Samaha, M. (2016). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576-586. <https://doi.org/10.1177/0894439316660340>
- Hossain, M. A. (2019). Effects of uses and gratifications on social media use: The Facebook case with multiple mediator analysis. *PSU Research Review*, 3(1), 16-28. <https://doi.org/10.1108/PRR-07-2018-0023>
- Islam, M. S., Sujon, M. S. H., Tasnim, R., Ferdous, M. Z., Masud, J. H. B., Kundu, S., Mosaddek, A. S. M., Choudhuri, M. S. K., Kircaburun, K., & Griffiths, M. D. (2020). Problematic internet use among young and adult population in Bangladesh: Correlates with lifestyle and online activities during the COVID-19 pandemic. *Addictive Behaviors Reports*, 12, 1-8. <https://doi.org/10.1016/j.abrep.2020.100311>
- Jiang, S., & Ngien, A. (2020). The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore. *Social Media + Society*, 6(2), 1-10. <https://doi.org/10.1177/2056305120912488>
- Jiang, Y. (2021). Problematic social media usage and anxiety among university students during the COVID-19 pandemic: The mediating role of psychological capital and the moderating role of academic burnout. *Frontiers in Psychology*, 12, 1-12. <https://doi.org/10.3389/fpsyg.2021.612007>
- Kayis, A. R., Satıcı, B., Deniz, M. E., Satıcı, S. A., & Griffiths, M. D. (2021). Fear of COVID-19, loneliness, smartphone addiction, and mental wellbeing among the Turkish general population: A serial mediation model. *Behaviour & Information Technology*, 1-13. <https://doi.org/10.1080/0144929x.2021.1933181>
- Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*, 7(1), 158-170. <https://doi.org/10.1556/2006.7.2018.15>
- Kircaburun, K., & Griffiths, M. D. (2019). Problematic Instagram use: The role of perceived feeling of presence and escapism. *International Journal of Mental Health and Addiction*, 17(4), 909-921. <https://doi.org/10.1007/s11469-018-9895-7>
- Kocabiyyik, O. O. (2021). Social media usage experiences of young adults during the COVID 19 pandemic through social cognitive approach to uses and gratifications. *International Journal of Technology in Education and Science (IJTES)*, 5(3), 447-462. <https://doi.org/10.46328/ijtes.226>
- Kuss, D., & Griffiths, M. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 1-17. <https://doi.org/10.3390/ijerph14030311>
- Lannoy, S., Chatard, A., Selimbegovic, L., Tello, N., Van der Linden, M., Heeren, A., & Billieux, J. (2020). Too good to be cautious: High implicit self-esteem predicts self-reported dangerous mobile phone use. *Computers in Human Behavior*, 103, 208-213. <https://doi.org/10.1016/j.chb.2019.09.018>
- Lee, E., Lee, J., Moon, J. H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, Behavior, and Social Networking*, 18(9), 552-556. <https://doi.org/10.1089/cyber.2015.0157>
- Lim, M. (2016). *How many Instagram users in Malaysia?* ecInsider. <http://www.ecinsider.my/2016/04/how-many-instagram-users-in-malaysia.html>
- Lin, C. Y., Broström, A., Griffiths, M. D., & Pakpour, A. H. (2020). Investigating mediated effects of fear of COVID-19 and COVID-19 misunderstanding in the association between problematic social media use, psychological distress, and insomnia. *Internet Interventions*, 21, 1-6. <https://doi.org/10.1016/j.invent.2020.100345>
- Lippi, G., Henry, B. M., Bovo, C., & Sanchis-Gomar, F. (2020). Health risks and potential remedies during prolonged lockdowns for coronavirus disease 2019 (COVID-19). *Diagnosis*, 7(2), 85-90. <https://doi.org/10.1515/dx-2020-0041>

- Malaysian Communications and Multimedia Commission. (2020). *Internet Users Survey 2020*. <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS-2020-Report.pdf>
- Oducado, R. M., Tuppal, C., Estoque, H., Sadang, J., Superio, D., Real, D. V., Roa, M. N., Malaga, X., Quiros, J., Fajardo, M. T., & Dela Rosa, R. (2021). Internet use, eHealthliteracy and fear of COVID-19 among nursing students in the Philippines. *International Journal of Educational Research and Innovation*, 15, 487-502. <https://doi.org/10.46661/ijeri.5520>
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. (2020). "Pandemic fear" and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. <https://doi.org/10.1590/1516-4446-2020-0008>
- Pandya, A., & Lodha, P. (2021). Social connectedness, excessive screen time during COVID-19 and mental health: A review of current evidence. *Frontiers in Human Dynamics*, 3, Article 68413. <https://doi.org/10.3389/fhumd.2021.684137>
- Ponnusamy, S., Iranmanesh, M., Foroughi, B., & Hyun, S. S. (2020). Drivers and outcomes of Instagram addiction: Psychological well-being as moderator. *Computers in Human Behavior*, 107, 1-11. <https://doi.org/10.1016/j.chb.2020.106294>
- Putra, J. (2018). Peran syukur sebagai moderator pengaruh perbandingan sosial terhadap self-esteem pada remaja pengguna media sosial. *Psikohumaniora: Jurnal Penelitian Psikologi*, 3(2), 197-210. <http://dx.doi.org/10.21580/pjpp.v3i2.2650>
- Rodríguez-Hidalgo, A. J., Pantaleón, Y., Dios, I., & Falla, D. (2020). Fear of COVID-19, stress, and anxiety in university undergraduate students: A predictive model for depression. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.591797>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Saiphoo, A. N., Dahoah Halevi, L., & Vahedi, Z. (2020). Social networking site use and self-esteem: A meta-analytic review. *Personality and Individual Differences*, 153, 109639. <https://doi.org/10.1016/j.paid.2019.109639>
- Seyed Hashemi, G. S., Hosseinneshad, S., Dini, S., Griffiths, M. D., Lin, C. Y., & Pakpour, A. H. (2020). The mediating effect of the cyberchondria and anxiety sensitivity in the association between problematic internet use, metacognition beliefs, and fear of COVID-19 among Iranian online population. *Heliyon*, 6(10), 1-6. <https://doi.org/10.1016/j.heliyon.2020.e05135>
- Shah, A. U., Safri, S. N., Thevadas, R., Noordin, N. K., Rahman, A. A., Sekawi, Z., Ideris, A., & Sultan, M. T. (2020). COVID-19 outbreak in Malaysia: Actions taken by the Malaysian government. *International Journal of Infectious Diseases*, 97, 108-116. <https://doi.org/10.1016/j.ijid.2020.05.093>
- Sholeh, A., & Rusdi, A. (2019). A new measurement of Instagram addiction: Psychometric properties of the Instagram addiction scale (TIAS). *CISAK*, 91-97.
- Ting, C. H., & Essaub, C. (2021). Addictive behaviours among university students in Malaysia during COVID-19 pandemic. *Addictive Behaviors Reports*, 14, 100375. <https://doi.org/10.1016/j.abrep.2021.100375>
- Treitel, Y. (2020). *The impact of Instagram usage and other social factors on self-esteem scores* [Doctoral dissertation]. ProQuest.
- Ümmet, D. (2015). Self-esteem among college students: A study of satisfaction of basic psychological needs and some variables. *Procedia - Social and Behavioral Sciences*, 174, 1623-1629. <https://doi.org/10.1016/j.sbspro.2015.01.813>
- Verduyn, P., Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social comparison on social networking sites. *Current Opinion in Psychology*, 36, 32-37. <https://doi.org/10.1016/j.copsyc.2020.04.002>
- Wahyuni, E. N., & Maksum, A. (2019). Self-esteem and social media addiction among college students: Contribution gender as moderator. *The 1st International Conferences on Engineering, Technology and Social Science (ICONETOS)*, 34-38.
- Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research*, 16(4), 362-369. <https://doi.org/10.1108/QMR-06-2013-0041>
- Yam, F. C., Korkmaz, O., & Griffiths, M. D. (2021). The association between fear of Covid-19 and smartphone addiction among individuals: The mediating and moderating role of cyberchondria severity. *Current Psychology*. <https://doi.org/10.1007/s12144-021-02324-z>

Zywica, J., & Danowski, J. (2008). The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; predicting Facebook™ and offline popularity from sociability and self-esteem and mapping the meanings of popularity with semantic networks. *Journal of Computer-Mediated Communication*, 14(1), 1-34.<https://doi.org/10.1111/j.1083-6101.2008.01429.x>

# Challenges and Coping Strategies in Mothers of Children with Autism Spectrum Disorder (ASD)

Sofia Faricha Azizah and Mohd Nasir Bin Masroom

School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

Corresponding author: [m.nasir@utm.my](mailto:m.nasir@utm.my)

06

## Abstract

Parenting autistic children is not easy and is a challenging job, people around them must have high patience and the right strategy to deal with them. During parenting autistic children, stress experienced by parents includes experiencing emotional stress, needing to control children's emotions, worrying about relationships with siblings, worrying about children's future, facing financial problems, and seeking inclusive education. In order to explore how mothers in parenting autistic children, this study is conducted to examine the mothers' challenges and coping strategies in raising autistic children. This study is qualitative research that uses a structured interview method to collect data from the respondents. A total of 10 respondents have been interviewed, all of whom are mothers of autistic children aged between 6-18 years and domiciled in Banyuwangi, Indonesia. Data analysis was carried out using the thematic analysis method, and it was found that respondents experienced internal and external challenges in raising autistic children. In addition, it was also found that there are factors that influence the mother's coping strategies. Overall, this study emphasizes that the challenges of raising autistic children are not only causing a negative impact on the respondents but also can make mothers more experienced and familiarized in coping with the challenges they face.

Keywords: Autisme, autistic children, challenges, coping strategies

## ■1.0 INTRODUCTION

According to Nareza (2021), autism is a type of brain development disorder that affects the sufferer's ability to communicate and interact with others. In addition, autism also causes behavioral disorders and limits interest for sufferers. According to Dekker et al. (2014), the role of parents is to reminding autistic children to practice and apply what they learn skills in various situations in everyday life. Therefore, the role of the closest people, especially parents, is very needed for the development of autistic children, and usually, the mother is the closest person to them. Due to current issues, mothers are the ones who get the most challenges in taking care of autistic children. Mothers will need strategies or tips to cope with the challenges of caring for and having an autistic child, be it challenges from the autistic children themselves or external challenges.

Parenting autistic children is not easy and is a challenging job, people around them must have high patience and the right strategy to deal with them. According to Chodidjah and Kusumasari (2018), during parenting, stress experienced by parents includes experiencing emotional stress, needing to control children's emotions, worrying about relationships with siblings, worrying about children's future, facing financial problems, and seeking inclusive education. Raising children with autism spectrum disorder will face various challenges that will trigger stress, however, it can descend with characteristics of the mother's personality and also the social support that she received (Aulita, 2021).

In addition to strategies to deal with autistic children themselves, parents, especially mothers, need strategies to overcome stress, fatigue, and stigma from the society that still considers autistic children a disgrace. Aulita (2021), also states that the behavior exhibited by autistic children causes mothers to supervise their children, with lack of communication skills and inappropriate emotions leave mothers confused and can even cause stress because mothers often don't understand the meaning of their children. Mothers who have children with autism



are more likely to experience mental health and physical health problems and have a lower quality of life than mothers who have children with other developmental problems (Wang et al., 2018). According to Hoogsteen and Woodgate (2013), as many as 40% of mothers and 30% of fathers with children with autism experience depression. Autism Spectrum Disorder (ASD) is a severe brain development disorder that affects sufferers with difficulties in socializing, communicating, and interacting with others (Li et al., 2018).

The Center for Disease Control and Prevention (CDC) (2018), stated that the prevalence of ASD patients increased from 1 per 150 population in 2000 to 1 per 59 in 2014. The CDC also states that ASD is more common in boys, with a prevalence of 1:37, while in girls it is 1:151. According Gusti (2019), Indonesia has a population of 237.5 million with a population growth rate of 1.14%, is estimated to have an ASD number of 4 million people. In the United States, the prevalence of children born with autism is 1 per 68 each year (CDC, 2018). Meanwhile, no definite data is stating the prevalence of autistic children in Malaysia (See, 2012). The high number shown by these data means that autistic children and their families need special and extra attention to get equal welfare.

In Indonesia, especially in the environment that will be studied for this research in Banyuwangi, the people still have very limited knowledge about what autism is and how to treat autistic children appropriately. They still consider autistic children to be a disgrace and forbid their children to be near or play with autistic children. It is the views of society that cause autistic children to become loners and find it difficult to interact with other people. Behavioral characteristics of autistic children include hyperactivity, injuring behavior self, and obsessive behavior (Sitimin et al., 2017).

In addition to having difficulty interacting socially and communicating, autistic children also have disruptive and unruly behavior disorders (Wang et al., 2018). The behavior problems of these children are the cause of psychological stress in children parents (Chan et al., 2018). According to Hoogsteen and Woodgate (2013), parents, especially mothers who have children with autism generally also feel that their household tasks are becoming increasingly difficult weight. Thus, this study is aimed at mothers who have children with autism. This can bring understanding to us about the difficulties of mothers in dealing with autistic children and how they cope with these difficulties.

Furthermore, the gaps was found that in previous studies, most of the studies focused on the experience of mothers in caring for autistic children. In addition, when analyzing previous studies, no research was found located in Banyuwangi. Due to the existing gaps, this study is conducted to explore the mothers' challenges in raising autistic children and also to examine the coping strategies by mothers of children with autism spectrum disorders in Banyuwangi.

### **Research Objectives**

The research objectives in this study are:

- i. To explore the mothers' challenges in raising children with Autism Spectrum Disorder (ASD).
- ii. To examine the coping strategies in mothers of children with Autism Spectrum Disorder (ASD).

### **■2.0 LITERATURE REVIEW**

A challenge is something that can inspire a person's ability to go through or overcome it (Faruq, 2015). In this study, the intended challenge is the problems faced by mothers who take care of autistic children. The challenges themselves are grouped into two, namely internal and external challenges. According to Ludlow et al. (2012), these challenges are facing with challenging behaviors of autistic children, facing judgments from others, and lack of support. Meanwhile, according to Chodidjah and Kusumasari (2018), the challenges faced by mothers of autistic children are experiencing emotional stress, worrying about the relationship of autistic children

with sibling, worrying about the future of autistic children, having financial problem, and difficulty finding inclusive education.

Coping strategy is the efforts created by individuals in dealing with situations that are full of challenges or that threaten themselves by using existing resources to reduce the stress and pressure caused (Khoiroh, 2013). An individual's coping resources will affect the coping strategies that will be carried out in solving problems (Maryam, 2017). According to Taylor (as Cited Hapsari et al., 2007), there are four (4) purposes of the coping strategy, namely maintaining emotional balance, maintaining a positive self-image, reducing environmental stress, and continuing to have satisfying relationships with others. The way individuals handle stressful situations is determined by individual resources which include physical health, problem-solving skills, belief or positive outlook, social skills, social support, and material support (Yenjeli, 2010).

Autism Spectrum Disorder (ASD) is a developmental disorder characterized by impaired communication, language, social interaction, as well as an interest in certain things and repetitive behavior (Wang et al., 2018). Meanwhile, Judarwanto stated (as cited in Manalu, 2013) that autism is a pervasive developmental disorder in children characterized by disturbances and delays in the fields of cognitive, language, behavior, communication, and social interaction. Symptoms of autism usually appear before the child is 3 years old, including the absence of eye contact and no response to the environment (Saharso, 2004). Suharso also mentioned if therapy is not immediately carried out, after the age of 3 years the child's development will stop and even tends to retreat, such as not knowing his parents and not knowing his name.

The study of Chodidjah and Kusumasari (2018) was exploring the experiences of mothers caring for school-age children with autism. This study was stated that the presence of autistic children with various problems causes child care to be difficult and full of challenges. The impact is not only on parents, especially the mother but also on the sibling. Autism in children, in general, can be detected at the age of 2-3 years and early intervention allows children to be able to achieve normality. The results of the data analysis of this study found 6 (six) themes related to the experience of mothers while caring for school-age autistic children. These themes are experiencing emotional stress, needing to control children's emotions, worrying about relationships with siblings, worrying about children's futures, experiencing financial problems, and seeking inclusive education.

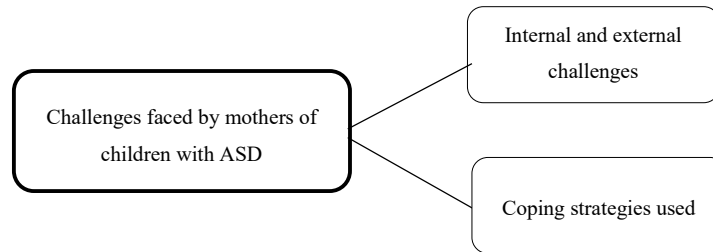
Rahmania et al. (2016) examined the coping strategies of mothers of preschool-age children with autism spectrum disorders. This study discussed two types of coping strategies based on the focus, namely problem-focused coping and emotion-focused coping. The results of the study have proven that the subjects used both methods to overcome various pressing problems in various spheres of daily life, including caring for autistic children. This study also states that the factors that determine which strategies are used the most or often depend on a person's personality and the extent of the stress level of a condition or problem they are experiencing.

Another study of Putri et al. (2019) was to find out the description of stress in parents who have children with autism spectrum disorders (ASD). Based on the results of the study, it was found that parents of children with ASD mostly experienced mild stress. Mild stress includes stress levels that often occur in everyday life. Stress in the mild category can help individuals become more alert and able to prevent the emergence of various possibilities that will occur from problems or pressures that arise. This study was also mentioned that in parents of children with autism, mild stress can encourage parents to increase their efforts in caring for children with ASD.

Furthermore, the study of Tway et al. (2007) identified the coping strategies used by families with children with ASD using the Resiliency Model of Family Stress, Adjustment, and Adaptation. The findings of this study have shown that many parents use passive assessment as a coping strategy in dealing with their child's ASD symptoms. Passive behavior reported by parents was

based on their belief that they did not have the ability to change the outcome of the child's disorder. This research has shown that active coping strategies are generally perceived as a more positive way of dealing with stressful events as individuals attempt to change the nature of the stressor or how one perceives the stressor.

The study of Ludlow et al. (2012) discussed the challenges faced by parents of children diagnosed with autism spectrum disorders (ASD). The results of this study were presented in the four core categories identified: dealing with challenges behavior, dealing with judgments from others, lack of support, impact on family, coping and the importance of proper support. In this study, the challenges were described as 'never ending', which had a significant impact on parents' sense of well-being and ability to cope. Challenging behavior mostly includes tantrums as a result of the child's difficulty coping with changing routines.



**Figure 1** Research Framework

Figure 1 is a research framework that shows that mothers who care for autistic children will face challenges and then there will be coping strategies for each of these challenges.

### ■3.0 METHODOLOGY

This study is a qualitative study that aims to explore the challenges and examine the coping strategies of mothers who have children with autism spectrum disorders. Qualitative methods were chosen to conduct this research. Respondents in this study are mothers who are caring for autistic children. The process of selecting participants or sampling in qualitative research is different from the sampling process in quantitative research. In qualitative research, respondents must have criteria and characteristics that are in accordance with the objectives and scope of the research. Therefore, the purposive sampling method is the most suitable for this research. The respondents' criteria that have been set by the researcher are mothers who have and raise autistic children living in the Banyuwangi area and the autistic children are at school age, which is between 6 - 18 years old. The instrument in this study used interview questions developed by the researcher and approved by the supervisor. These questions include Part A, a demographic question containing six (6) questions about the respondent's background including name, age, occupation, marital status, household monthly income, and autistic children current age. As for Part B, the questions are designed according to the challenges faced by mothers of autistic children and the factors that influence coping strategies contain ten questions covering challenges in raising autistic children and how to cope these challenges.

The primary data source of this research is the answers obtained from the interview method conducted by the researcher with the respondents. The researcher will also record the interview session with a voice recorder or cellphone with the respondent's consent. In addition, there are also supporting data from previous studies and other sources. The data collected in this study will be analyzed using thematic analysis methods. In the thematic analysis, the researcher will identify all the data and their relationship to each other so after that, the purpose of the research can be examined. According to Braun and Clarke (2006), thematic analysis is divided into several phases, the first phase of thematic analysis shows that the researcher is expected to transcribe the interview and gain an overall understanding through reading the transcript several times. Then, collect the data and organize it into possible categories of categories or subcategories and then compare the overall data. The next phase



Taking action	/	/	/	/	/	/	/	/	/	/
Family support	/	/	-	/	/	/	/	/	/	/

## ■5.0 DISCUSSION AND RECOMMENDATION

### *Challenges face by mothers of children with ASD*

The first objective of this research was to explore the mothers' challenges in raising children with Autism Spectrum Disorder (ASD). Based on the analysis of findings that have been carried out, it was found that most of the respondents faced internal pressures and external challenges while raising children with autism. The results of the research that have been obtained from interviews with respondents indicate that they experience internal pressure while raising autistic children. Internal pressure is the main challenge faced by respondents because it comes from the autistic children themselves. There were found three factors that cause internal pressure, including negative feelings, hold back emotion, and difficulties in dealing with autistic children. Nine out of 10 respondents experienced negative feelings when they first found out their child was diagnosed with autism, most of them felt shocked, sad, and even couldn't believe what had happened to their child. According to Chodidjah and Kusumasari (2018), mothers who have children with autism experience emotional stress in the form of feelings of sadness, worried and tired. In addition, as many as 4 respondents said that they sometimes have to hold back their emotions when their autistic child is in a bad condition. The respondents mentioned that they need to control their emotions when their autistic children are not in a good mood, have tantrums, angry all day long, and doing something wrong.

Other than experiencing negative feelings and required to control emotions, 7 out of 10 respondents experienced difficulties in caring for and educating their autistic children. Most of them have said that their autistic child is difficult to teach or be taught to be independent. There are also those who find it difficult to deal with their behavior that is different from normal children such as tantrums and mood swings easily. Challenging behaviors of autistic children, including temper tantrums, repetitive behavior, and aggressive behavior, are stressful for parents (Ludlow et al., 2012). Tantrums are described as unpredictable and difficult behavior to manage. In addition, there was a respondent that she found it difficult to teach her daughter to do one thing, she has to repeat the teaching even for months until her daughter understands the teaching. Also, one of the respondents is worried about the relationship between her autistic child and his sibling, because they often fight, and are difficult to give advice. The presence of autistic children has a negative impact on siblings, the impact is in the form of protests and rejection of the presence of autistic children, this refusal especially arises when mothers ask siblings to invite autistic children to play (Chodidjah & Kusumasari, 2018).

The respondents also experienced challenges that did not come from autistic children directly and were referred to as external challenges. In the interviews that were conducted with the respondents, it was found that two external factors were challenges for mothers when caring for autistic children, including dealing with other people's bad views and also facing financial problems. As many as 6 out of a total of 10 respondents stated that they received unfavorable views and judgments from their neighbors. Some of them also said that this was because the phenomenon of autistic children was still rare in their environment. Worse yet, there was a respondent who said that there was a neighbor who did not like her child just because of his autistic condition. According to Ludlow et al. (2012), the contempt that parents of autistic children often get is that other people tend to judge their children only as "naughty" children and that they as parents are incompetent in raising children. Ludlow also stated that many parents agree that it is difficult to deal with tantrums alone, moreover dealing with tantrums in public and reactions from others as the most difficult parts of challenging behavior

Next, the second theme obtained from the results of data analysis from external challenges is financial problems. Almost half of the respondents stated that they experienced financial problems because the cost of caring for autistic children was not cheap, not to mention the addition of other household needs. Therefore, financial problems are also one of the main challenges in raising autistic children for 4 out of 10 respondents who have been interviewed. This finding is also supported by previous study which stated that the presence of autistic children causes families to be faced with financial problems because of the therapy for autistic

children costs money for various medical consultants, therapy, and medicines (Chan et al., 2018). The results of the analysis also found that respondents with low monthly income did not necessarily experience financial problems, on the other hand, respondents who had higher monthly incomes did not necessarily not experience financial problems. The existence or absence of financial problems is determined by each respondent's needs, which of course are different.



**Figure 2** Thematic analysis of challenges and coping strategies on mothers of autistic children

### **Coping strategies used**

The second objective of this research was to examine the coping strategies in mothers of children with Autism Spectrum Disorder (ASD). From the current study, it was found that several factors influence the respondents' coping strategies in raising their autistic children, including factors from family support and the others, are from themselves as shown in Figure 2. The first theme of the analysis' results from the strategy used by mothers in raising autistic children is ignored. Ignore is meant based on what has been explained in chapter 4 is to ignore the views and bad words from other people such as neighbors that were thrown at the respondents' autistic children. Half of the respondents ignore other people's views of them and their families, they think there is no point in responding to people who have bad views of them. One of the respondents said that her life was not financed by her neighbors, so why need to respond to people like that. And also, another one said that she prefers to ignore because later those who have bad views and speak badly will surely be silent. Apart from ignoring, there was also one respondent who gives understanding to people who have a bad view of their autistic child, along with a statement from R8 "I'll just give them an explanation, my child's condition is like this, if you can't accept it, then please be quiet" (R8, 19 – 20). However, the researcher could not find any related sources that can support the finding.

Because caring for autistic children requires a lot of money, some respondents try to manage their finances to prevent and overcome financial problems. 5 out of 10 respondents said that they have strategies to overcome and prevent financial problems, two of whom said that they would owe money to their relatives. And the other two said that they would be frugal and hold back on buying things they like, even eating in the most frugal way possible to meet the needs of their children. The last respondent said that she and her husband had been saving long before marriage to prepare for the future and prevent financial problems. Unfortunately, the researcher could not find any previous research or any sources that could support this finding as in the previous point.

Furthermore, the analysis results of this study found that raising a child with autism requires a lot of patience. The findings came from the statements of most of the respondents. 9 out of 10 respondents said that they are always patient or try to be patient in dealing with the behavior of their autistic child. One respondent said that she is always patient in any case, she always tries not to be angry with her child because she is aware of her child's condition. Some of them also said that they must continue to be patient in teaching their children and should not give up or stop with their child's condition. Parenting autistic children not only demands the mother's



physical and mental health, but also a high level of patience (Qodariah & Puspitasari, 2016). Almost all respondents said that patience is one of the most important things to deal with autistic children, because their conditions are different from normal children. They tend to experience more frequent emotional swings, repetitive and hyperactive behavior, and also tantrums.

Appropriate action and adequate care are needed to treat autistic children. Based on the results of interviews that have been carried out, all respondents took various actions to deal with their children. The action was based on what they thought was most appropriate for their child's condition. Most of them took their children to the doctor for therapy or to a psychologist for consultation. However, there are also some of them who take their children to massage therapists and neurologists, and some even seek information on their own about their child's condition. Chodidjah and Kusumasari (2018), finding inclusive schools and location of therapy provider for children is a challenge for mothers. Mothers hope that their children can get inclusive education for their children.

The last theme that has been analyzed is family support. Most of the respondents who have been interviewed stated that their family is very supportive 9 out of 10 respondents said that all their family members support them, some even say that they support each other and help each other in caring for their autistic child. In cases like this, support from family members is really needed to keep the mother's psychological condition stable. Even so, there was one respondent who stated that she did not get enough emotional support because she had lived alone and her husband had passed away, following her statement *"Honestly, it's not enough, because I'm alone, my husband has passed away, so I have to do things myself, strengthen myself, sometimes I cry alone, but that's okay, that's how it is"* (R3, 29 – 30). Ludlow et al. (2012) found in their study that parents who received support from extended families had better coping strategies in dealing with autistic children. This statement can also be proven from the responses of the respondents who said that their family members also helped take care of their autistic children. Support from family members and the surrounding environment plays an important role in facing the challenges of parenting a child with autism.

### **Limitations**

The current study shows that there are several limitations that afflict this research. As with any research study, there are possible weaknesses in design, data, and interpretation. In this study, there are several limitations identified. The first limitation is that this study focuses respondents only on mothers who have autistic children of school age (6 - 18 years) who live in the Banyuwangi area, Indonesia. This makes the number of respondents very limited because it is difficult to find fitting respondent criteria in the area where the researcher lives. In addition, it also causes the data collection time which is quite time-consuming longer than the target due to the difficulty of finding respondents. The second is that the demographics and backgrounds of different respondents may affect the statements given, so the accuracy of the data may also be affected. Furthermore, the duration targeted by the researcher in one interview session is 20-30 minutes so that the researcher can obtain complete and clear data from the respondents. However, the duration obtained based on the interviews that have taken place is only about 10 minutes, this is because the respondents are reluctant to explain in more detail about their statements. As a result, many of the respondents' statements were too short so the data obtained were difficult to interpret and analyze. One of the obstacles the respondents were reluctant to go into too much detail was because they were not too familiar with this kind of interview process, so they only answered modestly. These issue can also affect the accuracy of the data.

### **Recommendations**

This research is research that deals with challenges and coping strategies in raising autistic children in mothers in Banyuwangi area, therefore, further research is recommended to expand the scope of research. This is because this kind of study is very limited, especially in the area where the research is carried out, children with autism are still difficult to find. Researchers in the future can expand the range of respondents not only from the mother's side but also to conduct research on the fathers of autistic children. In addition, further research could also focus on the inherent effects when challenges arise among mothers of autistic children. This is because when the researcher knows the impact experienced by the respondents, the impact can be handled appropriately using several psychological aspects to prevent emotional stress



on respondents. Furthermore, future researchers who plan to conduct the same study scope can use a questionnaire emphasizing the main criteria of the respondents to obtain better research findings. The respondent's criteria proposed for the future researchers are to take into account the more specific age range, how many years of caring for autistic children, the same marital status so that there is no gap between the answers of one respondent and another respondent.

Parents who have children diagnosed with ASD have a greater responsibility than parents who have normal children. If the parents are still laymen and do not understand the condition of their child, it is feared that it will have an impact on handling inappropriate children. It can also affect the mental and physical health of the parents themselves. Therefore, researchers suggest mothers or parents learn about autism spectrum disorders in more detail and consult with professionals in order to provide the most appropriate handler and adequate treatment to their autistic child. Other than that, parents' mental and physical health conditions should not be ignored, parents must understand which actions will not adversely affect their health. This is because there are various possibilities that have the potential to occur in the lives of parents with autistic children, such as bad words from the neighbors that can cause the condition of the mothers or parents to go down. If possible, parents are advised to provide understanding to neighbors or other people regarding their child's condition so that they no longer insult their autistic child. Lastly, mothers or parents are recommended to talk to their trusted people or seek professional help if they feel the condition is deteriorating and experiencing emotional stress due to caring for autistic children.

Not only for the future researchers and parents of autistic children, the results of this study can be used by certain institutions and organizations that offer assistance to parents of autistic children to better understand autism and not to take wrong actions. This assistance can be in the form of financial, mentoring, providing therapy places and care for autistic children and social support which will have a huge impact on parents. In other words, this research is able to open the eyes of the many organizations involved by deepening and understanding more clearly the opportunities for increasing assistance according to the needs of parents of children with autism or planning new initiatives to help those who need help, especially in terms of social support and inner strength.

## ■6.0 CONCLUSION

The challenge of mothers in caring for children with autism is not a problem that can be underestimated because it involves various aspects including the psychological condition and resilience of the mothers themselves. Because all the challenges they face can have an impact on themselves and even on the handling of autistic children if they are not addressed properly. However, the challenges faced by mothers in taking care of their autistic children do not become an obstacle to continue learning new things and living a happy life. This study emphasizes that the challenges of raising autistic children are not only causing a negative impact on the respondents but can give a positive impact on the lives of mothers to be more experienced and familiarized to coping with the challenges they face. In addition, caring for autistic children also allows mothers to come up with strategies that are appropriate to the problems that are currently happening to them and their children, they also become more patient and strong because they get support from their family members.

## References

- Abd Gani, N. I., Rathakrishnan, M., & Krishnasamy, H. N. (2020). A Pilot Test for Establishing Validity and Reliability of Qualitative Interview in The Blended Learning English Proficiency Course. *Journal of Critical Reviews*, 7(05). <https://doi.org/10.31838/jcr.07.05.23>
- Arikunto, S. (2019). *Prosedur Penelitian* (6th ed.). Rineka Cipta.
- Aulita, P. (n.d.). Ketangguhan dan Dukungan Sosial Pada Ibu yang Memiliki Anak Dengan Autisme. *Jurnal Imiah Psikologi*, 9(1), 97–107. <https://doi.org/10.30872/psikoborneo>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Carlson, N. R., Miller, H., Heth, D., Donahoe, J. W., & Martin, G. N. (2010). *Psychology: The Science of Behavior* (7th ed.). Allyn & Bacon.

- Chan, K. K. S., Lam, C. B., Law, N. C. W., & Cheung, R. Y. M. (2018). From child autistic symptoms to parental affective symptoms: A family process model. *Research in Developmental Disabilities*, 75, 22–31. <https://doi.org/10.1016/j.ridd.2018.02.005>
- Chenail, R. J. (2011). Ten steps for conceptualizing and conducting qualitative research studies in a pragmatically curious manner. *Qualitative Report*, 16(6), 1715–1730. <https://doi.org/10.46743/2160-3715/2011.1324>
- Chodidjah, S., & Kusumasari, A. P. (2018). Pengalaman Ibu Merawat Anak Usia Sekolah Dengan Autis. *Jurnal Keperawatan Indonesia*, 21(2), 94–100. <https://doi.org/10.7454/jki.v21i2.545>
- Dekker, V., Nauta, M. H., Mulder, E. J., Timmerman, M. E., & de Bildt, A. (2014). A randomized controlled study of a social skills training for preadolescent children with autism spectrum disorders: Generalization of skills by training parents and teachers? *BMC Psychiatry*, 14(1). <https://doi.org/10.1186/1471-244X-14-189>
- Faruq, H. A. (2015, May 20). Pengertian Ancaman, Tantangan, Hambatan dan Gangguan. <http://www.habibullahurl.com/2015/05/pengertian-ancaman-tantangan-hambatan-gangguan.html>
- Gusti. (2019). Kenali Gejala Austis Pada Anak Sejak Dini. *Universitas Gadjah Mada*. <https://www.ugm.ac.id/id/berita/18232-kenali-gejala-austis-pada-anak-sejak-dini>
- Hapsari, R. A., Karyani, U., & Taufik, T. (2007). Perjuangan Hidup Pengungsi Kerusuhan Etnis. *Indegenous Jurnal Ilmiah Berkala Psikologi*, 6(2), 122–129.
- Hoogsteen, L., & Woodgate, R. L. (2013). Centering Autism Within the Family: A Qualitative Approach to Autism and the Family. *Journal of Pediatric Nursing*, 28(2), 135–140. <https://doi.org/10.1016/j.pedn.2012.06.002>
- Kertamuda, F., & Herdiansyah, H. (2009). Pengaruh Strategi Coping terhadap Penyesuaian Diri Mahasiswa Baru. *Jurnal Universitas Paramadina*, 6(1), 11–23. <https://docplayer.info/37193662-Pengaruh-strategi-coping-terhadap-penyesuaian-diri-mahasiswa-baru.html>
- Khoiroh, Q. (2013). Hubungan Strategi Coping Dengan Tingkat Premenstrual Syndrome Pada Mahasiswi Fakultas Psikologi Universitas Islam Negeri Maulana Malik Ibrahim Malang.
- Li, G., Lee, O., & Rabitz, H. (2018). High efficiency classification of children with autism spectrum disorder. *PLoS ONE*, 13(2). <https://doi.org/10.1371/journal.pone.0192867>
- Ludlow, A., Skelly, C., & Rohleder, P. (2012). Challenges faced by parents of children diagnosed with autism spectrum disorder. *Journal of Health Psychology*, 17(5), 702–711. <https://doi.org/10.1177/1359105311422955>
- Manalu, A. P. (2013). Laporan Kasus: Faktor-Faktor Penyebab Penyakit Autisme Anak Di Bina Autis Mandiri Palembang.
- Maryam, S. (n.d.). Strategi Coping: Teori Dan Sumberdayanya.
- Moore, A. (2012). 8 Jenis Kelainan Pada Anak. Kalombati.
- Nareza, M. (2021, October 5). Autisme. Alodokter.
- Nugraheni, S. A. (2012). Menguak Belantara Autisme. *Buletin Psikologi*, 20(1–2), 9–17. <https://doi.org/10.22146/bpsi.11944>
- Patton, M. Q. (2002). Two Decades of Developments in Qualitative Inquiry. *Qualitative Social Work*, 1(3), 261–283. <https://doi.org/10.1177/1473325002001003636>
- Putri, A. M., Pramesti, W., & Hapsari, R. D. (2019). Stres Pada Orangtua Yang Memiliki Anak Dengan Gangguan Spektrum Autisme. *Jurnal Psikologi Malahayati*, 1(1), 7–13.
- Qodariah, S., & Puspitasari, N. R. (2016). Correlation between Patience and Coping Strategy of Mothers with Autistic Children. *Journal of Social Science and Humanity*, 6(12), 919–922. <https://doi.org/10.18178/ijssh.2016.6.12.773>
- Rahmania, Nurwati, R. N., & Taftazani, B. M. (2016). Strategi Koping Ibu Dengan Anak Gangguan Spektrum Autisme: (Studi Kasus: Orangtua Murid Taman Kanak-Kanak Mutiara Bunda). 3(3), 334–341.
- Rasmun, N. M. (2004). Stres Koping dan Adaptasi.
- Saharso, D. (2004). Peran Neurologi pediatri Dalam Usaha Melawan Autisme. *Anima Indonesian Psychological Journal*, 20(2), 116–127.
- Sitimin, S. A., Fikry, A., Ismail, Z., & Hussein, N. (2017). Work-family Conflict among Working Parents of Children with Autism in Malaysia. *Procedia Computer Science*, 105, 345–352. <https://doi.org/10.1016/j.procs.2017.01.232>
- Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.
- Suteja, J. (2014). Bentuk dan Metode Terapi Terhadap Anak Autisme Akibat Bentuk Perilaku Sosial. *Eduksos: Jurnal Pendidikan Sosial & Ekonomi*, 3(1), 119–132.
- Teijlingen, E. R. van, & Hundley, V. (2001). The importance of pilot studies. *Sociology at Surrey*, 35.
- Twoy, R., Connolly, P. M., & Novak, J. M. (2007). Coping strategies used by parents of children with autism. *Journal of the American Academy of Nurse Practitioners*, 19(5), 251–260. <https://doi.org/10.1111/j.1745-7599.2007.00222.x>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405. <https://doi.org/10.1111/nhs.12048>
- Wang, Y., Xiao, L., Chen, R.-S., Chen, C., Xun, G.-L., Lu, X.-Z., Shen, Y.-D., Wu, R.-R., Xia, K., Zhao, J.-P., & Ou, J.-J. (2018). Social impairment of children with autism spectrum disorder affects parental quality of life in different ways. *Psychiatry Research*, 266, 168–174.
- Yenjeli, L. (2010). Strategi Coping Pada Single Mother Yang Bercerai.
- Yuwono, J. (2012). Memahami Anak Autis: Kajian Teoritik dan Empirik. Alfabeta.

# Social Media and Job Performance among Human Resource Officers in Terengganu

Noor Athirah Syazana Mat Noor<sup>1</sup>, Zulkifli Khair<sup>2</sup>, Ana Haziqah A. Rashid<sup>3</sup>, Noorsidi Aizuddin Mat Noor<sup>4</sup>, Farhana Diana Deris<sup>5</sup>

*School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia*

<sup>1</sup>Noor Athirah Syazana Mat Noor: syazana1998@graduate.utm.my

07

## Abstract

This study aims to investigate the relationship between social media in communication and job performance among human resource department officers in the public sector located at Terengganu. The effectiveness of social media in communication and job performance was measured by using the questionnaires which instruments were The Effectiveness of Social Medias in Communication Scale (TESMCS) and Job Performance Scale (JPS). The data were collected from 108 human resource officers from public sector organizations that evaluate the effectiveness of social media in communication and job performance was involved in this study. Findings showed that the level of the effectiveness of social media in communication and the level of job performance were found medium. The result from Spearman Correlation showed an insignificant correlation between the effectiveness of social media in communication and job performance among human resource department officers. In addition, it was indicated that the effectiveness of social media in communication did not have a relationship with job performance. This could be the other factors probability might influence the respondents for this study. A few recommendations were suggested such as the organization can improve the level of effectiveness of social media in communication by providing a better platform as an official medium to communicate and should not set up goals and expect beyond the abilities of the employees for their job performance. Future study should focus on the whole officers in an organization and include the private sector regardless of age and position by using a qualitative approach for a better result.

**Keywords:** effectiveness, social media, communication, job performance

## Abstrak

Kajian ini bertujuan untuk mengkaji hubungan antara media sosial dalam komunikasi dan prestasi kerja dalam kalangan pegawai jabatan sumber manusia dalam sektor awam bertempat di Terengganu. Keberkesanan media sosial dalam komunikasi dan prestasi kerja dinilai menggunakan kaji selidik yang terdiri daripada instrumen The Effectiveness of Social Medias in Communication Scale (TESMCS) dan Job Performance Scale (JPS). Maklumat untuk kajian ini dikumpul daripada 108 pegawai sumber manusia dari organisasi dalam sektor awam yang menilai keberkesanan media sosial dalam komunikasi dan prestasi kerja mereka masing-masing. Hasil kajian mendapati tahap keberkesanan media sosial dalam komunikasi dan tahap prestasi kerja adalah sederhana. Hasil daripada Kolerasi Spearman menunjukkan bahawa kolerasi antara keberkesanan media sosial dalam komunikasi dan prestasi kerja tidak signifikan dalam kalangan pegawai sumber manusia. Tambahan pula, kajian menunjukkan bahawa keberkesanan media sosial dalam komunikasi tidak mempunyai hubungan dengan prestasi kerja. Hal ini demikian kerana, terdapat faktor-faktor lain yang boleh mempengaruhi responden bagi kajian ini. Antara cadangan kepada organisasi untuk meningkatkan tahap keberkesanan media sosial dalam komunikasi dengan menyediakan platform media sosial yang rasmi untuk berkomunikasi dengan lebih baik serta tidak menetapkan matlamat dan harapan melebihi keupayaan pekerja bagi menghasilkan prestasi kerja yang baik. Bagi penyelidik masa depan boleh melakukan penyelidikan secara menyeluruh iaitu menfokuskan kepada seluruh pegawai dalam sesebuah organisasi dan juga termasuk sector swasta tanpa mengira umur dan jawatan serta menggunakan pendekatan secara kualitatif bagi mendapatkan keputusan dan maklumat yang lebih tepat.

**Kata kunci:** keberkesanan, media sosial, komunikasi, prestasi kerja

## ■1.0 INTRODUCTION

The social networking site is really famous in this digital era when all of the countries around the world are using the social medias to communicate and build the relationship to achieve the Industrial Revolution 4.0 (IR 4.0) for their own country. According to Idris (2019), it is critical to have a required infrastructure in place to meet the criteria for the transition to Industrial Revolution (IR 4.0). The internal social media can increase employee's roles as reliable corporate ambassadors since employees may readily disseminate the organization's material to their own connections, according to academicians and organisations involved (Ferreira, 2019). Social media is demonstrating greater opportunities to facilitate organisations in knowledge management activities (Zhang et al., 2015) which can be seen as systems utilize several technological tools that work in a social platform to facilitate interaction and information exchange among people in the virtual social and workplace environment (Cao et al., 2016). The statistics from the Data Report Website reported that there were 28.00 million social media users in Malaysia by January 2021. It increased by 2.0 million in between 2020 and 2021. It can be seen as equivalent to 86% of the population of Malaysians as it increased by 413 thousand between January 2020 and January 2021 that showed the total of population is 32.57 million people (Kemp, 2021). Steenkamp and Hyde-Clark (2014) claimed that social media is the platform for the people to facilitate the information sharing and participation from users of the media in order to create and/or distribute the content to others.

In this digital era, lots of employees are taking the training regarding to the usage of technologies and how to use the social medias effectively in communication in order to give the information accurately without misunderstanding. It will add to the growing body of knowledge in the areas of social media, information exchange and workplace engagement by examining whether and how internal social media usage affects job performance, as well as the role of organizational openness and employee organizational identification as possible moderators (Men et al., 2020). Nevertheless, the employee performance can be affected by the usage of social media as it is become an important need for the competitive working environment (Kane, 2017). Other than that, these variables are really connected towards each other for the sake of the employee's performance and personal achievement during their working life. This can be seen as valuable in providing the depth of understanding of how the social media can affect employee engagement in organizations (Men et al., 2020).

In general, according to Dwivedi (2021), social media can be referred as the interactive technologies that enable people to create and share content, ideas, entrepreneurial endeavors, and other forms of expression through digital environments. The use of app-based in modern technology to improve connections between individuals, groups, companies, countries and the world is known as social media communication which is can be adopting in the workplace as social media communication that has both positive and bad implications (Zoonen, Verhoeven & Vliegenthart, 2017). Social media consist of tools that enable open online exchange of information through conversation and interaction (Yates and Paquette, 2011). Users can connect and generate content through social medias without needing to be physically present (Zhang et al., 2017). It can be proved when Daowd (2016) stated that social media is the platform through which people connect or collaborate with one another inside and outside the organizations

According to Alawamleha and Murthyb (2020), job performance can be defined as what employees achieve and what they fail to achieve. It is the measurement of an employee's behaviours, in other words, how well employees full-fill their job tasks in organizations (Groen et al., 2017). The definition stated by Kakkos et al. (2010) was there were factors that affect the employee performance include job satisfaction, working environment and stress. It can be defined as the overall job-related activities expected from an employee and how well they are accomplished by Cao (2010). Job performance can be defined as the total expected value derived from employees' actions over a fixed period of time. It can be described as what employees accomplish and fail to accomplish. It helps to calculate the performances of workers in terms of the quality and amount of work done (Bosco, 2014). Motowidlo and Kell (2012) defined that it is linked to the efficiency level of the work-related behaviours of an employee.

One of the issues that had been highlighted to be enlighten by the users of the social medias especially to the employees of an organisation or a company is when the social media can lead to irregularities and conflict borders cause fatigue and involvement to suffer negative consequences. It can be seen in one of the researches by Digital 2021 Global Overview Report through Hootsuite and We Are Social stated that Malaysia is at 9<sup>th</sup> of the highest country using the Internet and be the most active country in social medias with the average of time by hours and minutes which is 3 hours and one minute each day and ranked at 13<sup>th</sup> in the world (Kemp, 2021). The negative consequence triggered the process of deterioration of health, which indicates that conflicts and lifelong disorders require psychological expenses, which in turn can increase fatigue (Zoonen et al., 2017).

Then, the problem that needs to be cater is the employee's passive behaviour and non-self-governing. According to Men et al. (2020), it will affect the level of job performance which is must be come out with the level of measurement to spot their performance either turns out good or bad during their working period. Despite the fact that the usage of social medias poses some obstacles or threats, the digitised workforce provides enterprises with unparalleled prospects such as privacy issues, criticism and distractions (Men et al., 2020).

The unclear information and the gap in sharing knowledge by the organisations towards the employees need to be procure. According to Wushe and Shenje (2019), employees can use social media to come up with new and helpful ideas for products, services and work practices. People who use social media at workplace more frequently reported less imagination than those who use it less frequently (Kuhnel et al., 2020). It can be seen when Yoganathan et al. (2021) claimed that it is such pleasant engagement not only helps employees form bonds with peers and superiors who are similar to them, but it also allows them receive assistance from peers and superiors.

In addition, the miscommunication between the superiors and employees that occurred due to unnecessary loaded information. Mohamed et al. (2019) stated that the misunderstanding created by social medias had influenced the people's perceptions and differing interpretations of the message as well as the danger of being distracted from their work.

Besides, the employee's trust and confidence are lost in the leadership when their superior or management did not practice transparency at the workplace. It can be seen when the employees devote more time and effort to self-preservation and job search than to their existing position (Babu et al., 2020).

The productivity of employees decreasing rapidly because of outdated technology platform such as websites and organizations systems. According to Sujatha and Krishnaveni (2018), emphasised the importance of knowledge's impact to job performance which is crucial for an organisation's internal consistency and effective communication process among employees by utilising social medias. The use of technology for perceptual emotional purposed has been shown to have a favourable, albeit unintended, influence on employee's conventional and innovative job performance (Alawamleha and Murthyb, 2020).

This study aims to investigate the level of effectiveness of social medias in communication and job performance among human resource department officers. This study also aims to examine the relationship between the effectiveness of the social medias in communication and job performance among human resource department officers in public sector located at Terengganu. It will provide useful information about the possible outcomes and results which the effectiveness of social medias in communication may influence the job performance of human resource department officers in the organisations. By that, this will be analyse the relationship between the effectiveness of social medias in communication and job performance is crucial to be added in the existing literature.

## ■ 2.0 LITERATURE REVIEW

### 2.1 Social Medias in Communication

Social media is the famous social networking site that have been browse in the world. Most of the countries in the world will has their own data to collect on how many people browsing or has the account for the social medias. According to Cao et al. (2016), social media system utilized the several technological tools that work in social platform to facilitate interaction and information exchange among people in the virtual social and workplace environment. It can be seen when Back et al. (2009) stated that the tools which referred to the social medias are often tailored with the organization's nature and pre-existing platforms. Social networking tools aid information management by creating opportunities for anyone to hold a conversation with others. According to Mantymaki and Riemer (2016), social media is increasingly being used for open and tolerant communication with individuals in the work environment, rather than only for business objectives. These tools are actually can be the trigger point for the organization to create the sense of belongings towards the employees at the workplace which can give profit to the organization through the successful of the job performance. It can be seen as the aid for increasing the sense of community and social support in workplace (Leidner et al., 2018). However, according to Leonardi et al. (2013) and Jafar et al. (2019) claimed that in order to encourage the interaction between employees, social media platforms are increasingly being used at the workplace.

This statement being supported when it can provide essentials benefits knowledge management as it enhance both vertical and horizontal communication (Mantymaki and Riemer, 2016).

According to Torkzadeh and Doll (1999), in general, the technology's effect can be seen via the lens of the value chain's framework and it is based on the attitude-behaviour theory. The most of critical variable in the chain of a system to value build is effect, since it has a direct impact on it used, which it defines organizational impact. This study indicated to the theory of reasoned action (TRA) by Ajzen and Fishbein (1980) which is aim of the theory is to predict and understand the causes of the behaviour. According to Copeland and Zhao (2020), in order to understand their acquisition motivations, we need to know how they view the use, how they are impacted by their peers and superiors on social media, how the social medias site influences them, depending on their drive to obey with their peers or superiors and what they assume their peers need from them. This theory helps in understanding the behaviour of the Human Resource Officers perceived the information given by the management using the social medias that had been prepared for them. Furthermore, technology has become a widespread instrument for interacting in daily life (Verduyn et al., 2017). This statement was already highlighted that this study used this theory to comprehend on how the respondents can adapt the changes of information transferred and modern environment with the usage of social medias as one of the platforms to send and share information when it is between the cognitive and evaluative behavioural intention that referred as intentions which directly functions of both individual and social related variables as the act's mindset, a personal evaluative response, subjective standards, social knowledge available and perceived social pressure to behave are all factors to consider (Ajzen, 1988). Copeland and Zhao (2020) stated that in order to preserve consistency with the TRA, beliefs against using online platform or social medias to make an information-transferred should be taken into an account. Thus, it can be proved that this theory is trying to relate on how the effectiveness of social medias in communication can affect the users by measuring the motivation and self-contained.

Many models illustrating the adoption, effect and performance of information systems include the use of technology. Barki et al. (2007) stated that there is an important limitation of these models lies in their undifferentiated treatment of behaviours toward the use of technology with models often being criticised for treating use behaviours generically. As technology advances and adapts to various use habits and backgrounds, such as social media, this critique becomes much more pertinent. One of the dimensions of the social media use is social use. It can be defined as using the social media to build new social relations such as making friends, identify the individuals with shared interests and stay in touch with existing friends and acquaintances (Ali-Hassan and Nevo, 2009). Next is the hedonic use which refers the statement of Brandtzaeg and Heim (2009) by using social media for entertainment, the passage of time (Quan-Haase and Young, 2010), Papacharissi and Mendelson (2011) claimed it is unwinding and getting away, last but not least is having fun (Shao, 2009). The third one is cognitive use of social media focused on providing ideas as well as gaining the access to content created by others (Ali-Hassan and Nevo, 2009) and it can be including by points of views, stories, rating, discussion, personal images and videos are welcome (Leung, 2009). Therefore, all the dimensions in social medias use are important and indirectly affect job performance within the organization context.

## 2.2 Job Performance

Cao (2010) stated that job performance could be defined as the overall job-related activities expected from an employee and how well they are accomplished. It can be seen when the past studies suggest that using social media in the workplace may lead to improve employee's job performance (Shujaat et al., 2019). The increased of social media usage at work was linked to improve job performance through influencing impact of the job satisfaction found by Moqbel et al. (2013). The use of enterprise social media affects employee's performance stated by Pitafi et al. (2018) which is the findings concluded that enterprise social media has substantial positive effect on employee performance. Next, the job performance or whether an employee is functioning effectively, it is the first significant indicator of an employee's success at the workplace. Tajvidi and Karami (2021) and Bennett et al. (2010) claimed that the usage of social media in the workplace improves the employee work performance. According to Bhimani et al. (2019), job performance could be sparked by using social media as rich driver of sustainable resources. To be enlighten, employee's performance appears to improve as a result of a stress-reduction mechanism at the workplace, which is job performance is directly linked to productivity (Kumasey et al., 2014) by using the social medias in communication with the employers and peers. Mayfield (2018) described five important criteria that almost all social media shared which is engagement, accessibility, community, interaction and connectivity. These essentials showed that how it the social media in communication can influenced the employee's job performance at the workplace. Job performance can be defined as what employees achieve and what they fail to achieve and it can be clarified when

Bosco (2014) stated that it helps in order to calculate the performance of employees in terms of quality and amount of work done.

The social capital theory is been used in the study based on the ability to analyse power at both individual and organizational level but also how the structure is reproduced by individuals through the concept of habitual. The theory shows that how the outside world influence people's actions (Bourdieu, 1977). The social capital theory is a concept of social capital that is built by focusing on the personal connections between different actors in its implementation. Ellison et al. (2011) stated that the concept is embedded with a network of people and its measurable at both individual and group level. This theory helps this study to ensure the engagement given by the Human Resource Officers in doing their job effectively. According to Penzyski et al. (2018) stated that social capital principles the pertain to the interactions of person who operate together as a social unit. Individually, social capital is built significantly as a part of social interactions. As a result, it is reasonable to conclude that social capital is intended to improve an employee's willingness to use the opportunities derived from interpersonal relationships and applied to personal growth such as the job performance (Ceridwyn and Hyemi, 2016). This theory also can be identified as the social support that give positive impact with self-concept (Mastoras et al., 2018). It can be seen as the support system to the employees to gain skills and obtain the information without assumed and doubting while doing their task or job which help them to find what is the trigger point that influence the employees to give the substantial impacts to towards their perceiving and the outcomes of job performance. There is a significant relationship between social capital and job performance at workplace (Edwards, 2021). This theory can help the researcher to find what is the trigger point that influence the employees to give the substantial impacts to towards their perceiving and the outcomes of job performance. Hence, these two theories will be useful in this study as a support for the effectiveness of social medias in communication and the job performance.

Social capital includes the resources or assets that are embedded in a person's or a group's social media platform. Nahapiet and Ghoshal (1998) stated that the concept of social capital is conceptualized as a multidimensional structure that has three dimensions such as structural, relational and cognitive and these three dimensions are intertwined, separating them aids in the analysis of the dynamic relationships that occur among the actors. The structural factor is critical since it derives support from the social capital services such as mental and information support (Lefebvre et al., 2016). The possible accessibility to other facilities and valuable resources is determined by network relations that exist between individuals. Wittek and Agnessens (2011) claimed that users in the system are more likely to expand their social networks by forming connections with other resourceful people. According to Nahapiet and Ghoshal (1998), the essence of individual connections grow over time by consistent interaction of individuals is a dimension of relational social capital. As the result, the consistency and essence of positive relationships are often used to define the dimension. Trust, common experience, friendship and respect are all important in this situation. The relational dimension can be used to assess the quality of an existing conversation whether positive or negative. It can be seen as the consistency of interconnections is often taken into an account. Confidence and support as well as the acknowledgement that an entity has a network of relationships are often used to obtain this concept. The cognitive dimension of a shared vision is crucial for the existence of a shared mental model between colleagues. Employees in a network have similar information systems, positive affirmations, team responsibilities and team identification all of which are designed to facilitate efficient and reliable interaction (Maynard and Gilson, 2014). Employees in a digital working environment must develop and share a common vision which is crucial to their sense of mission and morale. Nahapiet and Ghoshal (1998) stated that three dimensions of social capital which are structural, cognitive and relational which consists of the engagements and connections between people and the representatives. This was serves as a framework for this study due to the widespread usage and acceptance as well-established social capital system.

### **2.3 Relationship between Social Medias in Communication and Job Performance**

Social medias are widely used in the community. It can be seen that various organizations have involved in this network system platform to communicate within their organisation or among the community. Most of the organisations are increasingly interested in the use of social media to build relationships with employees and other stakeholders (Macnamara and Zeffass, 2012). Task or job performance is directly related to the technical aspects of the organisation and it supports the core of any organisation either by executing its processes or maintaining its required services (Harari et al., 2015). It can be seen when Atsan and Cetinkaya (2015) stated that employees who use social media at work do more than just search and exchange information as they often use it to meet new people, develop a sense of belonging and shape the relationships.



Based on the result from Cetinkaya et al. (2018) indicates that the use of social media has positive effect on an employee's job performance. It can be seen when the usage of social media was linking to the dimensions that being used to job performance and found that social and cognitive use of social media have a positive effect on an employee's routine and innovative job performance (Ali-Hassan et al., 2015). The study on corporate blogging and job performance has been reaffirmed since the current findings demonstrate that a website system can improve job performance. Then, it proved that the employees regard the social media as a beneficial tool at workplace and it has a significant impact on the performance according to the results. The effectiveness aspect of social media was appeared to be strongly connected with employee's job performance, particularly work and ambient productivity. As a result, it is proposed that top management pass laws, processes, regulations and legal requirement social media activity and engage people to have it for work-related objectives in order to reap the greatest benefits. The correlation analysis result stated by Sakthivel and Parasuraman (2018) was significantly positive between social media and job performance that include the knowledge, skills, motivation and productivity. It can be proved when the social media has impact on the employee's job performance in higher percentage of usage respectively. This can be improved by proper usage of social media in the organisation. The employees gaining the knowledge, learning of skills, getting motivated and becoming more productive due to contributions of social media in the organization either with the peers or the top management. Therefore, this study tested a hypothesis regarding the relationship between the effectiveness of social medias in communication and job performance.

H: There is a relationship between social media in communication and job performance among human resource department officers in public sector located at Terengganu.

### ■3.0 METHODOLOGY

In order to fill in the lack of research on the relationship between social medias in communication and job performance among the human resource department officers, the target population of this study was the human resource department officers from public sector located at Terengganu. The samples were selected using the non-probability sampling which is convenience sampling. This is a cross-sectional study which applied quantitative methods by distributing questionnaires to collect data. The survey may take about 10 minutes within the period given to complete. The questionnaires were distributed in person and through Google form. In total, 108 returned the questionnaires were completely answered by the participants. The Effectiveness of Social Medias in Communication Scale (TESMCS) was used to measure the effectiveness of social medias in communication. This instrument was developed by Cao et al. (2016). It measures five dimensions which are social media use at work, trust, shared vision, network ties and knowledge transfer. The higher the score of each subscale, the greater the person identifies the particular dimension with their respective environment (Hester, 2010). The score of answer ranging from strongly disagree (1) to strongly agree (5). TSMCS consists of 20 items with each of the questions being self-descriptive statement of respondent's particularly in the effectiveness of social medias in communication. The five scales have acceptable internal reliability with Cronbach alpha value greater than 0.8 considered as good reliability. Job Performance Scale (JPS) was used to measure human resource department officer's job performance. This instrument contained only one dimension which is work performance (Cao et al., 2016) with 6 items that employed 5-point Likert Scale for the whole items from strongly disagree (1) to strongly agree (5). JPS has a good internal consistency with Cronbach alpha value better than 0.8. The descriptive statistics (mean and standard deviation) and inferential statistic (spearman correlation) were conducted to achieve the research objectives.

### ■4.0 RESULTS

#### 4.1 Demographic of Respondents

Majority of the respondents of the current study were female (50%) while male (49.1%) that ages between 26-30 years old (38.9%). Some of them also ages 21-25 years old (34.3%), 31-36 years old (25.0%) / The rest only consist 1 person which are 18-20 years old (0.9%) and 37-40 years old (0.9%). The majored races that can be seen was Malay (51.9%) that responded to the questionnaires. Meanwhile Chinese (27.8%) and Indian (20.4) also included in this study. In term of the position, most of the respondents were from the entry level (33.3) followed by the manage (26.9%) and the individual contributor (25.0%) also the director (14.8%).

#### 4.2 The Effectiveness of Social Medias in Communication

Further descriptive analysis was conducted on the research variables. Table 1 and 2 represents the level of the effectiveness of social medias in communication and job performance among the human

resource department officers in public sector. It was found that the highest score data for this independent variable dimension was the knowledge transfer with mean (2.58) and standard deviation (0.537) and the lowest ones was the dimension of trust with the mean score 2.25 and standard deviation 0.454. Next, the social media use at work dimension showed mean (2.58) and the standard deviation (0.518) which indicates a medium level of social media use at work among human resource department officers. Furthermore, it can be seen that shared vision dimension achieved medium level with mean (2.43) and the standard deviation (0.666). Then, the network ties showed that the mean score was 2.56 and the standard deviation 0.498 that achieved medium level of network ties among human resource department officers. Based on the table 1, the research findings indicates that the overall mean of the effectiveness of social medias in communication ( $M=2.47$ ;  $SD=0.271$ ) had been considered as a medium level. The standard deviation is a measure of the spread of scores within a set of data. Hence, it seems that the human resource department officers in public sector have medium level in showing the effectiveness of social medias in communication as it is not particularly use most of the time as to avoid misleading the information, efficiency of delivering message and as the ethical purposes.

**Table 1** Level of The Effectiveness of Social Medias in Communication

Variable and Dimension	Mean	Std. Deviation	Level
<b>The Effectiveness of Social Medias in Communication</b>	<b>2.47</b>	<b>0.271</b>	<b>Medium</b>
Social Media Use at Work	2.58	0.518	Medium
Trust	2.25	0.454	Low
Shared Vision	2.43	0.666	Medium
Network Ties	2.56	0.498	Medium
Knowledge Transfer	2.58	0.537	Medium

Mean value (Low = 1.00 – 2.33; Medium = 2.34 – 3.67; High = 3.68 – 4.00)

#### 4.3 Job Performance

Table 2 illustrates the result of descriptive analysis for work performance that brings the overall mean for this dimension to a medium level ( $M= 2.58$ ;  $SD= 0.537$ ). Thus, it can be concluded that the respondents were positively responding towards the items as indicator to measure their level of job performance in the organisation. Overall mean score for job performance ( $M= 2.71$ ;  $SD= 0.321$ ) on the studied organisation was at medium level. This shows that the organisation was only using the social medias partially as one of the mediums for their job performance. This indicates that the job performance also affected by other factors during the working hours that help them to create a better job performance at workplace.

**Table 2** Level of Job Performance

Variable and Dimension	Mean	Std. Deviation	Level
<b>Job Performance</b>	<b>2.71</b>	<b>0.321</b>	<b>Medium</b>
Work Performance	2.58	0.537	Medium

Mean value (Low = 1.00 – 2.33; Medium = 2.34 – 3.67; High = 3.68 – 4.00)

#### 4.4 Relationship between The Effectiveness of Social Medias in Communication and Job Performance

The result from Spearman analysis in Table 3 shows that the effectiveness of social medias in communication and job performance were not significant ( $r = 0.132$ ,  $p > 0.01$ ). Table 3 indicates that the relationship between those two variables was not existed. This can be seen through the p-value for the variables was more than 0.001. Furthermore, the Spearman correlation coefficient value which was +0.132 indicates the direction of the relationship was none between the effectiveness of social medias in communication and job performance.

**Table 3** Correlation of The Effectiveness of Social Medias in Communication and Job Performance

Variables	Job Performance	
	r	Sig.
The Effectiveness of Social Medias in Communication	0.132	0.174

\*\* Correlation is significant at the 0.01 level

## ■5.0 DISCUSSION AND RECOMMENDATION

The findings of the current study revealed that the human resource department officers in public sectors have a medium level of the effectiveness of social medias in communication. It was found that the impact towards human resource officers in public sector in using the social medias as the communication platform is not particularly use most of the time as to avoid misleading the information, efficiency of delivering message and as the ethical purposes. However, it just only be used in certain things which it will be used whenever it is needed such as email, direct personal message and urgent matters that need to be done by using the social medias as the fastest way. Most of the respondents were from entry level which was 33.3% that lead to bizarre the professional usage of social medias in communication with the peers and employers. It can be mean that they were not aware on focusing the ethical in communication using the social medias platform that can be the reason why it does not effective to them in communicate with the others. However, the difference can be highlighted when the result is high, it will be the main engagement medium to be used in order to achieve the objectives of the communication in time and use it efficiently meanwhile when it is low, this can be stated that social medias in communication is not preferable as it might be overlooked by to the employees with their personal matters and unfamiliar with the social medias platform.

According to Wushe and Shenje (2019), the use of social media and networking sites such as WhatsApp, Facebook, Telegram, Skype, Twitter, You Tube, Instagram, and LinkedIn, in particular, has become a phenomenon that has had both detrimental and beneficial effects on numerous organizations and employees in recent years. In this study, the researcher used the examples of social medias which were WhatsApp and Facebook. It can be seen that most of the respondents used these social medias only for personal matters for the certain time and when it comes to the working hours, they more preferred to be in physical meetings and using the official platform such as an Email. The findings also shown that it can be stated that the officers get a good exposure towards the effectiveness of social medias as one of the platforms to communicate in the organisation but also had been influenced by other factors in communication within them. The usage of social media at work had been claimed as one of the efforts for the officers to keep engaging among them when the result is at the medium level. According to Kanwal et al., (2021), social media is accessible through personal or workplace electronic devices like mobile phones, laptops, tablets, computers, etc. It is shown that they tried to find varieties of platform to communicate each other even though the impact does not meet the desire level when it had been effect by other factors. It can be stated that the communication using the social media only plays a small role in having an impactful engagement. However, to reduce time consuming, the employers and employees need to interact with each other by using the social medias related to the job or work given in order to achieve the goals of the organization

Next is the results shown that the trust was not at the demanding level when the officers also set their limit to set up the boundaries with the peers and employers. It can be seen that when the respondents aware on the community which is in social medias always peep their interest, be good in ensuring that nothing defames each other, always take good care about each other and carry out jobs with professionalism and dedication only at the medium level that means to be on the right track of putting and gaining trust. This finding is corroborated to Ahmad (2019) when the employees were preferred to use the social medias as the communication medium to reach out the information and news in short period of time to communicate with various of stakeholder groups in the organization. Then, the finding for the shared vision was at the medium level in using the social medias as their communication platform when it can be seen that most of the officers did not shared their vision regularly through the social medias or even with the peers. The finding is supported by Landa (2021) which is in other words, they had established a goal, but they had not yet established a shared vision. That is the reason when this section answered by some of the respondents did that neutrally agreed either by sharing the vision of helping others in solving their professional problems, goals of learning from each other and the value of helping each other is pleasant in social medias community or not, it still can create the bond among the officers to become a healthy relationship.

Furthermore, network ties also one of the important things for the social medias as communication dimension when the it is on the medium level. It shown that it is slightly important and the respondents were wide awake about the benefits from the usage of social medias in communication as the platform to engage among the officers. The respondents stated that maintaining the social relationship, good amount of time interacting and communicate frequently with the peers through social medias also a good way to keep the communication on-going during the working hours or after work. Some of the respondents also got to know their peers on personal basis that might make it easier for them to have an interaction in other hours for work purposes. As this finding is consistent with Clark and Roberts, (2010) that they observed, excessive usage of social media at work impacts productivity and work engagement,

social media addiction produces a slew of issues, particularly for employees. So, the result shown that the officers did not rely on the usage of the social medias in communication but did not denied the impacts of the application towards the officers in daily life at workplace. Moreover, knowledge transfer achieved a medium level which the respondents responded based on what they had gained in knowledge transfer during the working hours and at the workplace. This dimension was indicated on how far the respondents can get based on the usage of social medias as the communication platform that along their working life. The respondents stated that they really enjoyed learning through social medias, gained some knowledge and improved digital skills but it came with limited access and might ineffective to some that only had several tools or unstable connection and it can be both. The finding is accepted by Sapuarachchi (2021) as the nature of the message to be delivered determines which of these communication routes is used such as emails, for example, are used to arrange and communicate the intended message. That shown that the reasons why they cannot put their responsibilities by using the social medias as the communication medium to engage with the others because the constraints and restriction that might occur will underlying the real goals and main points of their job or works.

The current study found that the level of job was at medium level in the studied organization. This dimension contained of the respondents feel that they can perform better than an acceptable level and exceed the expectations with medium level of the usage of social medias as the communication platform in an organisation. They also stated that they put extra effort for their job and work even need to added skills and knowledge in using the social medias as their daily usage. This finding is corroborated with Rahayu and Nandyanti (2021) when a good job performance evaluation is critical in determining whether or not a person is promoted to a higher job or position. The result of this study shown that the respondents were partially agreed with the usage of social medias did influence their job performance because it might not play the important roles in any cases or usage during the working hours. The finding is supported by Yang and Hwang (2014) that the way employee feel about their jobs has an impact on their performance when it can be that the former focuses on whether an individual's outcomes are consistent with their expected outcomes which lead to these objectives include not just official organisational standards such as job efficiency and effectiveness, but also non-role actions such as assisting colleagues and making recommendations. It can be that the personality and the individual's psychological content of the employee also took part in the job performance as the result was most of the respondents were from the entry level. To conclude, the respondents know that they did not rely on the social medias too much in order to achieve what they wanted in improving their job performance just by having the communication or to engage with the peers or the management.

The findings of the current study revealed that the result is insignificant relationship between the effectiveness of social medias in communication and job performance in the studied organization. This result described that there is no linkage between the acceptance of respondents towards the usage of social medias in communication and overall job performance at workplace. However, the result did not show like other researcher's results which means they did not rely on the usage of social medias in communication in order to help them improving their job performance. According to Davison et al. (2014), social media can be used to support work is a matter of controversy. This research might be probably did not appropriate with the demography of the respondents that came from the human resource officers due to unfamiliar of the terms and usage of social medias did not frequently as other department officers. It can be the cause that findings did not significant as it can give a huge impact to the results of the study. Then, the way of the researcher collected the data might not be suitable with the respondents such as the understanding and comprehensive questionnaires towards the usage of social media as communication and job performance did not really presentable and intelligible. The finding indicates due to the reason of nowadays usage of social medias in communication cannot be as the main platform to be put up as the better medium to communicate and engage with the peers and employers as it will be a matter of controversy. Regarding to Jiang et al. (2019), they assume that social media can provide a forum for communication among employees, but the communication mechanism is viewed as a black box. If they are able to use it in a better way and did not influence by other factors, it definitely could promote a better overall performance for a person at the workplace.

One of the other factors that might be the cause of this insignificant result can be seen when this finding is supported by Bayona et al. (2020) that job performance is influenced by intrinsic motivators such as work engagement, as well as competence and environmental factors when work engagement is described as a work-related frame of mind that allows employees to concentrate on achieving corporate goals. By using the social medias, they cannot consider that just because they know a small component of their peer's culture, such as their joyful celebration, that they know all about their peer's culture in general. Next factor is retaining knowledge or can be said as talented employees or strategic workers tend to have more difficult jobs, to solve more problems, to process more information, and to require more abilities to complete their work effectively which can be seen that these people desire to work in

an organization that pays them a fair rate and provides them with a demanding and fascinating job in exchange for completing these complex jobs (Bayona et al., 2020). The knowledgeable employees, on the other hand, are always looking for occupations that allow them to live out their principles while also providing a higher level of satisfaction and a good job performance. One of the reasons why the respondents unreliable towards the usage of social medias in order to set up it as the communication platform when it has a big opportunity to create a misunderstanding among the employees during the conversation and might be lack of information needed for their tasks when the words usage is not comprehensive for all the employees.

Then, the organisational commitment influences job satisfaction, which in return affects job performance. According to Pool and Pool (2007), the study discovered that organisational commitment boosts job satisfaction, adding to the evidence for a favorable relationship between organisational commitment and job satisfaction which influence the job performance of the employees. When the working environment is happy and full with satisfaction, it creates a positive and healthy working lifestyle of the employees and helps in adapting the changes in order to enhance their job performance. This finding is supported by Loan (2020), that employees that have a high level of organisational commitment believe they can handle more work when employees who are more devoted to their jobs do better than those who are less committed, since they participate in and think about their employment more. Hence, the usage of social media might not be as effective as it has been assumed in a way of communication which that lead to a delayed responding from the other employees that can affect other employee's work or tasks as most of the respondents were from the state itself with when it is according to MacroTrends (2021), the population of Kuala Terengganu is only 1.82% which is 391,000. It also can be seen when in current situation, Terengganu state government management in phase of upgrading like 409 telecommunication structures to 4G internet network as the initiative to improve the network to 96.9 percent in that state (Bernama, 2021). According to Zolkipli (2021), through the article from MetroTV, stated that it was like 1000 telecommunication towers in Terengganu, that need to be upgrade because of the current situation in the state was only can provide 2G and 3G network services. This might be the cause that they were not exposed to the real usage of internet, the network service provided and currently living in the urban area.

Despite all the findings, the present study has several limitations. The study was only used quantitative method which it only focused in contributing the questionnaires to obtained the result and findings. This tool only provides small amount of information sources and prevents the researcher from addressing additional inquiries. Then, the use of convenience sampling which is a non-probability sample method that leads to lack of access to the studied organisation's demographic lists, the original plan of implementing the simple random sampling technique had to be adjusted to the convenience sampling. This sampling method was caused a generalisation difficulty. The result collected were only applicable to the respondents who took part in the studied and cannot be generalised to the entire community or population. Next, the involving of one sector which concentrate to the public sector only that contributed to the current results. This make the information given cannot be universal since the data only reflect the public sector itself, not as overall. It is because different sectors, which consist of public and private sector practicing different way of the cultures, norms and values that will be added the unique of themselves. Thus, the result is not applicable to the other sector due to the differences occurred.

Some recommendations that can jotted down for the future researcher which can further the study for whole officers regardless their ages and positions and make sure the questionnaires are spread accordingly as possible to gain a good and significant result in the study. Then, a qualitative approach that can help in making the result more precise which involved in the process of collecting data such as interviewing the respondents directly. It will provide more details information and efficiently. The future study can be conducted in a numerous number of locations with the involvement of varieties departments in public sector organisation. The greater numbers of the officers, the variety of answers that can be collected. For the organisations, must provide the better platform as an official platform for the employees to communicate each other where there will be no matter or issue about the trust and transparency among them. Then, the employers also should not set down expectation or goals beyond the abilities of the employees to ensure that they able to perform their job in a good way and followed the standard that had been stated. The recommendations provided in this section will be beneficial for both parties to conduct this study in the future.

## ■6.0 CONCLUSION

In conclusion, this study contributes to the literature by demonstrating that the effectiveness of social medias in communication did not correlate towards job performance of the human resource department in public sector. It can be seen that the usage of social medias in communication also can be affected

by other factors that influenced job performance of a person. The words of social medias and communication lead to the different perspectives of someone towards the definition and the way of usage depends on their needs. However, when it comes to job performance of a person, it concludes all the involving part which are mentally and physically to ensure that they perceived what they should perform. It is clear that from the findings, in order to design the effective social medias in communication especially among the employees in an organization, the employers and management need to take seriously the advantages and disadvantages of the working environment at workplace.

## References

- Alawamleha, H. A. M., & Murthyb, D. N. (2020). The Influence of Social Media on Organisational Performance and Job Performance. *International Journal of Innovation, Creativity and Change*, 13(12), 121-140.
- Ali-Hassan, H., Nevo, D., & Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *The Journal of Strategic Information Systems*, 24, 65–89.
- Bernama. (2021, August 26). 88 menara telekomunikasi baharu dibina di Terengganu di bawah inisiatif JENDELAB. *Astroawani.com*. Retrieved January 10, 2022, from <https://www.astroawani.com/berita-malaysia/88-menara-telekomunikasi-baharu-dibina-di-terengganu-di-bawah-inisiatif-jendela-316154>
- Bearfield, D. A., Berman, E. M., & Dubnick, M. J. (Eds.). (2020). *Encyclopedia of Public Administration and Public Policy-5 Volume Set*. Routledge.
- Cao, X., Pan Wang, P. S. C. P., Guo, X., Vogel, D., & Zhang, X. (2016). Exploring the influence of social media on employee work performance. *Internet Research*, 26, 529–545.
- Çetinkaya, A. Ş., & Rashid, M. (2018). The effect of use of social media on employee job performance. *Journal of Internet Applications and Management*, 9(2), 5-20.
- Daud, R., Ab Rahim, N. Z., Ibrahim, R., & Ya'acob, S. (2017). The knowledge communication conceptual model in Malaysian Public Sector. *Communications in Computer and Information Science*, 27–38. [https://doi.org/10.1007/978-3-319-62698-7\\_3](https://doi.org/10.1007/978-3-319-62698-7_3)
- Daowd, A. (2016). The Impact of Social Media on the Performance of Microfinance Institutions in Developing Countries: A Quantitative Approach.
- Dwivedi, Y. K., Ismagilova, E., Rana, N. P., & Raman, R. (2021). Social media adoption, usage and impact in business-to-business (B2B) context: A state-of-the-art literature review. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-021-10106-y>
- Edwards, A. V. (2021). *Neurodiversity and Workplace Social Capital Effects on Employee Attitudes and Intentions* (Doctoral dissertation, Walden University).
- Ferreira, D. S. B. (2019). Building trust from the inside out: Employees and their power of influence. In G. Thornton, V. Mansi, B. Carramenha, & T. Cappellano (Eds.). *Strategic employee communication*. Cham: Palgrave Macmillan.
- Groen, B. A. C., Wouters, M. J. F., & Wilderom, C. P. M. (2017). Employee participation, performance metrics, and job performance: A survey study based on self-determination theory. *Management Accounting Research*, 36, 51–66. <https://doi.org/10.1016/j.mar.2016.10.001>
- Kakkos, N., Trivellas, P. and Fillipou, K. (2010), Exploring the link between job motivation, work stress and job satisfaction: a case study in the banking industry, *Proceedings of the 7th ICESAL, Rhodes, June*, 28-29.
- Kane, G. C. (2017). The evolutionary implications of social media for Organizational Knowledge Management. *Information and Organization*, 27(1), 37–46. <https://doi.org/10.1016/j.infoandorg.2017.01.001>
- Kemp, S. (2021). *Global Digital Insights*. DataReportal. <https://datareportal.com/>.
- Kuala Terengganu, Malaysia Metro Area Population 1950-2022. MacroTrends. (2021, August 9). Retrieved January 10, 2022, from <https://www.macrotrends.net/cities/21809/kuala-terengganu/population>
- Laroche, E., L'Espérance, S., & Mosconi, E. (2020). Use of social media platforms for promoting healthy employee lifestyles and occupational health and safety prevention: A systematic review. *Safety science*, 131, 104931.
- Lee, S. Y., & Lee, S. W. (2020). Social media use and job performance in the workplace: The effects of facebook and KakaoTalk use on job performance in South Korea. *Sustainability*, 12(10), 4052. <https://doi.org/10.3390/su12104052>
- Loan, L. T. (2020). The influence of organizational commitment on employees' job performance: The mediating role of job satisfaction. *Management Science Letters*, 3308–3312. <https://doi.org/10.5267/j.msl.2020.6.007>
- Men, L. R., O'Neil, J., & Ewing, M. (2020). Examining the effects of internal social media usage on employee engagement. *Public Relations Review*, 46(2), 101880. <https://doi.org/10.1016/j.pubrev.2020.101880>



- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- Pitafi, A. H., Kanwal, S., Akhtar, S., & Irfan, M. (2018). Investigating the employee work performance in task interdependence and ESM environment. *International Journal of Information Systems and Change Management*, 10(3), 266-292.
- Peiró, J. M., Bayona, J. A., Caballer, A., & Di Fabio, A. (2020). Importance of work characteristics affects job performance: The mediating role of individual dispositions on the work design-performance relationships. *Personality and Individual Differences*, 157, 109808.
- Pool, S., & Pool, B. (2007). A management development model: Measuring organizational commitment and its impact on job satisfaction among executives in a learning organization. *Journal of management development*.
- Rafiq Idris (2019). Industrial Revolution 4.0: An Overview of Readiness and Potential Economic Effects in Malaysia from Millennial's Perspective. *World Scientific News; An International Scientific News*. WSN 118 (2019) 273-280.
- Rahayum, L. & Widyanty, W. (2021). The Influence Of Job Performance Appraisal, Work Experience And Personality Towards Employees Career Development PT. Sunggong Logistics. *Journal Ilmiah Manajemen dan Bisnis*, 7 (1), 155-173.
- Radhakrishnan, G. S., Basit, A., & Hassan, Z. (2018). The impact of social media usage on employee and organization performance: A study on social media tools used by an IT multinational in Malaysia. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 1/2018(7), 48-65. <https://doi.org/10.7172/2449-6634.jmcbem.2018.1.3>
- Ryu, K. (2020). Empirical analysis of organizational ethical climate, organizational commitment and job performance in JFMES in China. *The Impact of Organizational Ethical Climate on Organizational Commitment and Job Performance*, 65-82. [https://doi.org/10.1007/978-981-15-2813-2\\_4](https://doi.org/10.1007/978-981-15-2813-2_4)
- Sakthivel, R., & Parasuraman, J. (2018). A study on relationship between use of social networking sites and employees' performance at work place. *IOSR J Bus Manage*, 20(6), 10-13.
- Sapuarachchi, D. B. (2021). Cultural distance and inter-organizational knowledge transfer: A case study of a multinational company. *Journal of Knowledge Management*, 25(9), 2316-2333. <https://doi.org/10.1108/jkm-06-2020-0439>
- Steenkamp, M., & Hyde-Clarke, N. (2014). The use of facebook for political commentary in South Africa. *Telematics and Informatics*, 31(1), 91-97. <https://doi.org/10.1016/j.tele.2012.10.002>
- Sujatha, R., & Krishnaveni, R. (2018). Knowledge creating ba as a determinant of work performance of employees: An empirical analysis among pump manufacturing firms in South India. *Asia Pacific Management Review*, 23(1), 45-52.
- Tajvidi, R., & Karami, A. (2021). The effect of social media on firm performance. *Computers in Human Behavior*, 115, 105174.
- Van Zoonen, W., Verhoeven, J. W., & Vliegthart, R. (2017). Understanding the consequences of public social media use for work. *European Management Journal*, 35(5), 595-605.
- Wushe, T., & Shenje, J. (2019). The relationship between social media usage in the workplace and employee productivity in the public sector: Case study of government departments in Harare. *SA Journal of Human Resource Management*, 17(1), 1-10.
- Yang, C.-L., & Hwang, M. (2014). Personality traits and simultaneous reciprocal influences between job performance and job satisfaction. *Chinese Management Studies*, 8(1), 6-26. <https://doi.org/10.1108/cms-09-2011-0079>
- Zhang, X., Gao, Y., Yan, X., de Pablos, P. O., Sun, Y., & Cao, X. (2015). From e-learning to social-learning: Mapping development of studies on social media-supported knowledge management. *Computers in Human Behavior*, 51, 803-811. <https://doi.org/10.1016/j.chb.2014.11.084>
- Zolkiply, Z. I. (2021, February 3). Banyak Menara Telekomunikasi Perlu Dinaik Taraf di Terengganu [METROTV]. *Harian Metro*. Retrieved January 10, 2022, from <https://www.hmetro.com.my/mutakhir/2021/02/670865/banyak-menara-telekomunikasi-perlu-dinaik-taraf-di-terengganu-metrotv>



# HUBUNGAN ANTARA PERSEKITARAN ERGONOMIK DENGAN PRESTASI KERJA

## (THE RELATIONSHIP BETWEEN ERGONOMIC ENVIRONMENT AND JOB PERFORMANCE)

Muhammad Nazri Norhajidin<sup>1</sup>, Irmawati binti Norazman<sup>2</sup>, Siti Aisyah binti Abdul Rahman<sup>3</sup>, Nor Akmar binti Nordin<sup>4</sup>

<sup>1,2,3,4</sup>*School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities,  
Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia*

<sup>1</sup>Corresponding author: Irmawati binti Norazman; irmawati@utm.my

08

### Abstract

Ergonomics and job performance are closely related in interconnected to form occupational safety and health in order to ensure that employees are always healthy and safe in the workplace. Thus, this study aims to identify the relationship between the ergonomic environment and the job performance in the Negeri Sembilan Local Authority (PBT) apart from identifying the level of ergonomic and job performance among the respondents. The ergonomic environment studied is divided into four dimensions, namely space, machine, human and environmental while job performance has three dimensions, namely task performance, contextual performance, and counterproductive behavior. A total of 84 respondents from the employee scheme categorized as administration and support in this local authority were selected. The questionnaire was distributed via google form online in the implementation of the study during the Covid-19 pandemic. The study used stratified random sampling and quantitative research and is analyzed using SPSS software version 26. The results of the study show that there is a moderate relationship between the ergonomic environment and the job performance in the study area. In conclusion, a conducive ergonomic environment as a result of departmental collaboration can help the level of ergonomic work environment in the workplace to generate optimal job performance.

**Keywords:** ergonomic, job performance, work environment, occupational safety and health

### Abstrak

Ergonomik dan prestasi kerja berkait rapat dalam saling berhubung membentuk keselamatan dan kesihatan pekerjaan dalam memastikan pekerja sentiasa sihat dan selamat di tempat kerja. Maka kajian ini bertujuan untuk mengenal pasti hubungan antara persekitaran ergonomik dan prestasi kerja di Pihak Berkuasa Tempatan (PBT) Negeri Sembilan selain daripada mengenal pasti tahap ergonomik dan prestasi kerja dalam kalangan responden kajian. Persekitaran ergonomik yang dikaji terbahagi kepada empat dimensi iaitu ruang, mesin, manusia dan persekitaran manakala prestasi kerja mempunyai tiga dimensi iaitu prestasi tugas, prestasi kontekstual dan tingkah laku yang tidak produktif. Seramai 84 orang responden daripada skim pekerja yang dikategorikan sebagai pentadbiran dan sokongan di PBT ini telah dipilih. Soal selidik telah diedarkan melalui google form di atas talian dalam pelaksanaan kajian semasa pandemik Covid-19. Kajian ini menggunakan pensampelan rawak berstrata dan kajian kuantitatif serta dianalisis menggunakan perisian SPSS versi 26. Hasil kajian menunjukkan terdapat hubungan yang sederhana antara persekitaran ergonomik dengan prestasi kerja di kawasan kajian. Kesimpulannya, persekitaran ergonomik yang kondusif hasil daripada kerjasama jabatan dapat membantu tahap persekitaran ergonomik pekerjaan di tempat kerja bagi menjana prestasi kerja yang optimum.

**Kata kunci:** Ergonomik, Prestasi kerja, Persekitaran Kerja, Keselamatan dan Kesihatan Pekerjaan

### ■ 1.0 PENDAHULUAN

Ergonomik ditafsirkan sebagai peraturan atau undang-undang kerja tersusun, terancang, berperaturan, dan sistematik. Ergonomik berhubung dengan aspek reka bentuk mesin kerja, reka bentuk kerja, dan faktor manusia yang diorientasikan kepada pengguna tenaga kerja iaitu pengguna yang akan bergerak menggunakan reka bentuk kerja tersebut. Aspek ergonomik di dalam organisasi melibatkan reka bentuk

persekitaran tempat kerja dan stesen kerja yang memenuhi kriteria keselamatan dan kesihatan pekerjaan. Menurut seksyen 4 Akta Keselamatan dan Kesihatan Pekerjaan (AKKP) 1994 menggariskan perlindungan keselamatan melindungi pekerja di tempat kerja selain pekerja yang bekerja di persekitarannya dan memastikan keselamatan dan kesihatan pekerjaan di bawah risiko yang rendah terhadap risiko keselamatan dan kesihatan. Merujuk kepada Akta Keselamatan dan Kesihatan Pekerjaan (AKKP) 1994, Seksyen 30 (1) menerangkan bahawa setiap pengurusan atasan iaitu majikan perlu mewujudkan birokrasi keselamatan dan kesihatan pekerjaan (BKKP) di tempat kerja sekiranya bilangan pekerja mencapai 40 orang dan ke atas. Jadi dengan penubuhan jawatankuasa ini dapat bertindak untuk memastikan isu keselamatan dan kesihatan dapat dipastikan oleh majikan di organisasi untuk mengatur polisi, menghalang sebarang aktiviti yang berisiko dan mengadakan perundangan keselamatan dan kesihatan pekerja dengan peraturan dan tata amalan organisasi jabatan seperti yang diperuntukan oleh akta. Ergonomik dan prestasi kerja mempunyai saling hubung yang positif. Berdasarkan Paul (2014) perlakuan yang salah dalam ergonomik menyumbang kepada penurunan produktiviti kerja seharian ahli radiologi klinikal yang mengalami masalah otot dan tulang (MSD) semasa kerja. Keadaan ini menjadikan amalan dan kesedaran yang rendah terhadap ergonomik di klinikal tersebut dari segi penggunaan kerusi, meja, monitor, ketinggian kedudukan paras lengan dan kerusi yang menyokong tulang belakang berada dalam keadaan yang sangat tidak menguntungkan pekerja. Dapatan menunjukkan 38% pekerja yang berjawatan dalam radiologi mengalami penderitaan di dalam kerja dan 17% tertekan dengan tekanan semasa kerja.

Perkhidmatan pentadbiran dan sokongan banyak menghabiskan masa (Othman, 2015) dalam kerja seharian untuk memenuhi kehendak kerja itu sendiri dan ini menyumbang kepada kesakitan belakang badan, bahu dan leher serta pergelangan tangan kerana fokus yang tinggi diberikan terhadap kerja yang menggunakan komputer. Ini dapat dilihat daripada data analisis yang dibentangkan berkenaan sosio demografik responden pekerja di Auditor Nigeria yang dipelopori oleh jantina lelaki sebanyak 65.7%. Hasil dapatan mendapati mereka mengalami sakit kepala kerana tidak mendapatkan tidur yang tidak cukup dan ini menyumbang kepada sakit belakang, kelesuan, sakit leher dan ruas jari ini kerana faktor penyumbang kepada penggunaan skrin resolusi komputer yang rendah, skrin yang tidak sama dengan paras mata, skrin tidak boleh diubah kedudukan tinggi rendah atau pergerakan fleksibel. Persekitaran kerja memainkan peranan untuk memastikan pekerja dapat bekerja dalam keadaan yang cukup dengan pengaliran udara, pencahayaan, reka bentuk kerja dan reka bentuk kemudahan Othman (2015). Persekitaran kerja perlu berada dalam keadaan selamat. Dapatan Sadon (2018) menunjukkan bahawa kajian dalam Perkhidmatan Awam dan Pihak Berkuasa Berkanun membuktikan kemalangan yang berlaku di dalam sektor awam melibatkan 21 orang di dalam kategori Tanpa Hilang Upaya Kekal (THUK) adalah disiasat. Justeru itu, Pihak Berkuasa Tempatan seperti Majlis Bandaraya Seremban (MBS) (Seremban dan Nilai), Majlis Perbandaran Port Dickson (MPPD), Majlis Daerah Jelebu (MDJ), Majlis Perbandaran Jempol (MPJL), Majlis Daerah Kuala Pilah (MDKP), Majlis Daerah Tampin (MDT), Majlis Daerah Rembau (MDR) merupakan sasaran pada kajian ini. Kajian ini mengkaji hubungan antara persekitaran ergonomik dan prestasi kerja di tempat kerja yang dipraktikkan ke atas pekerjaan pentadbiran dan sokongan. Kajian ini di sokong oleh Rosley (2018) yang mendapati budaya ergonomik dapat menurunkan kemalangan, kecederaan, kos rawatan sakit dan memberi keselesaan kepada pekerja serta produktiviti pekerja dapat ditingkatkan bersama keuntungan syarikat.

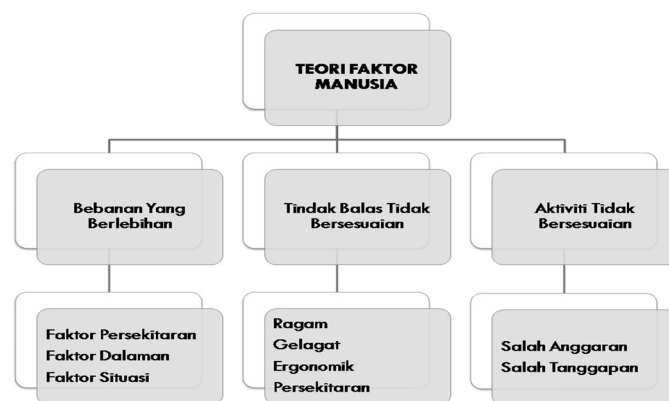
Objektif kajian yang terdapat dalam kajian ini adalah seperti berikut:

- i. Menenal pasti tahap ergonomik dalam kalangan responden kajian di Pihak Berkuasa Tempatan Negeri Sembilan.
- ii. Menenal pasti tahap prestasi kerja dalam kalangan responden kajian di Pihak Berkuasa Tempatan Negeri Sembilan.
- iii. Mengkaji hubungan antara ergonomik dan prestasi kerja dalam kalangan responden kajian di Pihak Berkuasa Tempatan Negeri Sembilan.

## ■2.0 KAJIAN LITERATUR

## 2.1 Persekitaran Ergonomik

Ruang reka bentuk kerja merupakan lokasi tumpuan kepada pekerja yang bekerja di stesen kerja berkaitan. Ini kerana ia merupakan ruang yang penting dalam pengendalian kerja-kerja operasi untuk mengoptimumkan kerja-kerja harian. Ruang ini perlu diberi tahap fleksibiliti yang tinggi untuk menghubungkan manusia dengan manusia yang bekerja didalamnya, capaian peralatan yang mudah diakses dan postur yang betul serta polisi yang dipaparkan. Penggunaan mesin atau radas merupakan alat bantu kerja yang memudahkan kerja-kerja harian dilakukan dengan efisien sekiranya ia bersesuaian dengan biomekanik tubuh manusia atau pekerja supaya tiada berlaku kecederaan serius dan berisiko. Mesin dan peralatan perlu diselenggara dengan baik dan mengikut jadual atau bergantung kepada keadaan mesin dan jangka hayat. Ergonomik terhadap manusia ditakrifkan sebagai kedudukan tubuh atau anatomi badan yang memerlukan tahap kesihatan yang tinggi. Di samping itu, biomekanik tubuh pekerja perlu dalam keadaan bebas dari halangan yang menghalang dari melakukan kerja-kerja di pejabat. Menurut Malek (2017) kesihatan psikologi dan fisiologi perlu berada pada tahap yang sihat agar kerja-kerja dapat dilakukan dengan sempurna. Walau bagaimanapun, persekitaran memainkan peranan penting pada ruang kerja, susun atur dan pencahayaan menyumbang kepada tahap fokus pekerja sentiasa kekal dan pekerja dapat bekerja dalam keadaan selamat kerana persekitaran menyumbang kepada faktor suasana yang harmoni. Pengkaji menggunakan Model Faktor Manusia (1980) yang dikemukakan oleh Dan Petersen yang mana di dalamnya menerangkan Teori Faktor Manusia. Di dalam konsep ni juga menerangkan mengenai bebanan yang berlebihan, tindak balas tidak bersesuaian dan aktiviti tidak bersesuaian.



**Rajah 2.1:** Model Faktor Manusia Dan Petersen (1980)

### Model Faktor Manusia Dan Petersen (1980)

Bebanan Yang Berlebihan yang dikemukakan oleh model faktor manusia melibatkan faktor persekitaran, faktor dalaman dan faktor situasi. Faktor ini melibatkan manusia dan persekitaran kerja yang memerlukan perhatian yang tinggi yang perlu di beri supaya kerja berjalan dengan lancar. Contohnya, dalam persekitaran pejabat di jabatan, faktor termal (suhu dan kelembapan), visual (pencahayaan dan silau) dan auditori (kebisingan dan getaran) menyumbang kepada prestasi kerja yang mampu mempengaruhi motivasi dan semangat kerja serta tahap penyelesaian pekerja yang bekerja di dalam jabatan. Faktor termal memainkan peranan penting untuk mempengaruhi minda dan prestasi kerja pekerja. Faktor pencahayaan dari cahaya lampu ruang kerja, cahaya monitor komputer, dan sebarang paparan yang menghasilkan pencahayaan untuk kegunaan kerja perlu berada di tahap yang jelas. Faktor auditori pula perlu berada pada tahap yang minima dan sedap di dengar kerana manusia mempunyai daya frekuensi pendengaran yang mampu mempengaruhi pada satu-satu masa. Ini untuk memastikan pejabat berada pada tahap yang harmoni. Tindak Balas Tidak Bersesuaian Menerangkan akan Ragam, Gelagat, Ergonomik dan Persekitaran. Contohnya menerangkan tindak balas yang dilakukan apabila sesuatu kemalangan dan insiden berlaku dengan secara sama ada berlaku tiba-tiba atau sudah ketahu dari awal

dengan mengabaikan kerana tidak berkaitan dengan pekerja tersebut akan tetapi bakal meninggalkan kesan yang besar kepada organisasi dan pekerja.

Ergonomik Ruang melibatkan ruang reka bentuk kerja yang merupakan tumpuan kepada pekerja yang bekerja di stesen kerja berkaitan. Ini kerana ia merupakan ruang yang penting dalam pengendalian kerja-kerja operasi untuk mengoptimumkan kerja-kerja harian. Untuk melaksanakan kerja di ruang ini perlu diberi perhatian lebih dengan mengenakan susun atur yang tersusun untuk memudahkan proses kerja. Ruang ini perlu di beri tahap fleksibiliti yang tinggi untuk menghubungkan manusia dan manusia yang bekerja didalamnya, capaian peralatan yang mudah diakses dan postur yang betul serta polisi yang dipaparkan. Ergonomik terhadap mesin merupakan alat bantu kerja yang memudahkan kerja-kerja harian dilakukan dengan efisien sekiranya ia bersesuaian dengan biomekanik tubuh manusia/pekerja supaya tiada berlaku kecederaan serius dan berisiko. Mesin dan peralatan perlu diselenggara dengan baik dan mengikut jadual atau bergantung kepada keadaan mesin dan jangka hayat. Mengenai ergonomik terhadap manusia ditakrifkan sebagai kedudukan tubuh atau anatomi badan yang memerlukan tahap kesihatan yang tinggi. Di samping itu, biomekanik tubuh pekerja perlu dalam keadaan bebas dari halangan yang menghalang dari melakukan kerja-kerja di pejabat. Kesihatan psikologi dan fisiologi perlu berada pada tahap yang sihat agar kerja-kerja dapat dilakukan dengan sempurna. Mengenai ergonomik terhadap persekitaran memainkan peranan pada ruang kerja, susun atur dan pencahayaan memainkan peranan yang menyumbang kepada tahap fokus pekerja sentiasa kekal dan pekerja dapat bekerja dalam keadaan selamat kerana persekitaran menyumbang kepada faktor suasana yang harmoni. Aktiviti Tidak Bersesuaian Menerangkan Salah Anggapan dan Salah Tanggapan pula menerangkan ketidaksedaran kepada kesilapan yang berlaku yang telah di buat pada awalnya tanpa memeriksa dan menilai ketidak logikal akan sesuatu keputusan dibuat menjadikan ia kepada risiko yang bakal ditanggung.

## 2.2 Prestasi Kerja

Dapatan Koopmans et al. (2016) mentakrifkan prestasi kerja merupakan suatu perbuatan yang dilakukan selari dengan matlamat jabatan oleh pekerja. Koopmans (2015) telah mengemukakan teori yang terdiri daripada tiga pada prestasi iaitu elemen tingkah laku yang tidak produktif, prestasi kontekstual dan prestasi tugas.

Prestasi tugas didefinisikan sebagai pencapaian yang utama dan penting untuk pekerja/ individu dalam menjalankan tugas yang diberikan mengikut skop tugas yang ditetapkan untuk mengelola tugas secara teknikal yang diorientasikan oleh tugas. Untuk mengukur prestasi tugas terdapat keupayaan yang di uji seperti daya menyelesaikan masalah dengan cekap, kecekapan dalam membuat keputusan yang seimbang dan betul, kecekapan dalam merancang sesuatu perjalanan tugas mengikut matlamat jabatan dan kualiti dan kuantiti yang terhasil yang menentukan prestasi atau objektif jabatan sama ada kuat mahupun lemah. *Prestasi kontekstual membawa maksud suatu tingkah laku yang membantu organisasi, sosial dan persekitaran psikologikal. Antara elemen yang dapat di nilai untuk menguji prestasi konseptual ini adalah seperti menunjukkan inisiatif dalam membuat kerja lebihan yang ditunjukkan untuk mengembangkan lagi usaha pekerja dan organisasi, pembangunan persekitaran kerja yang sama ada menunjukkan sentimen negatif atau positif dan membentuk psikologi jabatan untuk mencipta sesuatu yang bermanfaat. Elemen yang diterangkan ni lebih kepada prestasi yang ditunjukkan secara tidak formal untuk mendapatkan manfaat dalam bekerja. Tingkah laku yang tidak produktif didefinisikan sebagai gelagat yang akan menyumbang permasalahan kepada jabatan. Antara penyumbang permasalahan yang timbul seperti rekod kedatangan kerja melebihi cuti yang dibenarkan dan hadir lambat ke tempat kerja.*

## 3.0 METODOLOGI KAJIAN

Kajian ini melibatkan kajian kuantitatif secara *cross-sectional* iaitu menggunakan instrumen soal selidik untuk mengumpul maklumat kajian dalam hubungan antara persekitaran ergonomik dan prestasi kerja dalam kalangan Pihak Berkuasa Tempatan Negeri Sembilan. Populasi kajian dan pensampelan melibatkan tujuh buah Pihak Berkuasa Tempatan di Negeri Sembilan di mana jumlah populasi adalah 106 orang penjawat awam. Berdasarkan penentuan sampel oleh Krecjie dan Morgan (1970) jumlah pensampelan yang terbaik untuk kajian ini adalah 84 orang penjawat awam daripada 106 orang penjawat awam bersasar iaitu pada skim perkhidmatan pentadbiran dan sokongan di pejabat. Kaedah yang digunakan dalam kajian ini adalah kaedah persampelan rawak berstrata.

Instrumen yang terbaik digunakan untuk mendapatkan data daripada responden dengan efisien untuk mencapai matlamat dan objektif kajian adalah melalui borang kaji selidik yang di adaptasi ke atas talian melalui "google form". Di dalam soal selidik ini terbahagi tiga kategori iaitu Kategori A, Kategori B dan Kategori C yang melibut sebanyak 42 soalan dibangunkan. Kategori A adalah berkenaan demografi responden (5 soalan), Kategori B adalah berkenaan persekitaran ergonomik (22 soalan) dan Kategori C adalah berkenaan prestasi kerja (15 soalan). Di dalam soal selidik ini responden dikehendaki menjawab 42 soalan berdasarkan Skala Likert lima mata. Kategori A berkenaan demografi responden yang mana di dalamnya terdapat jantina, umur, pengalaman kerja, status perkahwinan dan taraf pendidikan. Di dalam Kategori B, soalan terbahagi berdasarkan kepada empat dimensi iaitu dimensi ruang, dimensi mesin, dimensi manusia dan dimensi persekitaran dari Teori Faktor Manusia Dan Petersen (1980) yang diadaptasi oleh Mat Rebi (2008). Manakala Kategori C berkenaan prestasi kerja yang mengandungi tiga dimensi iaitu dimensi prestasi tugas, prestasi kontekstual dan tingkah laku yang tidak produktif yang di ambil dari Model Prestasi Koopmans (2016). Pengkaji menjalankan kajian rintis untuk membuktikan kebolehpercayaan setiap dimensi di dalam borang soal selidik. Kajian rintis ini juga dijalankan untuk meminimumkan kesilapan yang akan terjadi semasa kajian sebenar dijalankan dengan menggunakan perisian SPSS "Statistical Package for Social Science" versi 26 untuk menentukan nilai "Cronbach Alpha" kepada 12 orang pekerja di Majlis Daerah Rembau. Pengkaji mendapati nilai "Cronbach Alpha" pada pemboleh ubah bebas iaitu persekitaran ergonomik adalah 0.916. Manakala, pemboleh ubah bersandar adalah 0.931. Menjadikan kedua-dua pemboleh ubah ini berada pada nilai kebolehpercayaan yang tinggi 0.953 pada nilai keseluruhan.

#### ■4.0 DAPATAN KAJIAN

Data telah dianalisis menggunakan perisian SPSS "Statistical Package for Social Science version 26". Analisis yang terlibat adalah analisis statistik deskriptif dan analisis korelasi Pearson yang mana selaras dengan objektif dan tujuan kajian di lakukan. Dapatan menunjukkan 51 (60.7%) orang lelaki dan seramai 33 (39.3) orang perempuan. Ini menjadikan responden lelaki adalah majoriti di dalam kaji selidik ini. Tahap umur responden yang bekerja di Pihak Berkuasa Tempatan Negeri Sembilan berada di dalam lingkungan 26 hingga 45 tahun dengan mencatatkan peratus 17.9% hingga 21.4%. Manakala pengalaman kerja responden majoriti berkhidmat selama 5 tahun dan ke bawah dengan mencatatkan 31.0%. Tambahan pula, status perkahwinan untuk responden adalah seramai 57 responden berstatus sudah berkahwin iaitu 67.9%. Tambahan pula, majoriti daripada responden mempunyai taraf pendidikan SPM seramai 39 responden (46.4%).

**Objektif Pertama: Mengenal Pasti Tahap Ergonomik Dalam Kalangan Responden Kajian Di Pihak Berkuasa Tempatan Negeri Sembilan.**

Berdasarkan Jadual 4.1 berikut adalah jumlah keseluruhan nilai skor min dalam kalangan responden untuk persekitaran ergonomik di Pihak Berkuasa Tempatan di Negeri Sembilan. Dapatan menunjukkan dimensi ruang dan mesin mencatatkan nilai min yang tinggi iaitu 3.94. Manakala untuk nilai min yang rendah iaitu dimensi manusia mencatatkan min 3.12 dengan tahap keberadaan yang sederhana. Menjadikan nilai min secara keseluruhan adalah tinggi.

**Jadual 4.1: Jumlah Keseluruhan Min Untuk Persekitaran Ergonomik**

DIMENSI	NILAI MIN	SISIHAN PIAWAI	TAHAP
Ruang	3.94	0.88	Tinggi
Mesin	3.94	0.67	Tinggi
Manusia	3.12	0.76	Sederhana
Persekitaran	3.79	0.65	Tinggi
<b>JUMLAH KESELURUHAN</b>	<b>3.69</b>	<b>0.51</b>	<b>Tinggi</b>

**Objektif Kedua: Mengenal Pasti Tahap Prestasi Kerja Dalam Kalangan Responden Kajian Di Pihak Berkuasa Tempatan Negeri Sembilan.**

Berdasarkan Jadual 4.2 adalah jumlah keseluruhan nilai skor min dalam kalangan Pihak Berkuasa Tempatan Negeri Sembilan untuk prestasi kerja. Dapat dilihat skor min tugas mendapat nilai min 4.24.

Untuk min yang rendah iaitu min untuk tingkah laku yang tidak produktif mencatatkan min 1.92. Ini menunjukkan tahap tingkah laku yang tidak produktif adalah rendah yang membawa maksud tingkah laku yang negatif bergerak secara pasif berbanding tugas yang bergerak secara aktif pada tahap yang tinggi. Keseluruhan tahap prestasi kerja adalah sederhana.

**Jadual 4.2: Jumlah Keseluruhan Min Untuk Prestasi Kerja**

DIMENSI	NILAI MIN	SISIHAN PIAWAI	TAHAP
Tugas	4.24	0.56	Tinggi
Kontekstual	4.11	0.62	Tinggi
Tingkah Laku Yang Tidak Produktif**	1.92	1.01	Rendah
<b>JUMLAH KESELURUHAN</b>	<b>3.42</b>	<b>0.51</b>	<b>Sederhana</b>

**Objektif Ketiga: Mengkaji Hubungan Antara Ergonomik Dan Prestasi Kerja Dalam Kalangan Responden Kajian Di Pihak Berkuasa Tempatan Negeri Sembilan.**

Merujuk kepada Jadual 4.3 berkenaan hubungan persekitaran ergonomik dengan prestasi kerja menunjukkan hasil analisis korelasi Pearson dan nilai signifikan yang telah dianalisis terhadap kedua-dua pemboleh ubah. Hasil analisis mendapati hubungan persekitaran ergonomik dengan prestasi kerja berada pada tahap pekali (r) 0.478\*\* dan nilai signifikan adalah 0.00. Hasil analisis mendapati bahawa terdapat hubungan yang sederhana dan positif. Merujuk kepada hasil analisis ini wujud hubungan yang signifikan pada tahap yang sederhana untuk persekitaran ergonomik dengan prestasi kerja di Pihak Berkuasa Tempatan (PBT) Negeri Sembilan.

**Jadual 4.3: Hubungan Persekitaran Ergonomik dengan Prestasi Kerja**

		Persekitaran Ergonomik	Prestasi Kerja
Persekitaran Ergonomik	Korelasi Pearson	1	.478**
	Sig. (2-tailed)		.000
	N	84	84
Prestasi Kerja	Korelasi Pearson	.478**	1
	Sig. (2-tailed)	.000	
	N	84	84

\*\* . Korelasi signifikan pada tahap 0.00 (2-tailed).

## 5.0 PERBINCANGAN DAN CADANGAN

**Objektif Pertama: Tahap Ergonomik Dalam Kalangan Responden Kajian di Pihak Berkuasa Tempatan Negeri Sembilan.**

Persekitaran ergonomik adalah pemboleh ubah bebas terhadap kajian yang dilakukan. Sehubungan itu, secara keseluruhannya mendapati setiap dimensi yang di uji di dalam analisis deskriptif mencapai tahap yang tinggi dan sederhana. Dimensi yang mendapat nilai skor min yang tinggi adalah dimensi ruang, mesin dan persekitaran. Manakala untuk dimensi manusia mendapat nilai skor min yang sederhana. Ini menunjukkan bahawa dalam kalangan Pihak Berkuasa Tempatan Negeri Sembilan sudah mendapat kesedaran di peringkat awal dan menjalankan pengamalan secara berpengetahuan di pejabat dengan baik. Menurut Azman (2019) menyatakan reka bentuk dan ruang kerja yang baik menyumbang produktiviti kerja harian di pejabat dengan sihat. Perkara ini perlu di ambil kira untuk ditempatkan dengan sebaiknya agar keselesaan yang optimum dapat menambah semangat kerja pekerja serta berdaya saing. Berdasarkan analisis yang telah dilakukan mendapati Pihak Berkuasa Tempatan Negeri Sembilan di lihat telah berjaya mengamalkan susun atur stesen kerja yang terancang dan pemilihan perabot pejabat yang sesuai sebagai kegunaan pada ruang kerja untuk keselesaan pekerja

Menurut dapatan Hasni (2018) mesin merupakan alat atau radas yang digunakan semasa kerja dapat mengurangkan kesan kesakitan atau risiko tidak sihat di tempat kerja yang membawa kepada kesan

akan datang yang mengganggu keselesaan pekerja. Dengan penggunaan mesin yang bersesuaian di tempat kerja pekerja dapat menggunakan dengan sebaik mungkin tanpa sebarang permasalahan yang timbul. Menurut Malek (2017) dalam kajian beliau mengatakan anggota badan mempunyai limitasi tersendiri sama ada ia sesuai untuk digunakan dalam bentuk pergulungan yang kerap atau tidak. Ini disebabkan terdapat beberapa risiko yang tinggi boleh berlaku kemalangan di tempat kerja dan sangat berpotensi menyumbang prestasi kerja yang berkurangan sekiranya langkah pengamalan ergonomik tidak dilaksanakan pada awalnya. Secara keseluruhannya Pihak Berkuasa Tempatan Berjaya dan sedaya upaya menyediakan peralatan kerja seperti mesin untuk kegunaan pekerja menggunakan dengan baik di dalam pemerhatian mengikut garis panduan yang ditetapkan. Tambahan pula nilai tambah telah diberi oleh pihak pengilang peralatan terhadap tata cara penggunaan mesin atau peralatan tersebut supaya tidak berlaku kemalangan kecil atau besar. Menurut Nurazwa (2020) persekitaran yang baik terbentuk daripada persekitaran yang mampu menyumbang kepada kesan terhadap produktiviti sesuatu kerja di pejabat yang mampu mempengaruhi tindak tanduk individu dalam melakukan sesuatu. Melihat kepada Pihak Berkuasa Tempatan Negeri Sembilan terdapat pekerja yang menghabiskan masa harian mereka dengan kerja di hadapan komputer. Jabatan memandang serius berkenaan isu ini dengan penyediaan pencahayaan yang cukup pada ruang kerja agar pekerja tidak mendapat penyakit seperti rabun. Secara keseluruhannya PBT Negeri Sembilan berjaya dalam memberi persekitaran yang baik pada ruang kerja di pelbagai sudut yang boleh diakses oleh pekerja tanpa mengalami sebarang kecelakaan di tempat kerja.

**Objektif Kedua: Tahap Prestasi Kerja Dalam Kalangan Responden Kajian Di Pihak Berkuasa Tempatan Negeri Sembilan.**

Berdasarkan hasil dapatan melalui jumlah keseluruhan min untuk prestasi kerja menunjukkan dua dimensi yang menyumbang kepada min yang tinggi iaitu dimensi tugas dan kontekstual berbanding dimensi tingkah laku yang tidak produktif berada pada min yang rendah. Ini menjadikan nilai keseluruhan untuk analisis dimensi prestasi kerja berada pada kedudukan sederhana. Menurut Marie (2016) perkara berkenaan tenaga kerja yang melibatkan perasaan perlu di beri penghargaan seperti anugerah atau ganjaran sama ada dalam bentuk pujian atau fizikal. Manakala menurut Raju (2017) untuk pekerja yang mahu mengoptimumkan pekerjaan harian yang mereka lakukan dengan sebaiknya mencadangkan membuat semakan terhadap diskripsi tugas yang mana perlu di lihat kembali bersama majikan untuk disesuaikan kepada kebolehan pasaran tenaga kerja dalam menyumbang potensi. Ini memudahkan pihak PBT masing-masing tidak terlepas pandang dalam memberi sebarang ganjaran kepada pekerja berdasarkan penilaian yang dibuat.

Menurut Ah Nam (2019) menyatakan bahawa kontekstual ini untuk mencari jurang di antara pendedahan peringkat individu terhadap jawatan perkhidmatan di jabatan. Ini kerana kontekstual merupakan penerimaan terhadap kerja yang dilakukan dengan kebolehan yang perlu ditunjukkan semasa bekerja dengan potensi positif. Merujuk kepada pernyataan Abu Bakar (2016) tingkah laku yang tidak produktif dihasilkan dengan suatu tindak tanduk si perlaku secara sukarela sama ada di dalam keadaan sedar atau pun sebaliknya. Di mana tingkah laku seperti ini membawa kepada sikap negatif yang mana cuba menimbulkan persekitaran yang tidak bagus yang mampu mempengaruhi persekitaran secara fizikal dan pemikiran. Kontekstual di dalam PBT dilihat berdasarkan kemampuan yang mampu dilahirkan oleh pekerja dalam menyumbang bakti kepada kerja harian dalam menambah baik proses kerja yang ditunjukkan. Ini dapat memberi kepada ketersediaan kepada pekerja dan organisasi kerana PBT menyediakan perkhidmatan yang berorientasikan kepada orang awam di sekitar kawasan kawalan dan operasi. Ini akan memberi kesan positif tidak kira dari dalam dan luar sebagai penunjuk aras bahawa kepakaran seseorang dapat diwujudkan melalui kebolehan dalam melakukan kerja.

**Objektif Ketiga: Hubungan Antara Persekitaran Ergonomik Dengan Prestasi Kerja Dalam Kalangan Responden Kajian Di Pihak Berkuasa Tempatan Negeri Sembilan.**

Hasil keputusan analisis ini memberi gambaran di mana terdapat hubungan yang positif pada tahap yang sederhana antara persekitaran ergonomik dengan prestasi kerja. Dapatan ini menunjukkan bahawa kakitangan PBT Negeri Sembilan masih lagi memerlukan persekitaran ergonomik dalam membantu meningkatkan prestasi kerja mereka. Justeru itu, pihak PBT perlu memberi penekanan kepada pengamalan ergonomik di tempat kerja supaya ia kekal positif dalam membangunkan tahap prestasi kerja yang baik. Dapatan kajian ini menyokong kepada kajian lepas Shamil (2020) yang mendapati hubungan antara ergonomik dan prestasi kerja mempunyai hubungan yang signifikan terhadap pekerja yang bekerja di dalam pejabat. Ini kerana untuk mengurangkan risiko kesakitan yang ditanggung oleh pekerja di pejabat suatu intervensi dilakukan melalui pendedahan postur bekerja bersama peralatan dan ruang kerja.



## Cadangan

Pihak organisasi disarankan untuk meluaskan lagi pengetahuan terhadap ergonomik di tempat kerja agar perkembangan operasi seimbang dengan beban kerja individu. Perkara ini dapat dipelajari dengan menggunakan inisiatif permulaan seperti membuat bacaan rujukan dari piawaian MAMPU (*Malaysian Administrative Modernisation and Management Planning*), penelitian, dan implikasi ketika diamalkan. Ini akan memberi keuntungan kepada jabatan dan pekerja kerana kehendak jabatan adalah menjana pendapatan manakala pekerja merupakan perlaku tugas tersebut. Jadi kedua-dua ini merupakan penggerak yang saling memerlukan. Keselamatan dan kesihatan pekerjaan dalam jabatan sangat penting kerana banyak kes kemalangan yang berlaku di jabatan yang melibatkan penggunaan kawasan peralatan di pejabat dengan penggunaan yang salah atau tidak mempunyai arahan penggunaan yang ditunjukkan. Selain itu, penjawatan keselamatan dan kesihatan di tempat kerja perlu dilantik atau diwujudkan di jabatan atau pihak pentadbiran. Pentadbiran juga wajib menjalankan bengkel secara dalaman atau luaran untuk memberikan pendedahan kepada tenaga kerja untuk mengambil langkah berjaga-jaga dalam penggunaan peralatan di pejabat. Peti cadangan dan latihan berkala juga perlu di beri pendedahan melalui pengamalan budaya ergonomik dan jabatan harus bersikap terbuka dalam mendengar luahan pekerja di atas kehendak kerja yang baik, seperti mengadakan sesi dialog sama ada secara bersemuka atau maya. Suasana kondusif semasa kerja lahir daripada faktor susun atur pada ruang kerja yang sempurna atau terancang. Susun atur yang baik dapat meningkatkan lagi daya persaingan atau prestasi kerja di pejabat kerana mempunyai aura positif saat kerja. Untuk memantapkan lagi persekitaran ergonomik jabatan boleh menghantar beberapa tenaga kerja di pelbagai jabatan kerajaan atau swasta yang telah mempunyai sijil piawaian ISO untuk mengakses lebih mendalam dengan melakukan pemerhatian terhadap jabatan yang di pilih sebagai rujukan.

Pengkaji akan datang disarankan untuk meluaskan skop dengan pembolehubah yang berbeza seperti budaya ergonomik, amalan dan komitmen jabatan terhadap ergonomik, keselamatan dan kesihatan di tempat kerja, inovasi ergonomik, ergonomik dan hubungan industri 4.0 dan kesedaran terhadap Ekosistem Kondusif Sektor Awam (EKSA). Seterusnya, pengkaji masa hadapan dapat membuat pergabungan di antara kaedah kualitatif dan kuantitatif dengan instrumen yang berbeza agar penyelidikan dalam bidang ini dapat dikembangkan. Pengkaji masa hadapan boleh melakukan kajian kepada beberapa jenis organisasi atau jabatan yang belum atau kurang mendapat tempat dalam kajian ergonomik ini, terutamanya di jabatan kerajaan seperti kerajaan negeri, badan berkanun, hospital dan badan beruniform. Data kajian yang berbeza akan memberikan persekitaran ergonomik membantu atau tidak sama ada hubungan di antara hubungan yang lain menghasilkan sesuatu yang positif atau negatif. Ini akan membuka ruang dan peluang kepada pengkaji akan datang dalam membuat perancangan matlamat lebih kepada organisasi dalam meningkatkan pengamalan dan membuat keputusan segera dan sekali gus memberi organisasi merancang perubahan di peringkat yang berskala permulaan.

## 6.0 KESIMPULAN

Tuntasnya, pengkaji mengharapkan dengan dapatan kajian yang dilakukan, ia dapat dijadikan rujukan oleh Pihak Berkuasa Tempatan Negeri Sembilan untuk memperbaiki kelemahan yang ada dan mengekalkan kesempurnaan yang diamalkan untuk dijadikan penanda aras. Pengkaji juga berharap kajian yang dilakukan dapat menarik minat pengkaji yang akan datang dalam mengembangkan lagi permasalahan yang dikaji pada kajian masa hadapan untuk lebih mengambil tahu dan meluaskan berkenaan ergonomik pada persekitaran pekerjaan. Walau bagaimanapun, pengkaji berharap agar kajian ini dapat memberi manfaat yang sejagat kepada pengkaji baharu sebagai rujukan buat negara, bangsa dan agama.

## RUJUKAN

- Amirul Shazli Sahimi, Z.-A. K. (2021). Persepsi Terhadap Pelaksanaan Pengurusan Keselamatan dan Kesihatan Pekerjaan Oleh Kakitangan Awam Di Putrajaya, Malaysia. *Journal of Social Sciences and Humanities*, 198-212.
- Azhana Othman, N. A. (2020). The Dark Sides Of Workstation : Ergonomics Aspects And Occupational Diseases Towards Job Performance At General Hospital In Malaysia. *Jurnal Kejuruteraan dan Sains Kesihatan*, 149-160.

- Azman Arif Amran, M. N. (2019). Hubungan Antara Sistem Kerja Ergonomik dan Prestasi Keselamatan dan Kesihatan Pekerjaan. *Jurnal Wacana Sarjana*, 1-12.
- Baba Md Deros, D. D. (2015). A Study on Ergonomic Awareness among Workers Performing Manual Material Handling Activities. *World Conference on Technology, Innovation and Entrepreneurship*, 1666-1673.
- Carlos J. Padilla, F. A. (2021). Anthropometry As A Readily Accessible Health Assessment Of Older Adults . *Experimental Gerontology*, 1-9.
- Daryle W. Morgan, R. V. (1970). Determining Sample Size For Research Activities. *Educational and Psychological Measurement*, 607-610.
- Debra Lerner, L. K. (2016). Cross-Cultural Adaptation Of The Individual Work Performance Questionnaire. *Research Gate*, 609-619.
- Dr. K. Krishnam Raju, D. S. (2017). A Study On Job Description and Its Effect On Employee Performance: Case of Some Selected Manufacturing Organizations In The City of Pune, India. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)* , 1-10.
- Farah Husna Anwar, F. N. (2020). Perkaitan Antara Motivasi dan Prestasi Kerja Terhadap Kepuasan Kerja Dalam Kalangan Penjawat Awam. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 34-57.
- Fatin Syahirah bt Sa'adon, D. R. (2015). Ergonomik dan Kepuasan Pekerja Di Universiti Malaysia (UUM). *Proceedings of Symposium on Technology Management and Logistics (STMLGoGreen)*, 417-421.
- Hashim, A. J. (2010). Tahap Kepuasan Pekerja Terhadap Prestasi Persekitaran Fizikal Dalam Pejabat. *Universiti Teknologi Malaysia*, 1-99.
- Hasni, M. Z. (2018). Hubungan Di Antara Faktor Ergonomik Dengan Tekanan Pekerjaan Dalam Sektor Penyelidikan dan Pembangunan: Kajian Dalam Kalangan Pekerja di Mimos Berhad. Malaysia: Universiti Utara Malaysia.
- Hassan, Z. (2016). Faktor Ergonomik dan Kepuasan Kerja: Kajian Kes Dalam Kalangan Operator Pengeluar. *ResearchGate*.
- Heidrun Becker, M. E.-D. (2016). An International Survey of the Ergonomics of Professional Translation. *Open Edition Journals*, 1-17.
- Jabatan Keselamatan dan Kesihatan Pekerjaan. (2021). *Factory & Machine*. Retrieved from Jabatan Keselamatan dan Kesihatan Pekerjaan: <https://www.dosh.gov.my/index.php/ms/factory-machinery/info-kkp/kesihatan-pekerjaan-3/statistik-perkeso-1>
- Kyoung-Ah Nam, S. P. (2019). Factors Influencing Job Performance: Organizational Learning Culture, Cultural Intelligence, and Transformational Leadership. *Performance Improvement Quarterly*, 1-18.
- Lasemang, N. (2017). Kesihatan Fizikal dan Mental. *Program Hubungan Industri*, 1-21.
- Li, Q. (2020). Task Performance Measures: A Cognitive Perspective. *Journal of Education and Development; Vol. 4, No. 3*, 88-93.
- Linda Koopmans, C. B. (2013). Development Of An Individual Work Performance Questionnaire. *International Journal of Productivity and Performance Management*, 6-28.
- Maisarah Azman, & Lai Wei Sieng. (2021). Faktor-Faktor Mempengaruhi Prestasi Pekerja mengikut Persepektif Pekerja. *Journal Of Business Management and Accounting*, 11, 87-107. doi:<https://doi.org/10.32890/jbma2021.11.1.5>
- Malek, M. C. (2017). Hubungan Di Antara Faktor-Faktor ergonomik Terhadap Prestasi kerja dalam Kalangan kakitangan Kilang Proton Shah Alam. *Proceeding of the 4th International Conference on Management and Muamalah\_ResearchGate*, 341-348.
- Marie S. Mitchell, R. L. (2016). Can You Handle The Pressure? The Effect of Performance Pressure on Stress Appraisals, Self-regulation and Behavior. *Academy of Management Journal*, 1-48.
- Mat Rebi Abdul Rani, Z. M. (2008). Perhubungan Antara Stesen Kerja Ergonomik dan Stres: Kajian Terhadap Operator Pengeluaran di Organisasi Multinasional di Malaysia. *Jurnal Teknologi*, 49-69.
- Mohamed Shahrizan Abu Bakar, K. I. (2016). Penyimpangan Tingkah Laku Di Tempat Kerja: Terminologi, Faktor, Tipologi dan Kesan. *Malaysian Journal of Social Sciences and Humanities (MJSSH)* , 18-26.
- Mohammad Shamil Mohammad Nor, M. N. (2020). Hubungan Antara Sistem Kerja Ergonomik dan Prestasi Keselamatan dan Kesihatan Pekerjaan. *Jurnal Wacana Sarjana*, 1-13.
- Mohd Nasir Selamat, A. A. (2019). Hubungan Antara Sistem Kerja Ergonomik dan Prestasi Keselamatan dan Kesihatan Pekerjaan. *Jurnal Wacana Sarjana*, 1-12.
- Mohd Nasir Selamat, M. K. (2019). Sistem Kerja Ergonomik dan Prestasi Keselamatan dan Kesihatan Pekerjaan dalam Industri Pembuatan di Klang, Selangor. *Jurnal Wacana Sarjana*, 1-14.

- Mohd Nasir Selamat, S. N. (2021). Hubungan Antara Sistem Kerja Ergonomik dan Prestasi Keselamatan dan Kesihatan Pekerjaan (KKP) di Industri Pembuatan. *Pusat Kajian Kesejahteraan Manusia dan Masyarakat Universiti Kebangsaan Malaysia*, 1-13.
- Mohd. Nasir Markom, N. b. (2020). Hubungan Antara Gaya Pembelajaran dan Prestasi Kerja Di Majlis Bandaraya Iskandar Puteri (MBIP). *Jurnal Kemanusian*, 166-171.
- Nikos Bozionelos, S. K. (2017). The Relationship of Emotional Intelligence With Task and Contextual Performance: More Than It Meets The Linear Eye. *Personality and Individual Differences*, 206-211.
- Normah Binti Salleh, M. F. (2017). Mengkaji Hubungan Di Antara Pembelajaran Koperatif (Kemahiran Generik) Dengan Kemahiran Menggunakan E-Pembelajaran Di Kalangan Pelajar Yang Mengambil Subjek Telekomunikasi Dan Rangkaian Di Fakulti Pendidikan, UTM, Skudai, Johor . *Fakulti Pendidikan Universiti Teknologi Malaysia* .
- Nurazwa Ahmad, S. (2020). Hubungan Di Antara Persekitaran Kerja dan Produktiviti. *Kajian Kes Di Malaysia*, 11-21.
- Olasanmi, O. O. (2016). Effect of Ergonomic Hazards on Job Performance of Auditors in Nigeria. *Department of Management and Accounting, Obafemi Awolowo University, Ile-Ife, Nigeria*, 33-44.
- Othman, S. A. (2015). Tahap Kesedaran ergonomik Dalam Kalangan Operator Pengeluaran Di Mondelez Malaysia Sdn. Bhd, Johor Bahru. Johor Bahru: Universiti Teknologi Malaysia.
- Paul McCoubrie, J. C. (2014). Musculoskeletal Symptoms Amongst Clinical Radiologists and the Implications of Reporting Environment Ergonomics—A Multicentre Questionnaire Study. *Journal of Digital Imaging*, 255-261.
- R. J. (2018). Aplikasi Ergonomik: Komitmen Majikan dan Pekerja. *Journal of Advanced Research in Business and Management Studies*, 93-102.
- Rahim Jamian, K. A. (2020). The Role of 5S in Improving Occupational Safety and Health Management System (OSHMS) in Small and Medium Enterprises. *Journal of Safety, Health and Ergonomics*, 1-6.
- Rahim Jamian, K. A. (2020). The Role of 5S in Improving Occupational Safety and Health Management System (OSHMS) in Small and Medium Enterprises (SMEs). *Journal of Safety, Health and Ergonomics*, 1-6.
- Roger Bougie, U. S. (2016). *Research Method For Business*. United Kingdom: John Wiley & Sons Ltd.
- Sadon, N. F. (2018). Mentransformasikan Hubungan Industri Di Malaysia: Keberkesanan Pengurusan Keselamatan Dan Kesihatan Pekerjaan. *Trends in Undergraduate Research*, 50-54.
- Sambung, R. (2019). Job Satisfaction on Employee Performance; Counterproductive Work Behavior and Organizational Citizenship Behavior as Mediations. *International Journal of Economic Behavior and Organization*, 50-56.
- Selamat, M. N. (2016). Ergonomic Work System and Occupational Safety and Health Performance. *Mediating Effect Of Psychosocial Work Factors* , 1-260.
- Shahreki, J., & Tee Suan Chin, J. K. (2019). The Effect Of Human Resources Information System Application On Employee Satisfaction And Turnover Intention. *Entrepreneurship and Sustainability Issues*, 1462-1474.
- Taber, K. S. (2018). The Use Of Cronbach's Alpha When Developing and Reporting Research Instruments In Science Education. *Science Education Centre, Faculty of Education, University of Cambridge*.
- Beehr, Terry A., and John E. Newman. "Job Stress, Employee Health, and Organizational Effectiveness: A Facet Analysis, Model, and Literature Review." *Personnel Psychology*, vol. 31, no. 4, 1978, pp. 665–699., <https://doi.org/10.1111/j.1744-6570.1978.tb02118.x>.
- Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia (MAMPU). (27 December, 2021). Malaysia Administrative Modernisation and Management Planning (MAMPU). Putrajaya, Malaysia.
- Zink, K. J. (2014). A Human Factors Perspective on Sustainable HRM. *Social Sustainability and Quality of Working Life*, 35-52.

# Women's perception on drivers and its association with Road Safety Environment in Malaysia: Using Confidence Interval-Based Estimation of Relevance

Irza Hanie Abu Samah <sup>1</sup>, Nur Syafiqah A. Rahim<sup>2</sup>, Abdul Shukor Shamsudin <sup>3</sup> Saraih Umami Naiemah<sup>4</sup>, Intan Maizura Abd Rashid <sup>5</sup>, Mas Idayu Saidi <sup>6</sup>

<sup>1,2,6</sup>*School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia*

<sup>3</sup>*College of Business, Universiti Utara Malaysia (UUM)*

<sup>4</sup>*Faculty of Business & Communication, Universiti Malaysia Perlis*

<sup>5</sup>*Faculty of Business, Universiti Teknologi Mara, Melaka (UiTM)*

<sup>1</sup>Corresponding author: (Irza Hanie Abu Samah, [irzahanie@utm.my](mailto:irzahanie@utm.my))

09

## Abstract

The cost of road traffic injuries has been estimated to account for about 1.5% of gross national product (GNP) in middle-income countries and 2% in high-income countries. And most of road traffic deaths usually involve adults aged between 15 and 44 years, who are often the family breadwinners. This is a serious issue that need to be addressed. Moreover, breadwinner currently occur among women, since the number of divorce cases is increasing in Malaysia, the circumstance is speculating that women need to be more independent and requires mobility to afford family for the survival. In addition, Malaysia has recorded the third highest death rate of road accident in Asian region, therefore, the current topic is very important to be discussed. Current research used Confidence Interval-Based Estimation of Relevance (CIBER). Targeted respondents in this study were female drivers from various age category, employment background, marital status and different pregnancy stages. The result of this study would be beneficial for New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP), Malaysian Institute Road Safety Research (MIROS), Ministry of Health (MOH) for helping in anticipation of preventing more women involving in road accidents.

**Keywords:** women, driving behavior, road users, road safety, road environment

## 1.0 INTRODUCTION

Women are importance for national agendas especially for sustainability of a country (Yeganeh et al., 2019). However, in the World Gender Gaps Index it showed women are still far behind in many aspects such as Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment. Current research highlighted that the index on educational, health and survival estimate that on its current trajectory, it will take another 14.2 years to completely close this gap. Meaning that, stills women are left behind to reach the parity (Bener & Crundall, 2008). Lacking on focus on women may have influence on the country's policy and regulations, and that too will impact on how society perceived women and its value to the country. Furthermore, women that involve in occupational related to transportation are still low. Figure 1 depicted the ranking on women employment based on sectors. This data speaks those women involve in occupation that related to transportation are still lacking, therefore, any initiatives to improve in the area of transportation may have overlooked on women aspect as opinion and insight gathered from this group were lacking.

## 2.0 LITERATURE REVIEW

Women involvement in transportation area were lacking in research and their participation in the real practise as well. Hence, the lack of women involvement in transportation management and occupational will lead to wrong conclusion in making up the policy. Hence it is important to study women drivers at the fundamental level. Meanwhile, understanding Women drivers could be in diverse background too. women drivers may come from a pregnant woman, elderly and young adult. The different in age composition and physical form may also carries different behaviour and personality while driving (Schlundt et al., 2007). However, one thing that previous research had confirm is that the careful

driving style was endorsed more by women (Taubman-Ben-Ari & Yehiel, 2012). This careful driving behaviour shows good value to the other road users and make women valuable to the eye of the society. Understanding each female driver and their driving behaviour is crucial for their road safety.

**Table 1 : Women Participation in Workforce (Transportation)**

Industry	Change in hours worked (Q2- 2019- Q2 2020)
Healthcare and social assistance	75%
Education	65.4%
Professional Services and support	42.5%
Manufacturing	29.9%
Agriculture	21.4%
Utility	21.4%
Transportation	16.5 %
Mining	12.1 %
Construction	8.3%

*Source: Women Participation in Workforce (2019)*

### ■3.0 METHODOLOGY

CIBER technique able to describe individual psychological behaviour and cognitive which associated with intention they about to do (Crutzen et al., 2017). In this plot, current research draw results from each contributing factor to women perception on Malaysia road environment. Women perception on road environment meaning that most female drivers are unintendedly involved in road accidents caused by other factors, primarily by other drivers and road conditions. The unfortunate events happen to female drivers because they lack of knowledge and sometimes tend to deliberate deviations from those practices believed necessary to maintain the safe operation. In CIBER techniques a developed questionnaire was used to test women perception on road environment. (WPRE) has been registered for intellectual property. Analysis using Jamovi produces a visual plot that explained in detail its association of the left and the right panel. Left panel depicted determinant of the study (OTHER DRIVER) and right panel is the dependent variable. Visual from Plot 1 illustrate the analysis of Confidence Interval-Based Estimation of Relevant (CIBER) plot for determinants 'OD1', 'OD2', 'OD3', 'OD4', 'OD5', 'OD6', 'OD7', 'OD8', 'OD9' & 'OD10' and targets 'Road Environment' based on a dataset with 124 rows, 124 of which have complete data.

### ■4.0 RESULTS

Majority of the respondents recorded high item means in determinant (left panel). The greener the diamond, the higher the item means were recorded. Figure 1 depicted plot of Confidence Interval-Based Estimation of Relevant (CIBER) for determinants of other driver and target road environment. The association left panel and right panel show  $R^2=0.31$ , meaning 31% of the variance in road environment were explained by the determinant (other driver). Further elaboration on the associations by each determinant portray in Table 2.

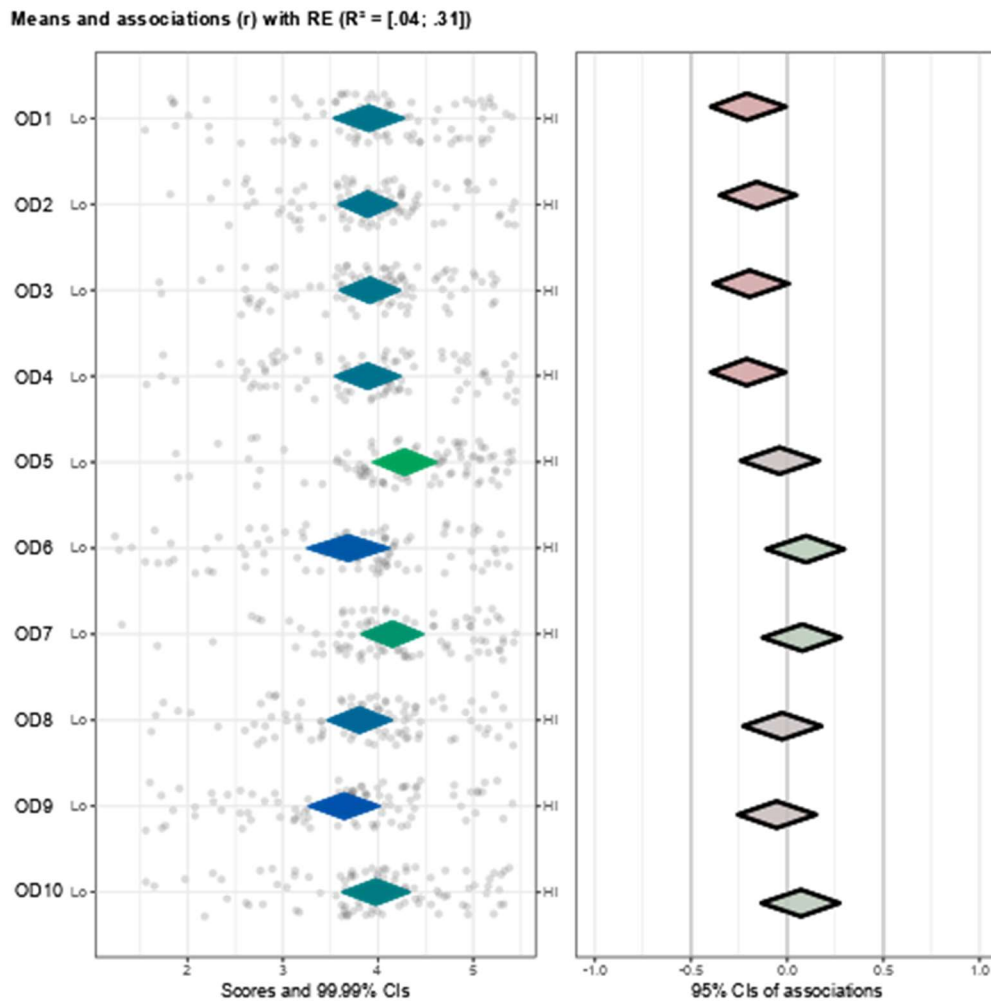


Figure 1: Left and the Right Panel

**Table 2** Left and Right Panel of Another driver and Road Environment

Left panel	Right panel
OD1: I always experience other drivers speeding behind me without safe distancing (73.4%-agree) (8.9%- disagree) The rest- no comment	Negative association depicted from the panel. Left panel indicate that many women are experiencing other drivers speeding behind them, and it makes the perception on the road environment is bad not safe for them.
OD2: I always see other drivers making an illegal u-turn (73.3%-agree) (4%- disagree) The rest- no comment	Red diamond on the red panel shows a negative association and it explained that left panel (green diamond) agrees that they always see other driver make illegal u-turn, and makes them perceived that Malaysia road environment is not safe for them.
OD3: I always see other drivers disobeying traffic light (73.4%-agree) (4.8%- disagree) The rest- no comment	Green diamond in the left panel on OD3 explain that majority of the respondents believe and see other drivers always disobeying traffic light, and It makes the respondents have negative perception about the road environment which is not safe for them.
OD4: I always see other drivers overtaking another car on double white lines (69%-agree) (5.6%- disagree)	Green diamond in the left panel on OD4 explains that overtaking another car on double white lines is always happen in Malaysia. Even if the action is violating the rule, however, it does happen among road users. Therefore, it shows that Malaysia road environment is not safe for them as the red panel

<p><i>The rest- no comment</i></p> <p>OD5: I experience watching drivers changing lanes without signalling (83.1%-agree) (4%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>shows a negative association to the OD4</p> <p>OD5 is the greener diamond compared to the other diamonds in the left panel. Meaning that, seeing other people changing lane without signalling is something common and always seen by the respondents. However, the grey diamond on the right panel shows that it has nothing to do with the safe perception on the road environment. This clearly shows that, if people are always getting use to the situation, they see no harm will happen to them, or nothing that can cause anxiety to them. Therefore, changing lane without signalling may become one of the cultures that are growing among Malaysian road users.</p>
<p>OD6: I experienced a car in front of me putting on the emergency brakes while driving. (46.8%-agree) (12.1%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>Blue diamond indicates a middle score. The dot that surrounding the blue diamond also explain majority of the respondents are moderately agree with the situation. This has association with road environment. Meaning that it could be interpreted that majority of the respondent experiences less and moderate other car putting emergency break, and when less people having this experience, therefore, they percept that road environment in Malaysia a safe enough for them.</p>
<p>OD7: I always see drivers on their mobile phones while driving. (54%-agree) (29.8%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>OD7, the diamond considered greener compared with other diamond in the left panel. Meaning majority of respondents have seen other drivers on their mobile phone while driving. However, the association with the right panel show a positive association, meaning they have good perception on Malaysia road environment even though they have seen many road users are on mobile phone while driving. This again like OD5, mobile phones seem like nothing to offer or cause danger to them. Perhaps it could be relating that the acceptance of norms, even it is violating the rule.</p>
<p>OD8: sometimes I feel that the drivers around me are not tolerable (65.3%-agree) (5.6%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>Blue diamond indicates a middle score. The dot that surrounding the blue diamond also explain majority of the respondents are moderately agree with the situation. And grey diamond on the right panel have no association.</p>
<p>OD9: I always had difficulties when trying to change lanes due to other drivers' behaviour. (63.7%-agree) (12.1%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>Blue diamond indicates a middle score. The dot that surrounding the blue diamond also explain majority of the respondents are moderately agree with the situation. And grey diamond on the right panel have no association.</p>
<p>OD10: I always see a driver with a slow reaction causing trouble on the road. (63.7%-agree) (12.1%- disagree)</p> <p><i>The rest- no comment</i></p>	<p>Green diamond denotes a positive voting from the respondents. Meaning that they have seen other driver causing trouble on the road. However, in the right panel it has positive association, meaning that a slow driver does cause trouble, but it still does not cause harm to the perception of women on the environment, and respondents feel it is still safe for them on the road and having a slow driver.</p>

Hence, for all finding in the CIBER was used to collect the Qualitative opinion on the suggestion to improve the road environment depicted in Figure 2.



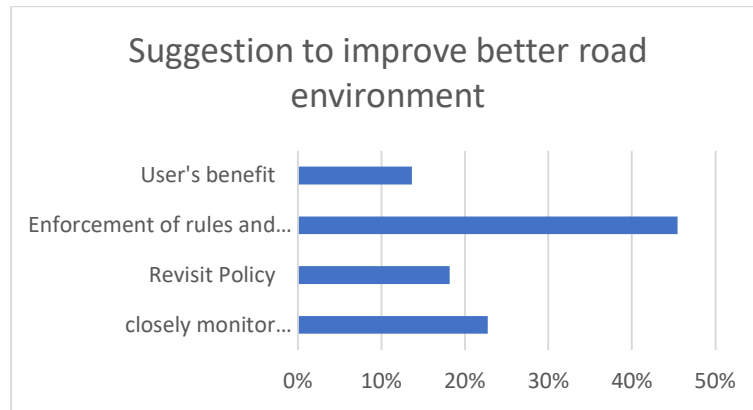


Figure 2: frequency of theme for opinion suggestion to improve road environment

Figure 2 explain suggestion by the respondents for the government to improve road environment conditions including system, people and physical object or maintenance. The suggestions of enforcement rules and regulation were to educate people and provide benefit of using public transportation and also to improve security in infrastructure as to cater the problem that most of the respondent faced.

## 5.0 DISCUSSION AND RECOMMENDATION

Limitation in this research is that the collected data was acquired during the pandemic, therefore driving behavior might be different due to the changes of rules and regulation on cross border or interstate driving. Furthermore, the various categories of age among women also produces different maturity level. Future research might want to look at differentiation of categories of women adult in driving. The contribution of this research is that it nourishes the framework of women in driving, in which the study in this area is still scarce. Other than that, using technique of JAMOMI also help to enlighten the behavioral aspect of women in anticipation for women on road accident.

## 6.0 CONCLUSION

This research focus on anticipation of prevention for women in road accident. Data of this research suggest that factors that lead to safe and unsafe road environment. This research also produces a copyright for the instrument development. As the results of CIBER shows that indicators of ability and emotion were positively associated with road environment, hence these two indicators were among the most valuable domain for women to anticipate and predict the road environment.

## Acknowledgment

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the ASEAN NCAP grant number [4C382].

## References

- Bener, A., & Crundall, D. (2008). Role of gender and driver behaviour in road traffic crashes. *International Journal of Crashworthiness*. <https://doi.org/10.1080/13588260801942684>
- Crutzen, R., Peters, G. J. Y., & Noijen, J. (2017). Using confidence interval-based estimation of relevance to select social-Cognitive determinants for behavior change interventions. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2017.00165>
- Schlundt, D. G., Briggs, N. C., Miller, S. T., Arthur, C. M., & Goldzweig, I. A. (2007). BMI and seatbelt use. *Obesity*, 15(11), 2541–2545. <https://doi.org/10.1038/oby.2007.303>
- Taubman-Ben-Ari, O., & Yehiel, D. (2012). Driving styles and their associations with personality and motivation. *Accident Analysis and Prevention*. <https://doi.org/10.1016/j.aap.2011.08.007>
- Yeganeh, R. C., Ebrahimi, H., Ranjbar, G. K., & Alimohammadi, I. (2019). Survey of gender effect on driving performance and mental workload of young drivers using a driving simulator. *Iran Occupational Health*, 16(1).