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The Effect of Psychological Self-Defence on the Performance of Graduates Employed in Matched and Mismatched Roles

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Abstract: In today's competitive job market, most graduates face obstacles in obtaining a job that matches their field and educational level. The lack of jobs related to graduates' fields and educational levels and to industrial demand in the era of postmodernism has caused psychological tension among graduates. This study predicts that employed graduates who apply mature defence mechanisms show higher work performance compared to graduates who apply immature styles of psychological defence mechanisms. The study also predicts that graduates in matched positions tend to use mature defence mechanisms compared to graduates with job mismatches. To explore this phenomenon, 116 employed graduates from different academic backgrounds shared their views on using mature and immature coping mechanisms in their work performance. The study found that mature self-defence had a positive effect on work performance, while immature defence mechanisms did not show any effect on work performance. Concerning the use of mature and immature defence mechanisms in graduates with matched and mismatched employment, the study revealed that there is no difference between the two groups of graduates in using both types of psychological self-defence. The findings showed that the mature psychological defence mechanisms can be used to understand the factors that contribute to work performance. This can serve as guidance for employed graduates to better perform in their work. For employers, the findings can help them understand their employees' psychological self-defence in dealing with work challenges in today's world.

Keywords: *job mismatches; defence mechanisms; graduates; work performance.*

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Introduction

The life transition from the academic to the career world is one of the challenges that most graduates face and need to adapt to. The work–life transition becomes more challenging when a graduate's career is not matched with their academic or educational field. This is one of the phenomena that most graduates face, due to the changed approach to careers in the era of postmodernism. Career was not perceived as a profession of determined roles or traditions but as a self-designed or self-directed project (Raksnys et al., 2015). This showed that graduates need to equip themselves with new skillsets, which may help them to be placed in the industry.

The expectations and demands of an industry can influence graduates' career development. For instance, new jobs with higher skills generated by the Fourth Industrial Revolution require new qualifications and skillsets (Gormus, 2019). Among those skills are collaborative, creative, critical and communication skills, known collectively as the four Cs. Creativity and critical thinking are needed in today's world for solving everyday problems (Birgili, 2015). Those skills are also essential in ensuring that the industry is more productive and able to overcome unforeseen challenges. If critical thinking skills are not included within an organisation, different ideas may not appear, and the existing processes may not be challenged, leading to stagnation when what is needed is change (Bednarz, 2013).

To deal with this job phenomenon, graduates need to be more skilful and better able to adapt to work challenges. One of the challenges graduates are facing now is the increase in unemployability and mismatched jobs due to limited supply and high job competition. Graduates need to show their capability and readiness in dealing with careers that are not related to their academic field or educational level. Although unemployment is perceived as one of the main factors that can hinder one's motivational beliefs and goal setting (Maree et al., 2008), mismatched jobs can also reduce graduates' adaptability in their work settings. This may contribute to negative expectations and negative self-concept beliefs among graduates. Engaging in a mismatched job that is not in line with their field and educational level may also lead graduates to have a negative perception of their future career. According to Steed (2018), mismatched graduates face poorer prospects and lower earnings than their peers who embark on careers that are a better fit for the knowledge and skills they acquired while earning their degrees.

Another challenge graduates have to face is fulfilling demands from employers. Most employers tend to look for graduates who are equipped with specialised skills and have relevant work experience. Job applicants are

expected to be able to perform tasks using digital tools and software and to think creatively to solve problems. Despite having little work experience, many Gen Z workers have already developed a specific set of expectations regarding the types of companies that they want to work for, as well as the responsibilities of the role.

Graduates have to equipped to deal with various job challenges, such as adapting to and understanding the transition from the academic world to working life. Employed graduates also need to achieve better work performance, which may help to increase the productivity of their industry. According to Molinsky and Pisman (2019), many young people feel disoriented, confused, dissatisfied and, in many cases, overwhelmed when facing the real world of work. For instance, the feedback they receive from industry professionals about their work performance may be different from the feedback they received during their academic studies. Furthermore, in the workforce, they will meet distinct groups of people of different ages, personalities, backgrounds, interests and positions. Dealing with new colleagues and employers with higher-level positions can sometimes cause worry and anxiety for certain employed graduates. This is because such individuals have a lot of power over the future career development of employed graduates. The relationships that are formed at work and in the professional world are quite different from those found in a university environment.

Therefore, in dealing with employability issues, graduates apply various psychological defence mechanisms that may help them to adapt to the current job challenges that most graduates face. Such psychological defence mechanisms may help employed graduates overcome their work-related stress, frustration and anxiety. Psychological self-defence coping is known as an 'ego-defence mechanism', or a subconscious effort to adapt. This involves internal and unconscious conflicts that arise, and the methods people use to emotionally face a dilemma, either in dealing with psychological tension in the state of consciousness or directly with one situation**.** There are several types of psychological defence mechanisms; for instance, defence mechanisms can be categorized as either mature or immature. Mature defence mechanisms refer to suppression, sublimation, humour and anticipation, while immature ones include projection, passive-aggressive behaviour, acting out, devaluation, autistic fantasy and denial.

Psychological defence mechanisms are defined as a set of actions aimed at reducing or eliminating any changes that threaten individuals' biopsychic integrity and stability (Negiri, 2014), such as when adapting to a work setting. Immature defence mechanisms exist concurrently with

psychological problems and pathologies. Researchers believe that they play a significant role in communication difficulties, and that the unsuccessful use of the available defence mechanisms can contribute to psychological problems (Gokdag, 2015). Defence mechanisms play a prominent role in helping a person adapt to the psychological tension that comes from their environment. The maturity of such defence mechanisms is positively associated with adaptability and negatively associated with psychopathology (Nam et al., 2019).

Most employed graduates, both those with job matches and those with job mismatches, need to adapt to and consider the demands and aims of the organisations they are employed by, which are normally focused on employee performance and the organisation's productivity. Graduate mismatches occur when employees hold positions that are not commensurate with their education levels or are outside of their field of study. This job mismatch contributes to underemployment, and it often does not allow graduates to fully maximise the use of their skills and capabilities in the industry (Darusman, 2020). Some might assume that graduates with job mismatches would face more challenges than graduates with job matches because their jobs are not in line with their academic fields or educational levels**.** Workers who face vertical job mismatch, wherein their level of education is not in line with the job requirements, must deal with low salaries compared to those whose levels of education are better in line with their job requirements, though by the same token, some attain higher salaries than others at the same job level when they are overqualified (International Labour Office, 2016).

Graduates with job matches can face other types of challenges, such as those involved in applying their knowledge and skills in real work environments, which are different from educational settings. Both groups of employed graduates may use the relevant psychological defence mechanisms to deal with their respective work challenges, which can help them improve their career development and performance, as requested by industry.

With advances in technology and increased demand resulting from the Fourth Industrial Revolution, most graduates are aware of the importance of soft skills and know that they should not exclusively rely on the knowledge and skills they learned at university. For instance, there has been a shift in demand for digital skills and the four Cs, with greater emphasis on the upskilling and reskilling of employees. Graduates can leverage these skills to gain success in their jobs despite facing negative circumstances at the beginning of their careers. Such challenges often include psychological tension, such as anxiety, stress and depression, which comes from within the

graduates themselves and from society's perceptions of their work environments.

To understand this phenomenon thoroughly, a study was conducted to understand how employed graduates adjust to the challenges and problems related to their jobs using a range of psychological defence mechanisms. The study's findings may help graduates and future graduates be more prepared to enter working life by enhancing their psychological strengths, which can help them to fit into their new work environments and obtain more career achievements.

Based on the preceding argument and past studies, this study has two aims. The first objective was to examine the effects of each psychological defence mechanism on employed graduates' work performance. The second aim involves exploring the differences between graduates with job matches and those with job mismatches in terms of using mature and immature defence mechanisms.

Literature Review

In this review of the literature, past studies are discussed, based on the aims of this study. Employees in a given organisation show different personality traits, and this may affect the ways they cope with their work settings (Omol, 2019). There are certain defence mechanisms that are more applicable that others when coping with a given work scenario. For instance, using humour as a defence mechanism involves in humorous activities to deal with challenges in the work environment (Omol, 2019). Humour is one of the mature psychological defence mechanisms. The other mature defence mechanisms are sublimation, suppression and anticipation.

In terms of development, the use of defence mechanisms may become more pronounced at some point from the beginning of adolescence to middle age and remains constant until late midlife, at which point it begins to decrease. The sublimation and suppression coping mechanism develop throughout age groups (Diehl et al., 2014). Past studies (e.g., Soldz & Vaillant, 1998) have found that as participants grew older, the use of immature defence mechanisms decreased, and the use of mature defence mechanisms increased. Nam et al.'s (2019) study examined the use of mature defence mechanisms among military servicemen in South Korea. The control group consisted of 36 men who reported no negative psychological effects as a result of military service, and the experimental group was comprised of 69 men who experienced psychological impediments related to military service. The study found that participants in the experimental group tended to use immature defence mechanisms more frequently than those in the control group.

Young adults who use mature defence mechanisms are better able to adapt to a specific condition. This revealed that some defence mechanisms can stand either as protective or risk factors in adjusting to stressful conditions. A study conducted by Elyasi et al. (2020) examined the correlation between defence mechanisms and burnout among 314 nurses. The findings showed that mature defence mechanisms – suppression, humour, sublimation and anticipation – negatively correlated with emotional exhaustion. In contrast, immature defence mechanisms–rationalization, projection, denial, omnipotence, devaluation, somatization, splitting, passive aggression, displacement and isolation – were related to depersonalisation. Participants who applied mature defence mechanisms were more effective when handling tough and demanding situations than participants who used immature defence mechanisms. The researchers suggested incorporating components related to defence mechanism into the job interview process for nurses to match individual psychological characteristics with different tasks and settings.

Previous studies on defence mechanisms have also reported that mature defence mechanisms have a positive correlation with cognitive reappraisal of emotional regulation (Shehata & Ramadan, 2017), and improve feelings of control and pleasure, help with integrating conflicting thoughts and emotions (Waqas et al., 2015) and psychological well-being (Ghadimianfar & Dadkhah, 2015). Using mature defence mechanisms also increases self-management and the ability to deal with unpleasant situations (Shehata & Ramadan, 2017). Sepidehdam et al. (2012) found a negative correlation between mature defence mechanisms and fatigue, poor quality of life and symptoms of depression. Further, participants who use mature defence mechanisms have reported experiencing less emotional fatigue. Conversely, immature defence mechanisms showed a positive correlation with emotional disorders (Malone et al., 2013), anger expression (Javaheri et al., 2011), poor adjustment and a higher number of sick leave days taken (Shehata & Ramadan, 2017).

The second aim of this study involves examining the differences between graduates with job matches and those with job mismatches using mature and immature defence mechanisms. The study assumed that graduates with job mismatches would tend to use immature defence mechanisms more than graduates with job matches because employees' knowledge and job skills cannot be fully applied within the job and the industry. Wafa et al.'s (2022) study found that soft skills are more valuable to employers, but fresh graduates should also possess basic or fundamental technical skills. Skills mismatch has been a persistent issue in Malaysia, wherein the expertise of jobseekers, particularly fresh graduates, does not match industry requirements

(The Star, 2020). Education alone cannot guarantee professional success or promotion. Globally, a majority of students further their study at the university level with the hope that they can work in the relevant industries after they have graduated (Mpho & Kaelo, 2017). Azmi et al. (2018) yielded twelve skills that university students needed to prepare themselves to meet the requirements of many jobs upon graduation. These skills are discipline, responsibility, positivity, time management, teamwork, open-mindedness, transparency, communication, leadership, creativity and innovation, appearance and stress endurance.

Zhu (2014) conducted a study among college graduates in China and found the loss of earnings earlier in a graduate's career path to be a significant effect of mismatched jobs. Velciu (2017) argued that placing people in positions at or above their level of education accounts for a sizeable portion of the long-term effects of over- and undereducation on workers' earnings documented in economic literature and will alter their cognitive performance in the future.

According to Daniels et al. (2008), control and support help people deal with stressors, such as work expectations, more skilfully, and their benefits compound over time. The researchers discovered that control and support enabled problem-focused and emotional coping, which were related to aspects including exhaustion, error rates, and a decrease in risky decisions. Their findings indicate that they have a beneficial influence on stress reduction and well-being.

Methodology

In this study, we included only employed graduates who were born and raised in Sabah and graduated from either public or private universities in Malaysia. The study was based on an online survey due to the COVID-19 pandemic, as it was considered the most convenient and safest way to interact with participants. Prospective participants answered the online questions by clicking on a Google Forms survey link, which the researchers shared via social media or email.

Participants

A total of 116 graduates from various educational fields employed at both governmental and non-governmental organisations in Sabah participated in this study. The researchers invited participants to join the study by sending them a Google Forms survey link through various social media platforms and

via email. Snowball sampling was used, as graduates who had already participated in the study were asked to share the survey link with their friends. This may have encouraged more employed graduates to participate in the study.

Research Instrument

A three-part questionnaire was used in this study.

Part A: Demographic Profile

The demographic scale consisted of nine items that measured gender, ethnicity, religion, university, programme, year of graduation, current job, academic level and work duration and experience.

Part B: Job Mismatch

Job mismatches were measured based on vertical (educational level) and horizontal (field) classifications. As discussed earlier, vertical mismatches based on educational level focus on overeducation. The measurement of overeducation was conducted by comparing an individual's actual education and the education required by their position. Horizontal mismatches were measured by comparing the field of a graduate and the work field or background. Based on the Dictionary of Occupational Titles in the International Standard Classification of Occupations, which reports several types of skills and the education optimally required for each occupation category, individuals were categorised as overeducated if their education level was more than the level of education required for their work. Graduates stated whether they were overeducated based on their perceptions and understanding of the work done. The respondents also had to indicate the minimum level of education required for their current jobs. A comparison was then made between the minimum level of education needed and the actual level of education they had attained. Sample items included the following: 'What is your educational level?' 'What is the minimum level of education needed for your current job?' 'Does your current job match your field/the programme at your university?' and 'What kind of education is needed to perform your job?'

Part C: Defence Style Questionnaire (Andrews et al., 1993)

This questionnaire that was used, designed by Andrews et al. (1993), consisted of 40 items that measure three types of psychological self-defence. For this study, only two styles were measured: mature self-defence, which is based on suppression, sublimation, humour and anticipation, and immature

self-defence, which is based on projection, passive aggression, acting out, devaluation, autistic fantasy and denial. The scale responses ranged from 1 ('strongly disagree') to 9 ('strongly agree'). Items for mature psychological defence mechanisms measured competency in dealing with negative conditions such as anxiety and specific problems, through the use of creative and constructive activities**.** For immature psychological defence mechanisms, sample items include the following: 'I often find myself being pleasant to people who by all rights I should be angry at' and 'If I have an aggressive thought, I feel the need to do something to compensate for it'.

Part D: The Individual Work Performance Questionnaire

The individual Performance Scale, created by Koopmans (2015), consists of 18 items that examine three types of work performance: task performance, contextual performance and counterproductive performance. A five-point Likert scale from 0 ('seldom') to 5 ('always') is used to measure participants' responses to each item.

Results

One hundred and sixteen participants took part in this study. Almost two-thirds of participants were female (74; 63.8%), and the remaining participants were male (42; 36.2%). The complete demographic profile of the participants is shown in Table 1.

Table 1 - Demographic Profile of the Participants (N = 116)

Variable	Number	Percentage
Job category		
Matched	65	56.0
Mismatched	48	41.4
Missing	3	2.6
Education level		
Undergraduate	86	74.1
Master's	14	12.1
Missing	16	13.8
Job level		
Full-time and permanent	71	61.2
Full-time and contracted	29	25.0
Part-time and contracted	2	1.7
Part-time and not contracted	4	3.4
Self-employed	10	8.6

Source: Authors' own conception

All the variables showed acceptable reliability values, ranging from 0.87 (individual work performance) to 0.90 (defensive coping skills). In terms of effects, only the mature defence mechanisms had a positive significant effect on work performance ($\beta = 0.15$ ($_{1,115),}$ $t = 3.64$). Mature defence mechanisms contributed to work performance by 10.4%. This indicates that the frequent use of mature defence mechanisms among employed graduates could increase their work performance (Table 2).

Table 2 - Effects of Defence Mechanisms on Work Performance

Work Performance	**R squared**	**Beta**	**p-value**
Mature defence mechanisms	0.104	0.15	0.001
Immature defence mechanisms	0.022	0.32	0.109

Source: Authors' own conception

In terms of the difference in the use of mature and immature defence mechanisms between graduates with job matches and mismatches, the results indicate that there was no difference between the two groups of graduates in the use of either type of psychological self-defence (Table 3).

Table 3 - Difference Between Graduates with Job Matches and Mismatches in Using Defence Mechanism

Variables	**N**	**Mean**	**SD**	**T-value**	**p-value**
Mature Defence Mechanism	65	55.77	10.07	-1.25	0.22
Job matches	48	57.98	8.61		
Job mismatches					
Immature Defence Mechanism	65	59.33	21.81	-0.814	0.42
Job matches	48	63.04	26.45		
Job mismatches					

Source: Authors' own conception

Discussion

The Effect of Mature Psychological Defence Mechanisms on Work Performance

This study found that mature psychological defence mechanisms can contribute to work performance with regard to task performance, contextual performance and counterproductive performance. Conversely, immature psychological defence mechanisms were not shown to have any significant effects on work performance. Defence mechanisms are behaviours people use to separate themselves from unpleasant events, actions or thoughts. Defence mechanisms can also be used as a type of self-deception, as they might be used to hide emotional responses that they do not want to deal with from themselves. However, defence mechanisms are mostly activated on an unconscious level. People are not always aware of the way their minds or egos respond to different situations or stimuli. This does not mean, however, that they cannot modify or change their behaviours. Indeed, unhealthy defence mechanisms can be transformed into ones that are more sustainable and beneficial (Healthline, n.d.). Omol (2022) recommended open communication, remaining positive and appreciating employees and giving them the opportunity to develop as an effective approach to enhancing the relationships between employee and manager relations**.** This can lead to healthier and more mature defence mechanisms. Maturity defence mechanisms are positively associated with adaptability and negatively associated with psychopathology (Nam et al., 2019).

Unpleasant emotions and beliefs are consciously altered into less intimidating forms rather than being ignored. People tend to deal with difficult situations using mature defence mechanisms, and these actions do not just automatically occur. For instance, suppression is a conscious form of repression in which an individual decides not to involve or discuss distressing emotions or thoughts. Sublimation is defined as a decision to alter vitality following unpleasant emotions and thoughts and performing constructive and creative activities. For instance, engaging in beneficial activities may help to distract destructive behaviours, such as getting mad with someone (An American Addiction Center, n.d.).

Defence mechanisms are psychological approaches that can be applied to protect an individual unconsciously from anxiety derived from undesirable thoughts or emotions. Referring to Freudian theory, defence mechanisms engage a bias of reality with aims that can help to cope better with a situation. Sublimation is similar to displacement but takes place when we manage to transform our unacceptable emotions into behaviours that are constructive

and socially acceptable, rather than destructive (McCleod, 2020). In dealing with challenges in the workplace, in addition to using defence mechanisms, it is advisable to get employees involved in discussions that allow them to conceive of their own ways to improve their performance. Additionally, employees could create a list of personal achievement goals for themselves. Encouraging employees to evaluate personal achievement, and at the same time concentrating on applying a constructive attitude, may help to weaken workers' defensive behaviour (Omol, 2019).

Differences Between Graduates with Job Matches and Mismatches and the Use of Defence Mechanisms

The study found no differences between graduates with job matches and those with job mismatches in terms of the use of either type of defence mechanisms. This may be because both groups of employees are faced with new work environments and challenges that are different from those encountered in their university environments. Today's labour force requires employees to inculcate relevant skills that enable them to succeed and retain gainful employment. Both hard and soft skills need to be instilled and strengthened by employers. Demands from employers with regard to recruitment, such as requirements for soft and hard skills, can result in worry, anxiety and concern among employed graduates. Employers emphasize soft skills over basic knowledge and technical skills. However, these crucial skills are less emphasized in academic contexts. Insufficient skills, along with the job challenges faced by graduates, force them to apply a variety of psychological defence mechanisms (Wafa et al., 2021). Furthermore, rapidly changing job demands and situations required individuals to engage in various skill-building strategies, such as reskilling and upskilling. Defence mechanisms are utilized to maintain homeostasis, which determines an individual's psychological maturity level. Pathological development is influenced by the prevalence of a specific mechanism type and the quantitative level at which it is used.

Conclusion

This study's findings revealed that mature psychological defence mechanisms have significant and positive effects on work performance among employed graduates in both job matched and mismatched roles, while immature defence mechanisms showed no effect on individual work performance. The two groups of employees showed no significant differences with regard to mature and immature psychological defence mechanisms. Other coping or defence mechanisms that reveal differences between the two groups of employed graduates might exist, and this should be investigated in

future studies. The two groups of employed graduates might be different regarding emotional regulation rather than the use of defence mechanisms. According to Wilms et al. (2020), emotional regulation, such as active coping and cognitive reappraisal, is a strategy that is used to regulate emotions. For instance, active coping or cognitive reappraisal refers to taking active steps to improve a situation by trying to change employed graduates' perspectives of or how they feel about the work challenges that they face. This assumption, however, needs to be examined and understood in future studies, as an alternative to focusing only on defence mechanisms.

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