

Irrational Beliefs and Mental Health among Malaysian Secondary School Teachers

Teo Shui Xian, Siti Aisyah Panatik, Mastura Mahfar and
Wan Mohd Azam Wan Mohd Yunus*

Abstract--- *This study aims to investigate the association between irrational beliefs and mental health among secondary school teachers in Malaysia. A total number of 82 secondary school teachers have participated in this study. Descriptive analysis and correlation analysis (r) were applied in this research. Teachers Irrational Beliefs Scale (TIBS) was used to determine the level of irrational beliefs while Depression, Anxiety and Stress Scales (DASS-21) was utilized to identify the level of depression, anxiety and stress symptoms among the secondary school teachers. The findings showed that the level of irrational beliefs among the secondary school teachers was moderate, the level of depression and stress were normal whereas the level of anxiety was moderate. The results showed that there was a weak positive significant relationship between irrational beliefs with depression, anxiety and stress among the secondary school teachers.*

Keywords--- *Irrational Beliefs, Mental Health, Depression, Anxiety, Stress, School Teachers.*

I. INTRODUCTION

Mental Illness Awareness and Support Association (MIASA) (2017) stated that mental illness is expected to be the second-highest form of health problem among Malaysians by 2020. According to Health and Safety Executive (2000), Ugwoke et al. (2017) and Khoo (2015), teaching is the most stressful occupation compared to others, such as nursing, community service occupations, professional and managing. Teachers are often viewed as the role models of good behaviour and personality for their students' due to their close interactions with students (Tanhan, 2014). In addition, mental illness among teachers has become an increasing problem in many countries (Bauer et al., 2007; Webber, Weltle & Lederel, 2006). However, not all teachers apply rational thinking skills while interacting with their students (Tanhan & Şentürk, 2011).

According to the Rational Emotive Therapy perspective initially introduced by Albert Ellis in the 1950's, some teachers are more likely to develop their irrational beliefs towards the school environment, and their extreme beliefs make them experience the threats in a much more stressful and negative way than those teachers who face the same stressors but from a more realistic perspective (Bermejo-Toro & Prieto-Ursúa, 2006).

Teachers' work stress was related to unpleasant emotions that may cause several negative effects, including dysfunctional behaviours in relation to students, colleagues and parents (Bora, Vernon, & Trip, 2013). As a result of

Teo Shui Xian, Department of Psychology, School of Human Resource Development and Psychology, Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, UTM Johor Bahru, Johor, Malaysia.

Siti Aisyah Panatik, Department of Psychology, School of Human Resource Development and Psychology, Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, UTM Johor Bahru, Johor, Malaysia.

Mastura Mahfar, Department of Psychology, School of Human Resource Development and Psychology, Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, UTM Johor Bahru, Johor, Malaysia.

Wan Mohd Azam Wan Mohd Yunus, Department of Psychology, School of Human Resource Development and Psychology, Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, UTM Johor Bahru, Johor, Malaysia. E-mail: wmohdazam@utm.my*

incorrect reasoning and irrational thoughts, individuals experience depression, anxiety, stress, and other similar problems (Ellis, 1994). Therefore, teachers' mental health was seen to correlate with irrational beliefs such as demandingness, awfulizing, low frustration tolerance, and global evaluation that hold by themselves. Irrational beliefs as a central idea in cognitive theory and therapy, have been shown to play a major role in numerous disorders, including depression, anxiety and stress (Bridges & Harnish, 2010).

According to the World Health Organization (2018a), depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. Radloff (1977) proposed that depression is the feeling of guilt, hopelessness, helplessness, worthlessness, loss of appetite, depressed mood, or disturbed sleep. At its worst, depression can lead to suicide (World Health Organization, 2018a). Furthermore, anxiety is a normal and healthy emotion. However, when an individual regularly feels disproportionate levels of anxiety, it can become a medical disorder. Anxiety disorders form a category of mental health diagnoses that lead to excessive nervousness, fear, apprehension, and worry (Felman & Browne, 2018; Spielberger, 1983). In addition, stress is the body's way of responding to any kind of demand or threat. When the body sense danger (whether it's real or imagined) the body's defences begin to set up an automatic process known as the "fight-or-flight" reaction or the "stress response" (Jeanne Segal, 2018).

On the other hand, Ellis (2002) proposed that individuals with high levels of irrational beliefs develop unhealthy negative emotional disturbances in the presence of negative activating events. Although the results of these studies provide evidence of a link between irrational teacher beliefs and the symptoms arising from teacher distress, the presence of irrational beliefs among teachers and their possible relationship with teacher distress has not been studied extensively (Bermejo-Toro & Prieto-Ursúa, 2006). Additionally, more research is needed on teachers' irrational beliefs and their relationship with emotions (depression, anxiety and stress), especially in Malaysia.

Only a few studies carried out in Malaysia (Jalil & Mahfar, 2016; Khoo, 2015; Mahfar, Aslan, Noah, Ahmad, & Jaafar, 2014), but there is no similar research that has had the same focus as in this study. Teachers at this secondary school experience heavy job demand including learning different teaching methods, a large amount of data entry and increases in disciplinary issues may affect their perception towards the heavy job demands and mental health condition. Thus, understanding teachers' irrational beliefs help school counsellor to support teachers and improve their mental health condition. Therefore, the main objective of this study was to investigate the association between irrational beliefs and mental health (i.e. depression, anxiety and stress) among Malaysian secondary school teachers.

II. LITERATURE REVIEW

2.1 Irrational Beliefs

Irrational beliefs are the core of psychological problems, and they are essentially illogical, rigid and inconsistent with reality. It will detrimental to the individual in achieving his or her basic goals. Rational Emotive Behaviour Therapy (REBT) (Ellis & Harper, 1997) is the fundamental concept and acts as a guideline in this research. It distinguishes itself from other cognitive-behavioural approaches by focusing on the rational and irrational beliefs as its core. Ellis (2000) reported that individuals has an innate tendency to behave rationally (realistic and positive toward themselves) and the potential to behave irrationally (hurt themselves). The purpose of REBT is to identify

and change the irrational beliefs to rational beliefs in resolving emotional and behavioural problems of human beings (Sheng, 2017). REBT believes that it is not the events itself that directly influences emotions and behaviours, yet, it is one's beliefs about the events that cause emotional and behavioural reactivity (Turner, 2016). People always unconsciously blame external events for their unhappiness, in fact, the suffering came from their own beliefs about the situation instead of the situation itself that causes emotional distress (Ellis, 1994; Turner, 2016).

According to the ABC model developed by Bernard and Ellis (1983), people tend to perceive that the activating event (A) will directly cause emotional and behavioural consequences (C). However, the emotional and behavioural consequences (C) is influenced by how the individual beliefs (B) about the activating event (A) and the event makes the individual have their own either rational or irrational beliefs (B). There are four categories of irrational beliefs: demandingness (teacher's demand for control over the student and blaming them for their misbehaviour and the teacher's desire to communicate and consultation with them) (David et al., 2005; Khoo, 2015), awfulizing (teachers' awful thought when he or she thinks that if cannot control the whole class that means he or she is not a good teacher), low frustration tolerance (teachers' level of frustration tolerance, if a teacher has low frustration tolerance, he or she will be difficult to control their emotion when he or she is dealing with disagreeable students) (Maag, 2008), and globalization (teachers' perception toward oneself, others or life as being miserable when things don't work out as expected).

2.2 Mental Health

According to World Health Organization (2014), mental health is "a state of well-being in which the person realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to his or her community". Next, the WHO constitution states: "Health is a state of complete physical, social and mental well-being and not merely the absence of disease or infirmity" (World Health Organization, 2018b). Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Dyrbye, Szydlo, Downing, Sloan, and Shanafelt (2010) proposed that depression, anxiety and stress are the main aspects of mental health.

In this study, depression refers to persistent sadness, feeling of guilt or low self-worth, feelings of tiredness, disturbed sleep or appetite, loss of pleasure, and poor concentration (World Health Organization, 2018a). Furthermore, according to Aris and LeeAnn (2017), anxiety refers to a feeling of worry such as fear that can be mild or severe. Moreover, stress is a physical, mental or emotional factor that affected mental or bodily tension (Aris & LeeAnn, 2017).

2.3 Relationship between Irrational Beliefs and Mental Health

Previously, there are numerous studies have been carried out to investigate the relationship between irrational beliefs and mental health. Warren and Dowden (2012) aimed to explore the relationships between elementary school teachers' beliefs and emotions. There are three objectives in this research which was investigating the relationship between irrational beliefs and each negative emotion; efficacy beliefs with depression, anxiety, and stress; and efficacy beliefs with general and specific irrational beliefs. The findings showed there are positive correlations between irrational beliefs and negative emotions; and self-efficacy was negatively related to depression, anxiety, and

stress. The efficacy of beliefs and irrational beliefs negatively correlated was partially confirmed in this study.

In addition, Popov, Popov, and Damjanović (2015) conducted a study which aimed to investigate the relationship between sources of stress in the workplace – the specific irrational beliefs and levels of psychological distress among teachers. The source of stress factor is specified through six subscale scores of dimensions of the IRS questionnaire (job demands, leadership support, colleagues' support, interpersonal relationships, role stressors, and change management). The result showed both stressors and irrational beliefs have a direct effect on general stress among teachers, and irrational beliefs partially mediated the relationship between stressors and stress symptoms.

On the other hand, Khoo (2015) conducted research aimed to test the mediating effect of irrational beliefs on the relationship between the activating event as the independent variable and stress as the dependent variable. The correlation results showed there were positive relationships among variables. The findings indicated that irrational beliefs mediate the relationship between activating event and stress among teachers and highlighted the teachers' irrational beliefs was the major determinants of emotional distress rather than activating event itself which comply with the ABC Model based on REBT approach.

Furthermore, Bermejo-Toro and Prieto-Ursúa (2006) carried out a study to investigate the relationship between teachers' irrational beliefs and different measures of teacher distress. The findings showed a high level of burnout and a significant positive correlation between teachers' irrational beliefs and all teacher distress variables considered in this study. Attitudes of low tolerance to frustration have a significant influence on the levels of stress, depression and physical symptoms.

Moreover, a study carried out by Green (2014) aimed to examine teacher-reported absenteeism and intention to leave the profession by investigating the relationships between teachers' demographic characteristics, self-reported teaching-related stress, job satisfaction, symptoms of depression, irrational beliefs, and self-efficacy. The result showed high level of irrational beliefs associated with increased absenteeism linked to teacher-perceived teaching-related stress; teachers' irrational beliefs associated with teachers' depression; depression and irrational beliefs significantly negatively related to teacher self-efficacy, job satisfaction, and teachers' intent to leave the profession; depression, irrational beliefs, teacher self-efficacy and job satisfaction significant predictors of desire to take a day off due to teacher-perceived, teaching-related stress and intent to leave the teaching profession; and teacher self-efficacy, depression, irrational beliefs, and job satisfaction related to years of teaching experience.

In summary, there are many previous studies revealed that irrational belief was positively related to mental health among teachers. However, there are still fewer researches conducted in the local population. Therefore, the researcher carries out this study to fill in the research gap as well as justify the relationship between irrational beliefs and mental health among teachers.

III. METHODOLOGY

3.1 Research Design

This study was a quantitative research by using survey method which utilized descriptive research, correlational

research and it was a cross-sectional study. In this research, descriptive research design was employed to identify the mean, standard deviation and frequency of irrational beliefs and mental health among the secondary school teachers. Besides, correlation research was employed to test the degree of relationship between two variables (Rooney & Evans, 2018). The strength of the relationship (weak to strong) and direction of the relationship (positive or negative) between irrational beliefs and mental health were examined in the study.

3.2 Population

The population for this research was a total of 82 teachers who teaching at a secondary school in Negeri Sembilan, Malaysia. All population were involved as respondents due to the total amount of teachers at this school is not in huge numbers. Questionnaires were given to the person in charge of the school, the school counsellor, in order to help the researcher in distributing the questionnaire. Participation in this research was voluntary and informed consent was obtained from all participants.

3.3 Measures

There are three sections consisted of 47 items in the questionnaire. Section A included demographic information. This part consisted of four items which are gender, age, ethnicity and years of teaching experience of the teachers.

Moreover, Section B was used to assess the level of teachers' irrational beliefs, Teachers Irrational Beliefs Scale (TIBS) developed by Bernard (1990). The questionnaire consists of 22 items and four teaching related areas, which included self-downing attitudes, low-frustration tolerance attitudes, attitudes to school organization, and authoritarian attitudes toward students. Next, TIBS contained four dimensions, known as demandingness, awfulizing, low frustration tolerance and global evaluation. This questionnaire contains only positive items. In this research, the respondents used five-point Likert scale.

Furthermore, in Section C, Depression, Anxiety and Stress Scale-21 (DASS-21) was employed to examine the level of mental health among the secondary school teachers. This questionnaire consists of 21 questions. The DASS-21 version was developed based on the original version of DASS-42 invented by Lovibond and Lovibond (1996). This questionnaire consists of 21-item and three dimensions, which are depression, anxiety and stress. This study utilised the Bahasa Malaysia version of DASS-21 that has good Cronbach's alpha for depression, anxiety and stress scales the values were 0.84, 0.74 and 0.79 respectively (Musa, Fadzil, & Zain, 2007). Depression, anxiety and stress are theoretically related, therefore the correlation between the scales are inherently high (Crawford & Henry, 2003; Warren, 2010). However, the result of the instrument does not design as a diagnostic tool and not meant to replace a comprehensive clinical interview, yet it only will certainly alert the researcher to a high level of distress in the respondents and this would need to be explored further within the interview process (Osman et al., 2012). The respondents are required to indicate the extent to which they agree with the statement by using the Four Point Likert scale.

3.4 Data Analysis

Statistical Package for Social Sciences (SPSS) version 21.0 was employed in this research to analyse the data using descriptive and inferential analysis. For Section B, which is Teachers' Irrational Beliefs Scale (TIBS), the

highest score of Likert scale is 5, which indicate strongly agree while the lowest score is 1, which represent strongly disagree. There are three levels of irrational beliefs which are low (1.00-2.33), moderate (2.34-3.67) and high (3.68-5.00).

In Section C, the level of mental health was measured by DASS-21, the highest score of Likert scale is 3 (applied to me very much, or most of the time) while the lowest score is 0 (did not apply to me at all). The scale will identify three items which are depression (D), anxiety (A) and stress (S). Next, the sum of the scores for each item will be needed and because DASS-21 is a short-form version of DASS-42, the final score of each item groups need to be multiplied by two (x2). There are five levels of mental health which are normal, mild, moderate, severe and extremely severe which divided by the founder of DASS-21 (Lovibond & Lovibond, 1996). For inferential analysis, the researcher used the Pearson Correlation Coefficient to determine the significance and magnitude of association between irrational beliefs and mental health (depression, anxiety and stress) among the secondary school teachers.

IV. RESEARCH FINDINGS

4.1 Demographic Analysis

Table 1 summarises the demographic characteristics of the study participants. There are 82 respondents, whereby 24 out of 82 respondents are male which occupied 29.3 percent of respondents whereas there are 58 respondents which obtained 70.7 percent were female.

Therefore, the result indicated that the number of female teachers was higher than male teachers. The findings indicated that 62 people (75.6%) are Malay, followed by 10 persons from other ethnic that made up of 12.2% from the respondents. Furthermore, there are only 5 Chinese and 5 Indian which accumulated 6.1% for each ethnic group.

All respondents were categorized into five age groups. There are 25 persons (30.5%) were from 36 to 45 years old, 21 persons (25.6%) were from 46 to 55 years old, followed by 20 persons (24.4%) from 26 to 35 years old. Moreover, the age group below 25 years old and more than 55 years old were indicated by 14 persons (17.1%) and 2 persons (2.4%) respectively. From the result, we can conclude that the largest group of respondents are from the age group of 36 to 45 years old.

On top of that, there are six categories of years of teaching experiences. The findings proposed that 23 respondents (28.0%) have teaching experiences below than 5 years, while 14 respondents (17.1%) have between 5 to 10 years of teaching experiences.

Meanwhile, 14 of the respondents (17.1%) have between 16 to 20 years of teaching experience whereas 11 respondents (13.4%) have between 11 to 15 years of teaching experience. The number of respondents who are having 21 to 25 years and 26 years and above teaching experiences are similar, which represented by 10 respondents (12.2%). Overall of the findings indicated that the percentage of respondents who obtained teaching experiences below than 5 years is slightly higher which is 28.0%.

Table 1: Respondent's Demographic Distribution (n=82 Respondents)

Variables	Frequency (f)	Percentage (%)
Gender		
Male	24	29.3
Female	58	70.7
Ethnicity		
Malay	62	75.6
Chinese	5	6.1
Indian	5	6.1
Others	10	12.2
Age		
Below 25	14	17.1
26 – 35	20	24.4
36 – 45	25	30.5
46 – 55	21	25.6
More than 55	2	2.4
Years of Teaching Experience		
Below than 5	23	28.0
5 – 10	14	17.1
11 – 15	11	13.4
16 – 20	14	17.1
21 – 25	10	12.2
26 above	10	12.2

4.2 Level of Irrational Beliefs

Table 2 displays the overall mean score, standard deviation and level of irrational beliefs. In conclusion, most of the teachers at School X have a moderate level of irrational beliefs.

Table 2: Level of Irrational Beliefs

Variable	Mean	Std. Dev.	Level
Irrational Beliefs	3.29	0.54	Moderate

4.3 Level of Mental Health

Table 3 illustrates the overall mean score, standard deviation and level of each dimension according to the founder of DASS-21, which required researcher to sum the scores for identified items, and due to DASS-21 is a short-form version of DASS-42, the final score of each dimension need to be multiplied by two ($\times 2$) in order to find out its level.

Table 3: Level of Mental Health Dimensions

	Mean	Std. Dev.	Level
Depression	9.39	10.31	Normal
Anxiety	10.49	10.48	Moderate
Stress	13.07	10.01	Normal

The respondents experienced normal level of depressive symptoms ($M = 9.39 \pm 10.31$). Furthermore, the findings show that the respondents experienced moderate level of anxiety ($M = 10.49 \pm 10.48$). Lastly, the result shows the respondents in this research experienced normal level of stress ($M = 13.07 \pm 10.01$). Although anxiety obtained a lower mean score than stress but anxiety have more severity level than stress, due to each of the dimensions perceived different severity rating (Lovibond & Lovibond, 1996).

4.4 Relationship between Irrational Beliefs and Mental Health among Teachers at School X

Table 4 showed that there is a significant positive relationship between depression and irrational belief among the secondary school teachers, although the relationship is weak ($r= 0.416$, $p<0.01$).

Next, the result also indicates that there is a significant relationship between anxiety and irrational belief. Meanwhile, there was a weak and positive relationship between anxiety and irrational belief ($r= 0.365$, $p<0.01$).

Lastly, the findings also showed a significant positive relationship between stress and irrational beliefs ($r= 0.398$, $p<0.01$) with the relationship existing is weak. In conclusion, the result of correlation analysis shows that there is a significant positive relationship between irrational beliefs and mental health among the secondary school teachers.

Table 4: The Relationship between Irrational Beliefs and Mental Health Level

Dimension	Irrational Beliefs	
	r	p
Depression	0.416	0.000**
Anxiety	0.365	0.001**
Stress	0.398	0.000**

Note: ** $p<0.01$

V. DISCUSSIONS, LIMITATIONS AND RECOMMENDATION

The findings have shown that irrational beliefs have a significant correlation with mental health, which is depression, anxiety and stress of teachers. The findings are consistent with several past studies (Bermejo-Toro & Prieto-Ursúa, 2006; Bernard, 2016; Bora, Bernard, Trip, Decsei-Radu, & Chereji, 2009; Green, 2014; Khoo, 2015; Popov et al., 2015; Warren & Dowden, 2012). Additionally, the current and previous studies showed that irrational beliefs and mental health have a significant positive correlation. Therefore, the higher the level of irrational beliefs among teachers, the higher they scored on the level of each mental health dimensions (depression, stress and anxiety).

The significant positive relationship between irrational beliefs with mental health dimensions (depression, anxiety and stress) of the current study is consistent with the results of several previous research. According to Tanhan (2014), depression is a significant predictor of teachers' cognitive beliefs, the non-depressed teachers had more rational beliefs, while more irrational beliefs were observed among teachers with medium or higher level depression. As a result of incorrect reasoning and irrational beliefs, individuals experience depression, anxiety, stress and other similar problems (Ellis, 1994). Besides, Warren and Dowden (2012) stated that irrational beliefs lead to unhealthy emotions thus hindering teacher performance. As an example, teachers that lack awareness of thoughts and emotions often have troubles responding to negative student behaviours (Long, 2010).

Apart from that, the current study found there is a weak positive correlation between irrational beliefs and mental health (depression, stress and anxiety). However, the previous study conducted by Warren and Dowden (2012) proposed that irrational beliefs are moderately correlated with depression and anxiety whereas a strong positive correlation was found between irrational beliefs and stress. In other words, the more rigid teachers are in their thinking patterns, the more intense their feelings of depression, stress and anxiety (Warren & Dowden, 2012). In

addition, Bermejo-Toro and Prieto-Ursúa (2006) stated some teachers are more likely to develop irrational beliefs towards the school environment, and that their beliefs make them experience the demands and threats in a much more stressful way than those teachers who face the same stressors from a more rational perspective.

Moreover, teachers with strong feelings of inadequacy had higher scores on the emotional exhaustion and anxiety scales; those teachers with more authoritarian attitudes towards their pupils scored more highly on emotional exhaustion and symptoms of depression; while those with low frustration tolerance scored more highly on emotional exhaustion, symptoms of depression and somatization (Bermejo-Toro & Prieto-Ursúa, 2006). According to REBT, emotional disturbance results from the individual's tendency to make absolutistic, extreme, illogical, inconsistent thoughts with the reality and rigid evaluations of perceived events (Bora et al., 2009). Moreover, unhealthy negative emotions tend to discourage people from changing what can be changed and adjusting constructively when they cannot change the situation which they faced by (Dryden & Branch, 2008). Therefore, in this way, irrational thinking exacerbates the stressors present in the school environment.

The irrational beliefs of teachers correlate positive significantly with distress variables such as role-related stress, burnout, psychopathological symptom, anxiety and depression (Popov et al., 2015). In other words, teachers who have more irrational beliefs are considered to be less efficient than teachers who have fewer irrational beliefs (Popov et al., 2015).

In conclusion, as stated and supported by the previous studies, it is clearly shown that irrational beliefs and mental health dimensions (i.e. depression, anxiety and stress) have a significant positive correlation with each other. The higher the level of irrational beliefs obtained by the teachers, the severe the level of mental health dimensions (depression, stress and anxiety) scored by them.

Limitations

Primarily, the first limitation of this study is that the findings of the study cannot be generalized to other populations due to the small total amount of teachers at the secondary school. The next reason is that the research involved only secondary school teachers. Therefore, the results of the study cannot represent other populations such as primary school teachers, teachers in fully residential schools, and teachers in special schools.

Furthermore, the study relied on self-reported instruments by using questionnaires for data collection and analysis. Therefore, there are possible risks of respondents provided biased answers that may compromised with their real situation. This circumstance could lead to low accuracy in findings. Thus, the sincerity of respondents is crucial in this research.

VI. CONCLUSION AND RECOMMENDATION

The purpose of the study was to investigate the association between irrational beliefs and mental health (depression, anxiety and stress) among secondary school teachers in a Malaysian secondary school. The result of the study had discovered that there was a significant positive relationship between irrational beliefs and mental health (depression, anxiety and stress) among the secondary school teachers. Lastly, the objectives of this research are achieved and the researcher also proposed some recommendations for future study. Some recommendations are

made to improve future research. Firstly, the current research only focused on teachers at a secondary school, which were incompatible to generalize on the other school or the whole academic world. Therefore, it is suggested that the sample size (n) of future research can be increased or done by broadening the targeted population with more comprehensive sampling strategies and research designs. Furthermore, future researchers can conduct the study in different contexts around Malaysia. Consequently, a large sample size from different schools could yield a more reliable result that can be applied in a wider term. Future researchers also can utilize a longitudinal study approach to overcome the common methods variance occurred in the cross-sectional study design.

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