

THE NEED FOR SUPPORTED EDUCATION AMONG HIGHER
EDUCATION STUDENTS WITH PSYCHIATRIC DISABILITIES

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To my papa and mama

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ABSTRACT

The purpose of the research was to show the need for the empirically effective Supported Education among higher education students with psychiatric disabilities. Its main objective was to examine the relationships between elements of Supported Education existing in the lives of these students and their current performances (that is: academic achievement, self-esteem, school self-efficacy & illness symptoms). The second objective was to examine the relationships between the students' coping difficulties and their current performances. The third objective was to survey the support for a Supported Education (SEd) program among these students. The research site was the state of Johor, Malaysia. The research was a survey by design, with a structured questionnaire as the instrument. Data from a sample of 30 respondents was collected and analysed using the SPSS version 13. Descriptive statistics showed an academic achievement (GPA) mean of 3.03, indicating academic capability; low level of coping difficulties faced by these students (who were currently studying and not taking an illness break); high level of SEd elements existing in their lives (the probable reason for their good current performance); high level of self-esteem (measured with the Rosenberg Self Esteem Scale), moderate level of school self-efficacy; and low level of illness symptoms/symptomatology. Inferential statistics showed significant relationships of moderate to very strong association between coping difficulties and their current performances. There were low insignificant relationships between SEd elements & self-esteem; and between SEd elements & school self-efficacy. A correlation between a sub-scale of SEd elements (academic support) and self-esteem revealed a moderate, close-to-significant relationship. There was a negligible relationship with academic achievement while the relationship with illness symptom went in an unexpected direction. The low relationships with self-esteem and school self-efficacy implied the possibility of a stronger association if the elements of SEd inventory is improved in construct or more accurately investigated with a pre-test and post-test design on a trial SEd program. The moderate relationship with a sub-scale of SEd elements suggested that SEd improves the self-esteem. The negligible relationship with academic achievement may be consistent with literature while the Modified Colorado Symptom Index used to measure illness symptom may not be suitable after all for all three group disorders (mood, anxiety and psychotic). The strong associations between coping difficulties and current performances imply clearly that the coping difficulties of these students affect their performances. The students' support for SEd was of a high level. In conclusion, higher education students with psychiatric disabilities do need and would benefit from a rehabilitation program such SEd. Recommendations based on the findings were made for policy makers, educators, mental health professionals & co-workers, NGOs, consumers and SEd researchers. Recommendations for future research were also made.

ABSTRAK

Penyelidikan ini bertujuan untuk menunjukkan keperluan Sokongan Pendidikan (SEd) yang merupakan model empirikal yang berkesan dalam pemulihan psikososial para pelajar di institusi pengajian tinggi yang mengalami kecelaruan mental. Kajian dijalankan dengan mengkaji hubungan antara elemen SEd yang sedia ada dalam kehidupan pelajar dengan angkubah pencapaian semasa (iaitu pencapaian akademik, penghargaan sendiri, efikasi sendiri akademik dan simptom kecelaruan). Objektif kedua ialah untuk mengenalpasti hubungan antara pengendalian cabaran dalam kehidupan pelajar dengan pencapaian semasa. Objektif ketiga ialah untuk mengkaji sokongan bagi program SEd di kalangan pelajar yang bermasalah psikiatri. Kajian lapangan dijalankan di negeri Johor, Malaysia. Kajian ini menggunakan soal selidik berstruktur sebagai alat kajian. Data diperolehi dari 30 responden telah dianalisis menggunakan program SPSS versi 13. Statistik diskriptif menunjukkan pencapaian akademik (GPA) dengan min 3.03 menandakan bahawa adanya keupayaan akademik di antara pelajar yang bermasalah psikiatri; tahap rendah dalam pengendalian cabaran (responden yang masih belajar dan tidak mengambil cuti sakit); tahap tinggi dalam elemen SEd yang sedia ada (kemungkinan inilah alasan pencapaian semasa yang baik yang diperolehi oleh responden); tahap tinggi dalam penghargaan sendiri (yang diukur dengan *Rosenberg Self Esteem Scale*); tahap sederhana dalam efikasi sendiri akademik; dan tahap rendah dalam simptom kecelaruan. Statistik inferens pula menunjukkan terdapat hubungan signifikan dari tahap sederhana kepada tahap sangat kuat antara pengendalian cabaran dengan pencapaian semasa. Hubungan antara elemen SEd dengan penghargaan sendiri dan efikasi sendiri akademik adalah tahap rendah yang tidak signifikan, tetapi hubungan dengan satu *sub-skala* elemen SEd (sokongan pelajaran) menunjukkan hubungan yang sederhana dan hampir signifikan. Hubungan antara elemen SEd dengan pencapaian akademik adalah amat rendah manakala arah hubungan dengan simptom kecelaruan adalah di luar jangkaan. Tahap sederhana dalam hubungan dengan sub-skala elemen SEd mencadangkan SEd meningkatkan penghargaan sendiri. Hubungan amat rendah dengan pencapaian akademik adalah konsisten dengan laporan literatur manakala Indeks Mudah Simptom Colorado yang diguna untuk mengukur simptom kecelaruan berkemungkinan tidak begitu sesuai untuk ketiga-tiga kategori kecelaruan (kemurungan, kebimbangan & psikotik). Hubungan-hubungan yang kuat di antara pengendalian cabaran dengan pencapaian semasa bermaksud pengendalian cabaran oleh pelajar yang bermasalah psikiatrik mempengaruhi pencapaian mereka. Sokongan bagi program SEd di kalangan para pelajar berkenaan adalah tinggi. Rumusannya, para pelajar di institusi pengajian tinggi yang mengalami kecelaruan mental memerlukan dan akan mendapat kebaikan dari program pemulihan seperti Sokongan Pendidikan. Cadangan dan kajian lanjutan juga diberikan.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

An undergraduate at University Technology Malaysia (UTM), whom the researcher met in her short stint as a research assistant at the psychiatric clinic of Sultanah Aminah Hospital, had a psychiatric diagnosis of anxiety cum depression. Unable to complete his bachelor degree in the specified years allowable, he appealed to the university for an extension. Based on a letter from his psychiatrist, the university granted him an extension of another year. The undergraduate was fortunate, with UTM demonstrating empathy for his medical condition. However, the undergraduate had many other personal struggles unknown to his lecturers and the university administrators. To a degree higher than his peers, he struggled with concentration problem quite frequently. He confessed to not even being able to “sort out information”. Neither could he discuss with his classmates for he found trouble in listening to discussions or oral explanations. This undergraduate also admitted to a lack of effective study strategies which the researcher discovered as her friendly conversation with him went on. On top of all these, campus life was very lonely affair for him for he lacked friends whom he could have “a meaningful conversation with”.

The one-year extension granted to this undergraduate is an example of what “Supported Education” can do from the educators’ side. In the United States of America, Supported Education would also offer him tutoring services, special class instruction on

study strategies, career guidance and a social network of similar others with whom he can meet with quite regularly to discuss and share his problems with, and to find support (Unger, 1992; Mowbray et al., 2005).

This research sets out to investigate the need for Supported Education for people with psychiatric disabilities who do face a certain amount of difficulty in coping when they resume or pursue higher education.

Supported Education is an innovative service model, which began officially only in the 1980's (Unger, 1993; Mowbray et al., 2005). Supported Education provides assistance, preparation, and supports to people with psychiatric disabilities who wish to pursue higher education (Mowbray et al., 1999). The Supported Education programs follow a psychosocial rehabilitation (PSR) model.

There are accumulating evidences of Supported Education (SEd) effectiveness in helping the mentally unwell adults succeed in higher education (Mowbray et al., 1999). Evaluations of SEd programs have shown significant increases in participants' college enrolments and competitive employment after the programs. It has also shown improvements in the participants' self-esteem, quality of life measure and school self-efficacy (Mowbray et al., 1999; Collins et al., 1998; Cook & Solomon, 1993, Dougherty et al., 1992, Hoffman & Mastrianni, 1993, Lieberman, Goldberg & Jed, 1993, Unger et al., 1991, Wolf & DiPietro, 1992; in Mowbray et al., 1999). There have also been significant drops in hospitalizations of the participants (Unger, Anthony, Sciarappa, & Rogers, 1991, in Unger, 1993; Isenwater, Lanham & Thornhill, 2002, in Mowbray et al., 2005), both during and after the programs. For instance, multi-site and experimental studies found post-intervention employment rates to be 46 percent (McFarlane et al, 1995), 53 percent (Rogers, Anthony, Toole & Brown, 1991), 56 percent (Bond, Drake, Mueser & Becker, 1997), 76 percent (Gervey & Bedell, 1994) and 78 percent (Drake, McHugh, Becker, Anthony, & Clark, 1996) (all cited in Mowbray et al., 1999). For comparison purpose, an earlier summary of descriptive studies (Anthony & Blanch, 1987; in Mowbray et al., 1999) reported that only 5 to 15 percent of people with long-

term, serious mental illness were employed. However, for those who enrolled into colleges offering degree courses after the SEd program, 27 to 74 percent of participants were found to have done so (Mowbray et al., 1999).

Furthermore, Mowbray et al. (2005) reported that SEd lowers the cost to a country in view of the reduction in hospitalizations and unemployment.

With such impressive supports for Supported Education (SEd), the interest in adopting the program is growing and today there are more than 100 SEd programs in the United States and Canada (Mowbray et al., 2005). There are also SEd programs in Europe: 20-25 programs in the Netherlands and one in Norway (Korevaar & Sullivan-Soydan, 2006), England, Belgium, Sweden and Czech (Personal communications with Lies Korevaar dated 7 December 2007; Anne Sullivan-Soydan dated 9 September 2007). Published journals reported of a SEd program in Israel (Sasson et al., 2005; Ponizovsky et al., 2004). SEd programs and initiatives have also been developed in the Asia-Pacific: “many” in Australia since 2001 (Best et al., 2007, p.1; Waghorn et al., 2004), one in Japan (Steve Szilvagy, personal communication, 5 December 2007) and in Singapore (Sally Thio, personal communication, 6 November 2007)

SEd was endorsed in 1997 in the U.S.A., as an exemplary practice for the treatment and rehabilitation of adults with psychiatric disabilities by the Federal Centre for Mental Health Services, Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Mental Health Association’s Partners in Care Program (Mowbray et al., 2005; 1999)

In the past, it was assumed that mental health clients could not become students in higher education. The idea that people with psychiatric disabilities cannot meet the demands of higher education, are disruptive in an academic setting, are not interested in pursuing higher education, and cannot take the stress of higher education are now considered myths of the bygone era (Austin, 1999, in Mowbray et al., 2005; Mowbray et al., 2006). Consider the following facts and findings: Repeated findings have found that

the median educational level of the mentally unwell is over 12 years of schooling and that 20 - 50 % of the mentally unwell have some college experience, usually before the onset of their psychiatric problems (Hazel, Herman, & Mowbray, 1991; Tessler & Goldman, 1982; Unger & Anthony, 1984; in Mowbray et al., 1999; in Bellamy & Mowbray, 1998; Dougherty et al., 1996). Unger's (1993) statistics shows that 62% of the mentally unwell who enrolled in a SEd program had completed their high school (secondary education) or gained a general equivalent diploma (GED). Most of the SEd participants had been in college before but few had attained any degree (due to the onset of psychiatric illness). In terms of performance, the grade point average for the participants in the SEd program who reported it (N=25) was 3.5. In another of Unger's study, the 124 SEd program participants reported a mean GPA of 3.14 (Unger & Pardee, 2002).

The onset of major mental illness often occurs between ages 17 and 25 (Unger, 1992; Barlow & Durand, 2002; Kunz & Finkel, 1987; Beiser, Erickson, Fleming, & Iacono, 1993, in Collins & Mowbray, 2005). The mean age of onset for schizophrenia is 21 (Beiser, Erickson, Fleming & Iacono, 1993, in Mowbray et al., 1999); while the 30-day prevalence of depression is highest in the age group 15 to 24 (Blazer, Kessler, McGonagle, & Swartz, 1994, in Mowbray et al., 1999). The onset of mental illness is at a time when many young adults are seeking higher education, preparing for future careers, and developing social relationships (Unger, 1992). Many of these prospective or current higher education students, thus, have their education interrupted or indefinitely postponed when illness besiege (Kessler, Foster, Saunders, & Stang, 1995, in Bellamy & Mowbray, 1998; Swanson et al., 1998 in Waghorn et al., 2004)).

Surveys of adults with serious mental illness have found high percentages of respondents actually wanting more education (McQuilken et al., 2003; Rogers et al., 1991; in Zahniser, 2005). In a state-wide survey in Massachusetts, U.S.A., Rogers and colleagues found that nearly two-thirds of consumers wanted more education.

With the advent of improved medication with less side-effects (e.g. the new generation anti-psychotics for Schizophrenia and bipolar patients in the 1990's) and better psychiatric care (Seligman, Walker & Rosenhan, 2001; Nolen-Hoeksema, 2004; Black & Andreasen, 1999 in Barlow & Durand, 2002; Kane, 2000) and improved cognitive ability (Bentley & Walsh, 2001; Geddes, Freemantle, Harrison & Bebbington, 2000; Kotulak, 2003; Weiss, Bilder & Fleischhacker, 2002; all in Mowbray et al., 2005); more people with psychiatric disabilities are functioning better. Effective psychiatric rehabilitation methods have also contributed to the improvement in functioning (Haefner & Maurer, 2000; Harrington & Clark, 1998; both in Collins & Mowbray, 2005). Hence, the more academically-able ones are able to return to higher education. There are also those who pursue higher education because of a "personal desire to learn" (Megivern, Pellerito & Mowbray, 2003, p. 220). They want to find "meaning in their lives", "instil greater confidence" in themselves, to be "respected as people living in the community", or to increase their marketability where employment is concerned (Bellamy & Mowbray, 1998, p. 407). With some stability in their psychiatric disorder, some middle-aged or older adults have also become interested in academic programs after a long history of low-paying jobs (Collins & Mowbray, 2005).

Research has found that students with psychiatric disabilities are not the disruptive students on campus, a belief previously held by many. This has been found through the first official Supported Education 5-year project developed by the Centre for Psychiatric Rehabilitation, Boston University (Unger, 1993) and a related demonstration project at the California Community Colleges (Parten, 1992, in Unger, 1993). Students with psychiatric disabilities were found to seldom use the crisis intervention services. An encouraging statistics came from Megivern, Pellerito & Mowbray's (2003) study where only one out of 35 participants with psychiatric disabilities was found to be disruptive (fought with another) when illness besieged during the course of his study. A few vandalism cases were reported in UTM, as described by Ismail Ahmed (2005), director of UTM Medical Health Centre (*Pusat Kesihatan*) over a telephone interview; but they were pertaining to students who were having their first onset of schizophrenia. Hence, they had not come under medication yet.

Besides, the Supported Education program is targeting students with psychiatric disabilities who are in remission and capable of returning to education. In other words, they are usually quite stable already and are not suffering from delusions/hallucinations that lead to dangerous behaviour or from a lack of impulse control. It is usually only those who are still actively psychotic and have a known history of aggression and substance misuse that display violence (Barlow, Brenyer & Ilkiw-Lavalle, 2000)

In the year 2001, mental health concerns were of “low priority” in Malaysia. This was voiced out by Lee, a mental health activist. Similarly, Haque, editor of the book “Mental Health in Malaysia: Issues and Concerns” said such issue was “often neglected” (Soosayraj, 2001). However, the country has taken steady strides in this direction in the last few years, as reflected by the current Health Minister, Datuk Dr. Chua Soi Lek who, in April 2005, said it was important for Malaysia to focus on mental health now (Pereira, 2005). Hence, it is not surprising that under the recent Ninth Malaysia Plan, RM900 million has been allocated to tackle mental health problems (Annie Freeda Cruz, 2006).

Datuk Dr. Chua explained that four of the ten leading causes of disability worldwide are mental disorders, according to the projection of the Global Burden of Diseases study (Murray & Lopez, 1996, in Mowbray et al., 2005; Bowis, 2004; Pereira, 2005). Depression will become the “second highest cause of death” (Pereira, 2005) by the year 2020, after cardiovascular disease.

The World Health Organisation (WHO) estimated that currently about 400 million people in the world are afflicted with a mental disorder (in Bowis, 2004; in Yeo, 2003). Bowis (2004) estimated that one in seven people have a mental disorder at any one time. Based on the Diagnostic and Statistical Manual of Mental Disorders (DSM) classification in 1990, estimates of mental and addictive disorder prevalence rate in the U.S. adult population was 28%. Perhaps this is how Bowis (2004) came up with his statement that, during our lifetime; one in three people will have a mental disorder. In other words, it is almost certain that it is either a friend or ourselves. In Malaysia, Datuk

Dr. Chua said that the prevalence rate is at least 15% (Annie Freeda Cruetz, 2006), which is some 3.9 million people based on a national population of 26.6 million (Department of Statistics Malaysia, 2005). Prevalence rate in 1997 was already 11%, as found in the National Health and Morbidity Survey (1996, in Kaur, 2003). Therefore, research on mental health issues should be given attention and the rehabilitative Supported Education program would become a future of mental health advances.

1.2 Background of Study

Many people, including the mentally unwell, are seeing the need to be equipped for employment with at least a post-secondary education. Between 1950 and 2000 in the United States of America, the proportion of available unskilled jobs fell from 60% to 15% (Secretary's Commission on Achieving Necessary Skills, 1991, in Stoep et al., 2003). In today's technologically advanced society, there is less room for unskilled labour. Even for white-collar jobs, at entry-level, there is an expectation for candidates to have basic computer application skills such as word processing (Mowbray et al., 1999). The opportunity for a better paying job comes only with higher education and training (Mowbray et al., 1999; 2005).

The statement of Hancock's, director of an Education Trust, exemplifies what many are now aware: "In this economy, if you don't have some post-secondary education, the likelihood that you're going to get a decent job and help support a family is nearly non-existent" (Pierson, 2002; in Mowbray et al., 2005, p. 8). Likewise, with the mentally unwell, arming themselves with at least a higher education would at least enable them to fight against the discriminated position they are already in in entering the open labour market, let alone compete in it.

In Bond et al.'s (1997) study, about 40 – 70% of clients terminated a supported-employment placement within six months. Most of these job placements were found to be in the unskilled, entry-level category (Bond et al., 1997; in Mowbray et al., 1999).

Perhaps, as Evans (1997; in Mowbray et al., 1999) postulated, improved long-term outcomes might be obtained through advanced education and training; leading the disabled to skilled job placements that offer greater longevity, stability, benefits and less stress than typical blue-collar placements.

In the past two decades, research on employment outcomes of persons with severe mental illness in the U.S. has consistently concluded that educational attainment is not associated with employment outcome (Anthony & Jansen, 1984; Tsang et al., 2000; in Waghorn et al., 2004). However, a more recent longitudinal study (Mueser et al., 2001) and a secondary analysis of data (Mechanic et al., 2002) associate educational attainment with increased employment outcomes and higher employment status in the U.S.A (cited in Waghorn et al., 2004). In Australia, the evidences also suggest that educational attainment is positively correlated with employment outcomes; including the durability of the respondents' employment (Jablensky et al., 1999; Waghorn et al., 2003; in Waghorn et al., 2004).

Sharpe et al. (2004) reported of a proliferation of individuals with psychiatric disabilities in higher education settings in America. Within one year, for instance, five institutions in the Big Ten Conference encountered an increase from 30% to 100% in the number of students with psychiatric disorders (Measel, 1998; in Sharpe et al., 2004). Increments of students with psychiatric disorders have also been reported by college officials in Mowbray et al. (2006), Collins and Mowbray (2005), and the U.S. Department of Education (1992, in Werner, 2001, p.19 & 21.) If one were to walk in the campus ground, one would encounter 5 - 8% of students who are newly diagnosed with a psychiatric disorder (most often depression) each year, according to Rimmer Halikas & Schuckit in the U.S. (1982, in Werner, 2001, p.23.) The pace of the phenomenon has been likened to a "rising tide" (Eudaly, 2002; in Sharpe et al., 2004). Sharpe and his colleagues (2004) indirectly attributed it to the emergence of supported education .

Other reasons why students with psychiatric disabilities have become a "significant minority" on college campus are because of increased medical knowledge

(and better psychiatric care); enhanced technology (such as medication with less side-effects); improved educational preparation; expectations raised by families, advisors and the disabled students themselves; and expanded support services programs or other effective rehabilitation methods (American Council on Education, 1994, in Werner, 2001, p.21; Kane, 2000; Collins & Mowbray, 2005). Sharpe et al. (2004) said the most influential factor may be the expansion of the diagnostic criteria for psychiatric disabilities.

Sharpe et al. (2004, p. 4) recommend supported education to service-providers for people with psychiatric disabilities, describing it as a “comprehensive approach”. In Sharpe et al.’s (2004, p.4) words, it is “a model and template of services that can be fully or partially replicated”. Sharpe et al.’s description emphasized the fact that the Supported Education program need not be fully replicated and can be adapted if Malaysia were to adopt such a support program for our mentally unwell who wish to return or are returning to education.

Supported Education, a psychosocial rehabilitation (PSR) model, began officially only in 1981 (Unger, 1993; Unger 1998, Unger & Anthony, 1984, Unger et al., 1987, in Mowbray, Megivern, & Holter, 2003). It evolved as a response to the shortcomings of rehabilitative vocational programs and to the stated desires of people with mental disorders and their families for the pursuit of postsecondary education (Unger, 1993; Mowbray & Megivern, 1999; Rogers et al., 1991, in Mowbray et al., 1999). The services available to them then did not acknowledge their accomplishments (many had graduated from high school and begun college) and did not provide opportunities for them to continue their learning. At that time, treatment rather than rehabilitation was the primary goal of the mental health agencies (Unger, 1993).

About the same time period (literature on atypical effectiveness dates back to 1998 according to Nolen-Hoeksema, 2004), the new atypical anti-psychotics were introduced to the United States market and this saw a breakthrough in the psychiatric treatment of those with schizophrenia and bipolar disorder (Mueser & Gingerich, 1994;

Barlow & Durand, 2002; Nolen-Hoeksema, 2004). The atypical anti-psychotics have fewer serious side-effects (Black & Andreasen, 1999, in Barlow & Durand, 2002) and are able to improve cognitive abilities (Bentley & Walsh, 2001; Geddes et al., 2000; Kotulak, 2003; in Mowbray et al., 2005, p.8). Thus, many consumers were able to function and maintain employability (Nolen Hoeksema, 2004). With the aid of supported education program, the new medication led to the consumers' unexpected presence in the grounds of tertiary institutions in some places.

The history of Supported Education is traced back to 1984 when the Centre for Psychiatric Rehabilitation at Boston University, Massachusetts, U.S.A established the Continuing Education Program (CEP). The 5-year research and demonstration project prepared young adults with psychiatric disabilities to obtain employment or additional education or training that would lead to employment (Unger, 1993; Unger et al., 1991, in Werner, 2001). Students attended classes on the Boston University campus for 4 semesters for 3 ½ hours, 3 days a week. The demonstration project showed increased participation in other postsecondary education environments, increased employment, decreased hospitalization, and increased self-esteem (Unger, Anthony, Sciarappa, & Rogers, 1991; in Unger, 1993). During the course of this 5-year project (1983-1988); other settings such as in Chicago, New York and California also developed programs that explored the efficacy of mental health consumers returning to an educational environment (Furlong-Norman, 1990, in Unger, 1993). All these, thus, led to the formulation of Supported Education, and its definition and the three prototype models (Unger, 1993).

Because of the positive outcomes noted and its location in a campus setting which was a normalized, non-stigmatizing environment; Supported Education became particularly appealing to young adults and their families. However, with the limited financial resources available, it became clear that if SED programs were to continue to be developed, it had to be done without great expense. Therefore, a new project entitled, "Development and Evaluation of Models to Use Community Resources to Meet Client Needs for Postsecondary Education" was designed. The goal of the project was to

develop SEd programs which utilize only existing resources. This was the second 5-year project (1992-1997), headed again by the Centre for Psychiatric Rehabilitation, Boston University (Unger, 1993). The researcher calls this second 5-year project the “first official” SEd project as it is recognized as the “first SEd program described in the literature” by Mowbray et al. (2005, p.12).

Over time, seven sites were chosen to be part of the “first official” SEd project. They included a psychiatric hospital, a psychiatric hospital in collaboration with a state university, a mental health association, a vocational technical institute, a county mental health system and two community colleges (Unger, 1993). All three prototype models were included.

Then came the MSERP, the Michigan Supported Education Research Project, from which many of the literature on SEd have derived their research findings. The MSERP operated as a research demonstration project for this first official SEd project which ran from 1992 to 1997. The MSERP offered its (non-credit) SEd services at the campus of Detroit/Wayne County Community College. After the completion of its research demonstration objective; it was then continued as an ongoing program, called the MSEP or Michigan Supported Education Program (Mowbray & Megivern, 1999).

Therefore, with the effectiveness of SEd programs proven and known, there are today over 100 SEd programs in North America, all over Europe, in the middle east, Australia as well as in Asia.

The main objective of Supported Education is actually to help people with psychiatric disabilities who are capable to enter or resume higher education. Therefore, most of the SEd programs have basically just been “initiation” programs. Only a minority (a few clubhouses and free-standing programs reported in Mowbray, Megivern & Holter [2003, p.164 & 166] provide support to students already enrolled in educational institutions to assist them with retention in school or provide on-going support after the “initiation”. The focus of this research, however, is to propose on-going support for

students with psychiatric disabilities in order to help them with retention when illness besiege or to help those who are already in remission when they enter or resume higher education to complete it successfully. Proposing Supported Education for students with psychiatric disabilities to help them enter higher education for the first time is only a secondary objective or a “by-product” of this research. Although such kind of SEd programs is a minority as reported by Mowbray, Megivern & Holter in 2003; Soydan informed, over a telephone discussion on 26 October 2006, that there are more of such kind of “on-going” supports in schools and campuses now (Soydan is a key researcher in SEd at Boston University Centre for Psychiatric Rehabilitation and has been involved in SEd for over 15 years.)

In recognition of the need for rehabilitation services and support systems as critical supplements to mental health treatment, the Community Support Program (CSP) was developed in the 1970s in the U.S.A. The CSP launched several psychosocial rehabilitation (PSR) models which had only supported employment (Tice, 1994, in Mowbray et al., 2005) and supported housing (Ogilvie, 1997, in Mowbray et al., 2005) initially. Community housing and employment were the only goals of PSR agencies providing mental health rehabilitation and treatment initially (Mowbray et al., 2005). Education as a means to employment or meaningful community integration had not been fully explored. Eventually, with the positive outcomes reported by SEd programs and with the then mediocre success of the supported employment programs in America, attention began to turn to SEd as a means for a more promising outcome in long-term employment and more encouraging rehabilitation reports (Mowbray et al., 1999; 2005).

In Malaysia, and parts of Asia-Pacific to be precise, the concept of Supported Employment has caught on in recent years. In a country report by the New Zealand representative at the 25th Asia-Pacific International Seminar in Special Education, Bennie (2005, p.101) commented that Supported Employment is “clearly emerging as the model most likely to achieve positive employment outcomes for young people with intellectual disabilities”. As for Malaysia, Norsham Harman Shah (2005) reported of how Malaysia has geared itself towards providing vocational skills and training right

from the primary school level for the disabled children. That has included the Secondary Special Education Vocational School set up in 2003, which has been a milestone for Malaysia. In the workplace, three sheltered workshops have been established for the disabled (Mahmood Merican, 2002). Other forms of Supported Employment practised in Malaysia has included “implementing simple work adjustments and modifying the physical environment” (Khor, 2002, p.4) for the disabled.

In referring to the “disabled”, there has not been a firm and consistent definition in Malaysia. The definition of the “disabled” adopted by different ministries in the Malaysian government differs (Siti Zakiah Muhamad Isa, 2003), as a brief summarized illustration below shows:

Ministry of Health

- based on World Health Organisation definition which includes the mentally unwell (Siti Zakiah Muhamad Isa, 2003).

Ministry of Local Government and Housing

- “disabled in terms of physical, hearing or sight that limits their mobility or usage of building facilities” (Siti Zakiah Muhamad Isa, 2003). In other words, it does not include the mentally unwell.

Ministry of Education

- the definition is not available on the Ministry of Education website but the “Disability Laws” write up on the internet by JobStreet.com reported that the Education (Special Education) Regulations 1997 defines pupils with special needs to mean pupils with visual impairment, hearing impairment or with learning disabilities only. That means, the definition of “disabled” catered for under the Ministry of Education does not include the mentally unwell.

At present the Malaysian legislation providing for the rights of the disabled is inadequate. The Education Act 1996 and the Education (Special Education) Regulations 1997 make provisions for special education for pupils with special needs. Pupils with

special needs are defined in Regulation 2 of the 1997 Regulations as those with visual impairment, hearing impairment, or learning disabilities only. Only those with hearing and sight impairments, and learning disabilities are recognised and supported in the schools by the Malaysian Ministry of Education. Unlike in the United States of America and the United Kingdom, the legislation in Malaysia has not drawn attention and cared for children or adults with psychiatric disabilities in the education system.

In the U.S.A. (Provenzo, 2002; Hallahan & Kauffman, 1994), for example, their Section 504 of the Vocational Rehabilitation Act, since 1973, prohibits discrimination against all disabled. Then came the 1975 Education for All Handicapped Children Act which mandates that children with disabilities are provided free and appropriate public education until the age of eighteen (now extended to age twenty-one). The Individuals with Disabilities Education Act (IDEA) of 1990 then amended the Education for All Handicapped Children Act (1975). “Children with disabilities” was then defined to include those with “serious emotional disturbance”. The general definition for children with “serious emotional disturbance” includes those with mental disorders (Hallahan & Kauffman, 1994). IDEA also altered the word “children” to “individuals”, which means the provision for free access to education includes also young adults with disabilities. IDEA has thus ensured that discrimination in admission to higher education for those with psychiatric disabilities is prohibited in the U.S.A. In fact, IDEA has also made it mandatory that every older student with a disability has an individualized plan for making the transition to work or further education following high school (although not all educational institutions in the U.S. have put this mandatory provision into implementation, according to Mowbray). Because of these legislature mandates in the U.S.A., Supported Education was introduced in the 1980’s, was given the support it needed and could flourish.

In the United Kingdom (Brooke & Welton, 2003), the definition of “disabled” also includes the mentally unwell. The legislation in the U.K., for example, states:

A child is disabled if he is blind, deaf or dumb or suffers from a mental disorder of any kind or is substantially and permanently handicapped by illness, injury or congenital deformity or such other disability as may be prescribed.

[Children Act 1989, Section 17(11) in Brooke & Welton, 2003]

The Disability Discrimination Act 1995, Section 1(1) includes an adult who has a “mental impairment” as someone who “has a disability” (in Brooke & Welton, 2003).

Like in the U.S.A., the laws in the U.K. (Special Educational Needs and Disability Act, 2002) make provision that the “disabled” children and young adults should not be discriminated against in their rights to a free, appropriate public education (in Hallahan & Kauffman, 1994; in Brooke & Welton, 2003).

In Malaysia, a proposed Persons with Disabilities Act 2002 was initiated a few years ago (“Disability Laws”). The proposed Act was drafted by the Ministry of National Unity and Social Development through its Working Group on Legislation headed by En Mah Hassan Haji Omar. The definitions of “disability” and “impairment” in the Proposed Act include “any loss of abnormality of psychological, physiological or anatomical structure or function”. In other words, the inclusion of those with psychiatric disabilities is being proposed in the definition of disabled. The Proposed Act also requires relevant authorities to provide every disabled child with free education in an appropriate environment until the age of 18 years. This is perhaps an early step towards ensuring individuals with disabilities (including those with psychiatric disabilities) are provided access and support to free education, like the routes and progress the U.S.A. and the U.K. have taken.

According to a postal communication with the Ministry of Women, Family and Community Development (Uma Maniam, on behalf of the *Ketua Setiausaha*, Head Secretary, dated 15 January 2007), the researcher was informed that there are six categories of the disabled recognised in Education in Malaysia. They are: the physically disabled, hearing impaired, visually impaired, learning disabled, those with cerebral palsy

and those with multiple disabilities. Those with psychiatric disabilities are, therefore, not recognised as a disabled in Malaysian Education and not provided official support. Uma Maniam said the proposed Persons with Disabilities Act 2002 is currently being attended to and early efforts are being done in the preparation of the Act (*“usaha-usaha awal telah dilakukan kearah penyediaan akta ini”*). Deducing from a 7 May 2007 report by Davidson in the New Strait Times, the proposed Act has apparently yet to reach parliament.

In the setting of a local higher education institution such as University Technology Malaysia (Skudai); Mohd Tajudin Haji Ninggal, director of Career and Counselling Service, informed that there has been about 80 – 110 students each year from the year 2004 – 2005 seeking the counselling centre service for “personal problems”. Many in this number are having mental health problems. Mohd Tajudin Haji Ninggal stated that the mental health needs of the students is presently “not an alarming issue” but it will be a more critical “consideration for the future” as the number rises.

Although Malaysia does not have any legislation preventing the discrimination of people with psychiatric disabilities from entering education or supporting the introduction of Supported Education yet; NGOs, mental health centres or educational institutions keen on providing for the needs of these students can spearhead such a program. With Malaysia now focussing more on issues of mental health, it would not be long before more support will appear for implementations of SEd for students with mental disorders.

In the U.S.A., SEd programs usually target adults with psychiatric disabilities who are not yet students at the time of the program. These adults have either completed their previous educational program (e.g. high school) or had their previous higher education program terminated due to illness. The researcher defines this group the “Type II students”. SEd programs thus seek to encourage Type II students to enter or resume higher education. Although the Type I students are not the focus of the SEd programs in the U.S.A., SEd programs are also available in some places which provide support to existing students with psychiatric disabilities so that they can complete their educational

program successfully (Mowbray, Megivern & Holter, 2003). Such students who became ill while pursuing their higher education program but are still enrolled with the institution are defined as “Type I students” by the researcher. In this research, the feasibility of SEd program in Malaysia is being studied and proposed for both the Type I and Type II students (although the emphasis is directed towards supporting the Type I students).

This research would be another good proposition for the Ministry of Education to expand its scope, definition of “disabled” and provide support for the mentally unwell in their pursuit of education, which is very much a primary civil right.

In a recent speech by the Prime Minister, Datuk Seri Abdullah Ahmad Badawi, he urged that efforts be “stepped up to ensure that the country’s welfare programmes continued to remain among the foremost in the world in the wake of recognition in this respect by the United Nations” (Ng & Karen De Cruz, 2006). Therefore, providing the mentally unwell with psychosocial rehabilitative support such as SEd would be very much in line with what the Prime Minister has just urged the country to do.

1.3 Statement of Problem

With mental illness being the fourth leading cause of ill health in Malaysia now (Health Ministry, 2004, in “Malaysia short of mental health professionals”, 2005) and the prevalence rate now estimated at 15% or more (Annie Freeda Cruz, 2006), mental health concerns are becoming important issues in the country.

In a survey of the teenager population in Malaysia in 1997, Toh and his colleagues found that 13% of teenagers have some form of “mental health problem” (Kaur, 2003). Teoh, in a 2000 study, described them as somatic complaints (28%), “depression” (23%), “mood disorders” (18%) but not differentiated from “depression”, anxiety disorders (6%) as well as eating disorders, schizophrenia and tic disorders; amongst a few others less relevant to the purpose of the current study (Kaur, 2003).

The typical age at onset of mental illness is between 17 and 25 (Beiser, Erickson, Fleming, & Iacono, 1993, & Beratis, Gabriel, & Hoidas, 1994, in Collins & Mowbray, 2005; Barlow & Durand, 2002; Kunz & Finkel, 1987), when many are considering or pursuing higher education. Kessler et al. (1995, in Mowbray et al., 2005) found that 4.3 million individuals in the U.S.A. would have completed college if they had not experienced a serious mental illness. An estimated 86% of undergraduates who had psychiatric disorders were found to withdraw prior to completion of their degree (Collins & Mowbray, 2005).

There is a high rate of unemployment among adults with psychiatric disabilities (Jayakody et al., 1998, in Collins & Mowbray, 2005). Records from U.S.A, U.K. and Australia show rates ranging from 61% to 90% (Hughes, 1999; Lehman et al., 2002; Crowther et al., 2001; all in Waghorn et al., 2004). According to Unger (1994, in Collins & Mowbray, 2005), young people with psychiatric disabilities are more likely to be employed if they have taken higher education classes. Besides, in today's highly technological society, at least a higher education certification is needed in order to earn an adequate income (Pierson, 2002, in Mowbray et al., 2005; Bond et al., 1997, in Mowbray et al., 1999).

New improved medication, better psychiatric care and effective rehabilitation methods have made it increasingly possible for individuals to pursue higher education (Haefner & Maurer, 2000, & Harrington & Clark, 1998, in Collins & Mowbray, 2005).

When adults with psychiatric disabilities do enrol in a higher education program, they face difficulty coping in a rather stressful academic environment that demands the same from them as the mentally fit and fast (Megivern, Pellerito & Mowbray, 2003; Collins & Mowbray, 2005; Mowbray & Megivern, 1999). Some of their coping difficulties include concentration problem, non-test anxiety, residual illness symptoms, side-effects of medication and conflicted relationship with their faculty.

The Supported Education (SEd) program, a psychosocial and educational rehabilitation intervention, addresses such a problem. However, there is currently no SEd program in Malaysia.

The aim of this study, therefore, was to show the need for Supported Education for students with psychiatric disabilities studying at higher education in Johor, Malaysia. It did so by examining whether there were relationships between elements of Supported Education existing in the lives of these students and their current performances. Another primary objective was to examine the relationships between their coping difficulties and their current performances. The third primary objective was to survey the support for SEd programs among these students.

1.4 Research Objectives

The objectives of this study were, thus, specified as follows:

- (i) To determine the level of coping difficulties among the mentally unwell students.
- (ii) To determine the level of SEd elements existing among the mentally unwell students.
- (iii) To determine the levels of current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students.
- (iv) To determine the level of support for Supported Education programs among the mentally unwell students.

- (v) To determine the differences in coping difficulties, elements of SEd, academic achievement and illness symptoms between Type I and Type II students.
- (vi) To identify the relationships between coping difficulties and current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students.
- (vii) To identify the relationships between elements of SEd existing and current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students.
- (viii) To identify the relationship between coping difficulties and elements of SEd.

1.5 Research Questions

Based on the research objectives, the research questions were thus as follows:

- (i) What is the level of coping difficulties experienced by the mentally unwell students?
- (ii) What is the level of SEd elements that exist among the mentally unwell students?
- (iii) What are the levels of current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students?
- (iv) What is the level of support for Supported Education programs among the mentally unwell students?

- (v) Are there significant differences in coping difficulties, elements of SEd, academic achievement and illness symptoms between Type I and Type II students?
- (vi) Are there significant relationships between coping difficulties and current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students?
- (vii) Are there significant relationships between elements of SEd existing and current performances (academic achievement, self-esteem, school self-efficacy, and illness symptoms) among the mentally unwell students?
- (viii) Is there a significant relationship between coping difficulties and elements of SEd existing among the mentally unwell students?

1.6 Hypotheses

From the research questions, thirteen hypotheses were formulated. The first twelve hypotheses are grouped under three general hypotheses, as shown below.

1.6.1 General Hypothesis

There are no significant differences in coping difficulties, elements of SEd, academic achievement and illness symptoms between Type I and Type II students.

1.6.1.1 Hypothesis 1

There is no significant difference in coping difficulties between Type I and Type II students.

1.6.1.2 Hypothesis 2

There is no significant difference in elements of SED existing between Type I and Type II students.

1.6.1.3 Hypothesis 3

There is no significant difference in academic achievement between Type I and Type II students.

1.6.1.4 Hypothesis 4

There is no significant difference in illness symptoms between Type I and Type II students.

1.6.2 General Hypothesis

There are no significant relationships between coping difficulties and current performances (academic achievement, self-esteem, school self-efficacy and illness symptoms).

1.6.2.1 Hypothesis 5

There is no significant relationship between coping difficulties and academic achievement.

1.6.2.2 Hypothesis 6

There is no significant relationship between coping difficulties and self-esteem.

1.6.2.3 Hypothesis 7

There is no significant relationship between coping difficulties and school self-efficacy.

1.6.2.4 Hypothesis 8

There is no significant relationship between coping difficulties and illness symptoms.

1.6.3 General Hypothesis

There are no significant relationships between elements of SEd and current performances (academic achievement, self-esteem, school self-efficacy and illness symptoms).

1.6.3.1 Hypothesis 9

There is no significant relationship between elements of SEd and academic achievement.

1.6.3.2 Hypothesis 10

There is no significant relationship between elements of SEd and self esteem.

1.6.3.3 Hypothesis 11

There is no significant relationship between elements of SEd and school self-efficacy.

1.6.3.4 Hypothesis 12

There is no significant relationship between elements of SEd and illness symptoms.

1.6.4 Hypothesis 13

There is no significant relationship between elements of SEd and coping difficulties.

1.7 Rationale for the Study

Supported Education has become globally (Mental Health and Rehabilitation eCast, February 2007) recognised as an empirically proven rehabilitation method in promoting the recovery of students with psychiatric disabilities who are studying in higher education. However, Malaysia is largely unaware of Supported Education (SEd) and has not developed any SEd program. The overall rationale for carrying out this study was to show the need for Malaysia to consider developing a SEd program for the benefit of its higher education students with psychiatric disabilities.

The first specific rationale was to study the magnitude of the correlations between elements of SEd existing in the lives of the students and their current performances. The correlation study had predictive implication (Creswell, 2002) of positive outcomes SEd could lead to, as reported in literature (Mowbray et al., 1999; Collins et al., 1998; Tutty et al., 1993 in Ratzlaff et al., 2006).

There were three other specific rationales for the study. The calibre of these students in a Malaysian setting was examined as there were indications in SEd literature (Unger 1993; Unger & Pardee, 2002; Dougherty et al., 1992) that they may be academically more capable than had been expected. Their coping difficulties, derived based on previous studies (Mowbray, Pellerito & Megivern, 2003; Mowbray & Megivern, 1999; Collins & Mowbray, 2005), were investigated for a closer understanding of their needs. Finally, the students' support for SEd, in a Malaysian setting, was surveyed to determine whether they were in favour of having and utilizing a SEd program. All four rationales culminated in the overall rationale which was to propose that SEd be given a serious consideration in Malaysia.

1.8 Significance of Study

This research would be of significant contribution. As far as the researcher has been able to search, there has not been any published study in Asia related to Supported Education. This study is the first research on SEd in Asia. SEd is being promoted by Professor Atsuko Otaki in Japan and there is interest shown but there has not been any SEd program developed yet (Atsuko Otaki, personal communication, 11 December 2007). In Singapore, some educational support provided to clients in a rehabilitation centre (Sally Thio, Senior Director of Hougang Care Centre, personal communication, 6 December 2007) may be a form of SEd. However, there has not been any research done in Asia. Four influential researchers in the area of SEd confirm this as they are not aware of any study on SEd conducted in Asia (personal communications with Anne Sullivan-Soydan dated 9 September 2007; Mark Salzer dated 6 December 2007; Steve Szilvagyí dated 5 December 2007; Lies Korevaar dated 7 December 2007).

The wide and diverse audience this research would contribute to are specified as follows:

(i) Mental Health Consumers

This study would be a “voice for the mentally unwell”, a stigmatized group of people who, in Malaysia, are still feared and discriminated against. It is only in recent years that the mentally unwell have a growing support with regards to their unique needs. If Supported Education is introduced in Malaysia, more mental health consumers would be encouraged to pursue or resume higher education and this would contribute to a significantly better prognosis or recovery among mental health consumers. It would also contribute to reduced unemployment rate among the mentally unwell, stigma, as well as the direct and indirect costs of mental illness to the country (due to hospitalizations).

(ii) The Ministry of Education and the Ministry of Health

This study provides both the Ministry of Education and the Ministry of Health a closer understanding of the unique needs and coping difficulties of those with psychiatric disabilities in their academic pursuit. It would also inform how the mentally unwell are capable of functioning academically at higher education, especially when support is provided.

This research is also a proposition to the government to include the mentally ill in the definition of the disabled (*Orang Kurang Upaya*) in Malaysia, supporting the proposed Persons with Disabilities Act 2002 being looked into currently (“Disability Laws”, un-dated). The proposition to the Ministry of Education is to include students with psychiatric disabilities in their educational support for the “disabled”. With special education being provided for the mentally and learning disabled, let not the needs of students with psychiatric disabilities be overlooked.

This study informs the Ministry of Education and the Ministry of Health that Supported Education, if provided for students with psychiatric disabilities at higher education, can lead to an improvement in their subjective well-being (self-esteem and school self-efficacy).

A question arises whether it would be too far fetched for Malaysia to carry out SEd programs as Malaysia may lack necessary facilities and resources to manage a successful collaboration between the mental health professionals, educational institutions and mental health service agencies. A visit to the University of Melbourne by a delegation of senior Malaysian mental health clinicians to look into a possible long-term collaboration with Australia (“Mental Health: A Malaysia-Australia Conversation 19-22 July 2004”) and the Health Minister’s 2005 statement on the importance of focusing on mental health (Pereira, 2005) have demonstrated the direction Malaysia is seriously taking with

regards to mental health issues and concerns. It is clear mental health issues are growing when in the year 2006 alone, three mental health conventions were held – the 8th Johor Mental Health Convention, the 6th Perak Mental Health Convention and the 5th Kuala Lumpur Mental Health Conference. It would not be long before many necessary “fixtures” would be in place.

The results of this research can pave the way for a feasibility study or further research to be done on Supported Education.

Besides showing the Ministry of Health why Supported Education can be a part of their recovery plan for patients with psychiatric disabilities, this study also gives an idea how the Ministry of Health can play their lead role of facilitating multi-sectoral collaboration and cooperation between mental health service and other services in enabling the mentally unwell participate more meaningfully in the community, a role outlined in the 1998 National Mental Health Policy (Parameshvara Deva, 2004).

Even though this study is on the mentally unwell students in higher education settings, the findings can lead to future work on providing mental health services in the secondary school settings too.

Most research on mental illness are done by the medical profession (psychiatrists). As far as the researcher is aware, no study on mental illness has come from the education faculties in Malaysia. Those that have been done by Education students are mostly on stress, and a few recent ones on sexual disorders and conduct disorder. Few public universities in Malaysia offer subjects such as Behavioral Disorders, like what University Technology Malaysia has done. Therefore, this research would be among the first contributions to the knowledge base on mental illness from the education faculties in Malaysia. It may be one of a few internationally from the perspective of Educational Psychology.

(iii) Field of Educational Psychology

There is a need for educational psychologists to be properly recognized and allocated positions in the schools or institutions of higher learning in Malaysia. In the United Kingdom, educational psychologists (“school psychologists” in the U.S.A.), who have knowledge in both mental disorders and academic skills, are stationed in schools to handle the problems and needs of students with psychiatric disabilities (U.S. Department of Labour, 2006; The British Psychological Society). However, in Malaysia, there is no such position and the above-mentioned role is played to a certain but limited degree by the school counsellors. Most of the school counsellors have not been trained adequately to handle students with mental disorders. Apart from University Technology of Malaysia, the curriculum for Counselling in most local public universities has not included subjects like Abnormal Psychology. Even if the counsellors have been taught Abnormal Psychology, they do not have adequate knowledge in the understanding and teaching of effective study skills. Educators who have knowledge of study skills, on the other hand, do not have knowledge in Abnormal Psychology.

The postgraduate program, Educational Psychology, is offered in some universities like University Technology Malaysia, University Science Malaysia and University Putra Malaysia. In some of these programs, like in University Technology Malaysia, a subject such as “Behavioral Disorders” is taught as an elective in the curriculum. Educational Psychologists in these universities are therefore equipped with mental health knowledge. With the counsellors’ lack of knowledge in study skills and the teachers/lecturers’ inability to handle mental health problems; educational psychologists can be empowered to handle these dual roles for students with mental health problems (Phillips, 1990).

This research shows how the need for an educational psychologist or at least a counsellor trained in Abnormal Psychology to assist the growing number of students with psychiatric disabilities.

(iv) Campus Counselling Centres

The counselling centre in any college or university is in a very good position to play a key collaborative role, together with mental health professionals and organizations, in Supported Education. The outcome of this research is informative for campus counselling centres, such as the one in UTM, Skudai. Campus counselling centres can take into consideration SEd programs which it can replicate (either fully or partially) in providing services to students with psychiatric disorders in the campus.

(v) Mental Health Services

This research brings to the awareness of psychiatrists, medical officers, psychologists, counsellors, social workers, occupational therapists, rehabilitation workers of the following: their patients/clients' academic potential, their coping difficulties, and the need to encourage and assist their patients in their desired academic pursuits as part of a psychosocial recovery plan.

The research also informs mental health professionals and co-workers of the effectiveness of SEd.

(vi) Non-Governmental Organizations

This research also informs non-governmental organizations (NGOs), such as the Malaysian Mental Health Association (MMHA), Mental Health Foundation (MHF) and *Pertubuhan Sokongan Kesihatan MINDA Johor*

(MINDA) which can play vital roles in support and advocacy for consumers and their caregivers.

(ix) Researchers on Supported Education

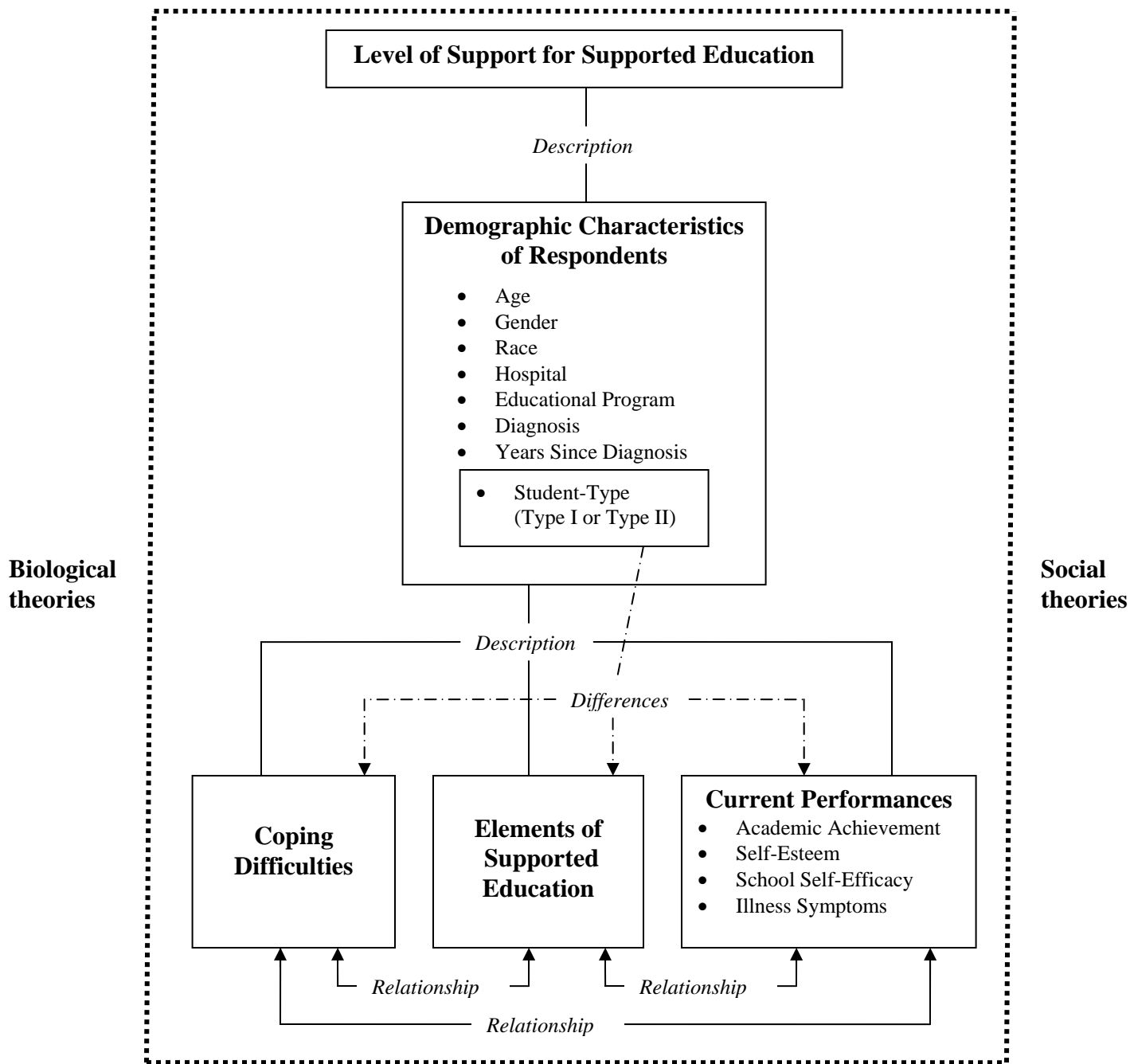
This study extends existing knowledge on Supported Education. The studies in the U.S.A., where it has mostly been done so far, are based on rather long-term experimental studies. The current cross-sectional study investigated the need for SEd. It was done by evaluating “elements of SEd” existing among students with psychiatric disabilities and correlating it to their current performances, such as in school self-efficacy and academic achievement. This is the first time an approach such as this is taken in the field of SEd. Besides, a research on SEd in a site outside America would also be of interest to researchers on SEd. A congruent result would be an implication that the concept of Supported Education has similar outcome in Johor, Malaysia, an Asian site.

1.9 Conceptual Framework

Figure 1.1 on the next page shows the conceptual framework of this study. The following paragraphs provide an explanation of the conceptual framework.

Students with psychiatric disabilities have coping difficulties in their educational pursuit. It lowers their self-esteem, school self-efficacy, and academic achievement; and can bring about more illness symptoms. However, when they have elements which are characteristic of Supported Education (SEd) such as social support, career guidance, knowledge of stress and illness management, and counselling; their performances (self-esteem, school self-efficacy, academic achievement and illness symptoms) should be better. In other words, it was hypothesized that there are relationships between (i) coping difficulties and current performances; and (ii) elements of SEd and current performances. Coping difficulties and elements of Supported Education was, therefore, hypothesized to

Psychological theories



BIO-PSYCHOSOCIAL APPROACH

The psychiatric illness of the students is explained by biological, psychological and social theories. The **Bio-psychosocial Vulnerability-Stress** model further explains its onset and relapse. Supported Education, a rehabilitation method which reduces the illness symptoms and improves the self-esteem and school self-efficacy, is also bio-psychosocial in approach.

Figure 1.1 Conceptual Framework

be inversely related as students who have more elements of SEd in their lives should have less coping difficulties at college.

It was hypothesized that there would be positive relationships between elements of SEd and current performances such as self-esteem and academic achievement. On the other hand, the relationships between element of SEd and current performances such as illness symptoms and school self-efficacy (because a higher score in the scale indicates lower school self-efficacy) were hypothesized to be negative. The strength of the relationships between elements of SEd and current performances was examined, in order to see whether there would be strong implication of the need for SEd to be introduced to students with psychiatric disabilities at higher education in Johor.

Likewise with coping difficulties, it was hypothesized that there would be negative correlations between coping difficulties and current performances such as self-esteem and academic achievement. With illness symptoms and school self-efficacy, a negative correlation was expected. The strength of the correlations between coping difficulties and current performances was also examined, in order to review the existence and impact of coping difficulties in the lives of these students. The examination of these two sets of relationships formed the primary focus of this study.

Another primary objective which was foreseen to reinforce the aim of this research was to determine the level of support for Supported Education among students with psychiatric disabilities studying at higher education in Johor.

A secondary objective was to investigate whether there were any statistical differences between Type I students (those who became ill during their current educational program) and Type II students (those who became ill before enrolling in their current educational program) in their current performances, level of SEd elements and coping difficulties. The purpose was to determine whether the result would be another proposition for international researchers on SEd that SEd should be provided for Type I

students, and not catering only to Type II students like most of the SEd programs in the U.S.A.

The theoretical framework in explaining, predicting and connecting all these relationships among coping difficulties, elements of SEd, and current performances is the bio-psychosocial approach of combining biological, psychological and social theories. Integrating the bio-psychosocial approach with the vulnerability-stress model, the ultimate bio-psychosocial vulnerability-stress model explains even more clearly, more specifically and further the onset, relapse, coping difficulties and treatment (the SEd program) of students with psychiatric disabilities.

1.10 Limitations of Study

As the sample of the research were students with psychiatric disabilities registered in the Permai and Sultanah Aminah hospitals in Johore which is primarily an urban population with a reasonably large number of higher institutions; the findings may not be generalizable to other states or geographical areas.

Selection of respondents had not been entirely random. Although respondents from *Hospital Permai* were picked randomly from a manual file search using the random number table (Kerlinger, 1973); respondents from *Hospital Sultanah Aminah* were either patients who came for their regular psychiatric consultation, recommended by psychiatrists or whose files were found by a medical attendant. The selection at *Hospital Sultanah Aminah* may have posed a bit of a bias. Therefore, the research results need to be generalized carefully.

As a more accurate pre-test and post-test experimental research of a Supported Education (SEd) program could not be carried out to compare the effects of SEd, only elements of SEd existing among the students with psychiatric disabilities could be

measured. Hence, the measure of the effects of SED in this study was purely based on deduction.

Finally, although social desirability effect, which was checked against, was not evident in all the questionnaire responses; the name and identity card number of the respondent requested on the first page of the questionnaire may have affected the reporting of frank information (Fowler, 1995), such as illness symptoms and coping difficulties.

1.11 Definitions of Terms

Definitions are provided for key study variables; namely, elements of Supported Education, coping difficulties, academic achievement, self-esteem, school self-efficacy, illness symptoms and support for Supported Education. Definitions are also provided for related key terms; namely, psychiatric disability, students with psychiatric disabilities, Supported Education, Supported Education Program and higher education.

The conceptual definitions are given for some related key terms in the first part of this section, while operational definitions are given for all the terms in the second part of this section.

1.11.1 Conceptual Definitions

Conceptual definitions are provided for some related key terms below.

1.11.1.1 Psychiatric Disability

The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, put together by the American Psychiatric Association, defines a mental disorder as:

“a clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (eg., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one”.

(DSM-IV, 1994, p. xxi)

Mental disorders are classified in the DSM-IV as distinct categories that are diagnosed on the basis of observable behaviours which meet criteria(s) stipulated in the DSM-IV (Nolen-Hoeksema, 2004, Barlow & Durand, 2002).

The term “mental illness” is differentiated from “mental disorder” by David Satcher, Surgeon General of the U.S.A. He said that “mental disorders are diagnosable mental illnesses” (“Mental illnesses and disorders differ” in Satcher, 1999), meeting the criteria of the DSM.

Other terms which have been used in related literature to describe mental disorders and therefore used in this study are: “psychiatric disabilities” and “psychiatric disorders”. They are sometimes used interchangeably for the purpose of reducing monotony. However, the term “psychiatric disabilities” is favoured in this research as this term is most often used in Supported Education literature. The researcher is also of the opinion that the term “psychiatric disability” sounds less stigmatizing compared to “mental disorder” which seems to evoke greater fear among some hearers and has gathered a more stigmatizing connotation.

It also needs to be noted that the term “mental health problem” is different from “mental disorder”; because, as also explained by Satcher, a mental health problem is a

mild condition such as in depression that has not reached a stage where it needs clinical treatment or becomes a “mental disorder” (“Mental illnesses and disorders differ” in Satcher, 1999).

The DSM-IV points out that there is no adequate definition for the concept of mental disorder and that it “lacks a consistent operational definition that covers all situations (p. xxi)”.

1.11.1.2 Supported Education

“Supported Education” is defined as shown below:

Education in integrated settings for people with psychiatric disabilities for whom postsecondary education has not traditionally occurred or for whom postsecondary education has been interrupted or intermittent as a result of a severe psychiatric disability and who, because of their disability, need ongoing support services to be successful in the education environment.

(Unger, 1993, p.2; Unger, 1992, p.1-2)

Supported Education is based on the concept of “supported employment” and the definition is therefore taken from supported employment in the United States’ Rehabilitation Act Amendments of 1986.

Another definition, by Collins & Mowbray (2005) is that Supported Education is:

a specific type of intervention that provides supports and other assistance for persons with psychiatric disabilities for access, enrolment, retention and success in postsecondary education (and higher education, in the case of Malaysia).

(p.310)

A typical SEd program offers career guidance, tutoring and study skills assistance, special instruction class on stress and illness management, counselling,

application for reasonable accommodations, social support and network from both peers and SEd staff.

The SEd program can be a specific program offered by the disability services office (campus counselling service), or offered off campus under different organizational auspices (such as a community mental health centre or a non-governmental organization) [Collins & Mowbray, 2005].

1.11.2 Operational Definitions

Operational definitions are given below for all the study variables and most related key terms. The conceptual definitions for related key terms, “psychiatric disability” and “supported education”, have been expounded in the first part of this section.

1.11.2.1 Psychiatric Disabilities

This study limits the scope and definition of mental disorders or psychiatric disabilities to three categories:

- a. Mood Disorders
- b. Anxiety Disorders
- c. Schizophrenia and other Psychotic Disorders

Mood and Anxiety Disorders were chosen because they have been found to be the most common mental problems (“Here to help”, 2003; “Mental Health: European Commission....”, 2005). The World Health Organization study in 14 countries worldwide found Depression (10%) and General Anxiety Disorders (8%) to be the most prevalent

(Craig & Boardman, 1997, in Rizal, in press). As for Schizophrenia and other psychotic disorders, it was included in this study for two reasons. Firstly, most participants in SED research or demonstration projects such as the MSERP and MSEP (Bellamy & Mowbray, 1998; Mowbray & Megivern, 1999; Mowbray et al., 2006; Unger, 93) and in a recent qualitative study (Megivern, Pellerito & Mowbray, 2003) are those with schizophrenia. The psychiatric diagnosis of the participants at the Michigan Supported Education Program (MSEP) indicated that 67.9% were diagnosed with schizophrenia, 10.4% depression, 14.2% bipolar disorder, 2.9% anxiety disorder, and 4.6% others (Bellamy & Mowbray, 1998, p.403). In the recent qualitative study (Megivern, Pellerito & Mowbray, 2003), out of the 35 study respondents whose college experiences were explored, 42.9% had schizophrenia and related disorders, 28.6% bipolar disorder, 17.1% major depression and 2.9% generalized anxiety disorder (while the diagnosis of 8.6% of them was unavailable). Secondly, Schizophrenia is the most serious of all psychiatric disorders (Tee, 2004). Positive outcomes from students with Schizophrenia, which is the worst of all psychiatric disorders, but who have elements of Supported Education will thus give a conservative indication of how effective SED can be for students with most other disorders.

1.11.2.2 Students with psychiatric disabilities

In Mowbray et al.'s research (1998; 1999; 2005); people with psychiatric disabilities chosen for the Supported Education programs are those with severe mental illness (SMI) as the priority of mental health efforts in U.S.A is on those with SMI. This is because of economical reasons. The definition of SMI, according to the two-dimensional definition by the National Institute of Mental Health (NIMH, 1987, in Ruggeri et al., 2000), is operationalised as a two-year or longer history of mental illness, and a GAF (Global Assessment of Functioning) score of 50 or worse. In this research, however, students with mild or moderate severity were included.

The “students with psychiatric disabilities” in this study met four criteria:

- (i) They were currently studying in higher education and not taking an illness break (i.e. studying certificate, diploma, graduate diploma, bachelor degree, postgraduate degree or external professional certification at institutions of higher learning).
- (ii) They were registered as outpatients with either of the two psychiatric hospitals in Johor (namely Sultanah Aminah Hospital and Permai Hospital).
- (iii) They had been diagnosed by the psychiatrists/psychiatric medical officers with one or more of the following three psychiatric group disorders:
 - Mood disorder
 - Anxiety Disorder
 - Psychotic Disorder
- (iv) Their illness must not be a transient condition (such as schizophreniform, brief psychotic disorder, acute psychosis, and post-traumatic stress disorder)

“Students with psychiatric disabilities” are divided into two “student-types” (divided based on whether they were doing their educational program as students who were ill before their educational program or as students who became ill during the course of their educational program):

- Type I students:
 - Those who became ill while studying. After an allowable leave from their educational institution and now that they are in remission, they are now resuming their course of program in the same institution.
- Type II students:
 - Those whose previous higher education studies had to be terminated due to illness. They had left their studies for some time and have now returned to resume their higher education, be it in the same or different institution/course.

Or

- Those who completed their previous studies before becoming ill. Now that they have recovered, they are pursuing an educational

program of a higher level (eg. having completed Form 6 previously, they are now pursuing a diploma or a bachelor degree).

The differentiation can be summed briefly as follows:

Type I students	Students who became ill during their study program.
Type II students	Students who became ill before their study program.

Because one of the secondary purposes of this research is to propose to international researchers on SEd to consider more seriously SEd programs for students who are currently studying, this group of students who became ill only during their study programs are thus given the “Type I” term. Whereas the “Type II” students are students who are already the targets of the SEd programs in North America (students who were became ill before they began their educational program).

The term “respondents”, “patients”, “clients”, “consumers” or “students” are used according to the situation called for and they all refer to the population of students with psychiatric disabilities being studied.

This study shall often refer to the “mentally ill” as the “mentally unwell” as the researcher feels the term “mentally unwell” is a less stigmatizing one. Although the term “mentally unwell” is not officially used in most mental health literature, it has been used by some parties, sparingly and of late (“NSW Govt releases Mental Health Act...,” 2006; “Student Health Centre” University of Surrey, 2006; Hegarty, 2006).

1.11.2.3 Elements of Supported Education

As a Supported Education (SEd) program does not exist in Malaysia, the survey for possible contribution of Supported Education is done by surveying elements of SEd existing in the lives of the sample.

“Elements of Supported Education” are characteristics of Supported Education existing in the lives of the higher education students with psychiatric disabilities; such as career assessment/exploration/guidance they have done or received (e.g. from school), tutoring and study skills assistance they have received (not from a SEd agency), knowledge on stress and illness management they have read or received (e.g. from the hospital), counselling, social support, and reasonable accommodations received from their educational institution or applied by their psychiatrists.

Elements of SEd are measured using a researcher-designed inventory, based on literature expounding in details SED models or programs (Mowbray et al., 2005; Brown, 2002 in Mowbray et al., 2005; Moxley, Mowbray, & Brown, 1993; Unger, 1992, p.3/4; Cook & Hoffschmidt, 1993). The inventory can be referred in Appendix D1.

1.11.2.4 Supported Education Program

In the interest of this research, a SEd program is broadly defined and divided into two types: Type I program and Type II program. The Type I program, which is the emphasis of this research proposition, is the on-going kind of SED program which supports students who are currently studying. The Type I program is few in numbers (Mowbray, Megivern & Holter, 2003) but it is emerging throughout North America (personal communication with Anne Sullivan-Soydan, a key SEd researcher who has been involved with SEd for over 20 years). The Type II program is the original type of program which prepares and encourages adults with psychiatric disorders to enter or re-enter higher education. Below is a summary of the differentiation:

Type I program	Catering to students with psychiatric disabilities currently studying.
Type II program	Catering to adults with psychiatric disabilities who have yet to study.

The description of Supported Education throughout this study is mostly that of Type II program, as taken from literature. However, Type I and Type II programs share

many similar characteristics and content. The main difference is that the Type II program has a fixed pre-determined period which is of a rather short duration while the Type I program has an indefinite period as it is on-going and it supports students till the completion of their study program.

1.11.2.5 Higher Education

In the U.S.A., Supported Education has been provided for students with psychiatric disabilities in both “postsecondary education” and “higher education”. Apparently, in the SEd literature (Mowbray & Megivern, 1999, p.1; Mowbray et al., 2005, p.9; Unger, 1992, p.1) and in the U.S.A., both “postsecondary education” and “higher education” are synonymous, as confirmed also by Anne Sullivan-Soydan, a key researcher on SEd with the Boston University (personal communication). They refer to education after high school (high school is equivalent to Year 12 in the United Kingdom, or Form 6 in Malaysia): that is degrees, associate degrees and skills training. Degrees and associate degrees can be done in some colleges as well as universities.

However, in Malaysia, “postsecondary education” refers to the pre-university level, after the five secondary years (after Form 5), when students study and sit for their *Sijil Tinggi Peperiksaan Malaysia* exam, matriculation, A’ level, or American foundation studies (Education Guide Malaysia, 2004).

“Higher education” refers to education taken after the postsecondary years or after Form 5, and this includes certificate, diploma, degree, and professional courses (Education Guide Malaysia, 2004; and postal confirmation with Mohammad Naim Yaakub, Deputy Secretary of Planning and Research Department from Ministry of Higher Education), like in the U.S.A.

1.11.2.6 Coping Difficulties

Coping difficulties are difficulties faced by students with psychiatric problems in coping with their educational pursuit. Some examples of coping difficulties are the inability to concentrate, impaired memory, test and non-test anxiety, depression, other illness symptoms, side effects of medication, loneliness and conflict with people.

Coping difficulties was measured with a researcher-designed inventory, based on information extracted from studies giving details of “barriers” and “personal difficulties” experienced (Mowbray & Megivern, 1999; Megivern, Pellerito & Mowbray, 2003; Collins & Mowbray, 2005; Mowbray et al., 2006). The inventory can be seen in Appendix D1.

1.11.2.7 Academic Achievement

The definition of academic achievement is inferred in Hargreaves et al. (1984, in MacGilchrist, 2004, p.25) as encompassing the following four aspects:

- (i) Capacity to remember and use facts
- (ii) Practical and spoken skills
- (iii) Personal and social skills
- (iv) Motivation and self-confidence

The academic achievement in this study measured largely (i), (ii) and (iv) above.

The researcher was informed that both public and private higher education institutions in Malaysia use the internationally-recognised Cumulative Grade Point Average (CGPA) evaluation system (Mohamed Salleh Mohamed Yasin, Chief Executive Officer of *Lembaga Akreditasi Negara* or the National Accreditation Board, postal communication dated 5 January 2007).

The “academic achievement” of the respondents was thus measured using their Grade Point Average (GPA) last achieved. Although it turned out that some higher education institutions did not use the CGPA system, adjustment was made by converting some respondents’ percentage mark into GPA-equivalent using a mathematical formula. The conversion and other adjustments made are documented in Appendices E1 – E3.

1.11.2.8 Self-Esteem

Self-esteem is defined by Larsen & Buss (2002, p. 432) as a general evaluation of one’s understanding of oneself along a good-bad or like-dislike dimension. More specifically, it is “the extent to which one perceives oneself as relatively close to being the person one wants to be and/or as relatively distant from being the kind of person one does not want to be, with respect to person-qualities one positively and negatively values” (Block & Robbins, 1993, p. 911; in Larsen & Buss, 2002, p.341). Rosenberg defines self-esteem briefly, and in a summarised form to the above, as “a favourable or unfavourable attitude toward oneself” (1965, p.15).

Rosenberg’s definition summarised the operational definition of self-esteem in this study, and thus the widely-used Rosenberg’s Self Esteem Scale was used as measurement (refer Appendix D1).

1.11.2.9 School Self-Efficacy

Self-efficacy, as explained by Bandura (1986, in Larsen & Buss, 2002), the originator of the concept; is the belief that one can do the behaviours necessary to achieve a desired outcome. In other words, self-efficacy is the confidence one has in one’s ability to perform the actions needed to achieve specific outcome. Because it is domain-specific; school self-efficacy, therefore, refers to a person’s confidence in his or her ability to perform well at school.

School self-efficacy was measured using a researcher-modified version of the original school self-efficacy most likely designed by Mowbray, and mentioned in Mowbray et al. (1999) & Collins et al. (1998), as informed by Mary Collins (personal communication).

1.11.2.10 Illness Symptoms

“Illness symptoms” as used in some literature, or “symptomatology” (Mowbray et al., 1999; Collins et al., 1998) as used in other literature, is the current existence of psychiatric symptoms of a person with psychiatric disability. By measuring his or her level of illness symptoms experienced, it gives the evaluator an idea of the person’s functioning level or level of illness severity.

The term “illness symptoms”, rather than “symptomatology”, is used in this study because of its simplicity and the ease in communication.

Illness symptoms was measured using the Modified Colorado Symptom Index, a modified version of the Colorado Symptom Index and validated by Conrad et al. (2001). It can be seen in Appendix D1.

1.11.2.11 Support for Supported Education

The respondents’ support for Supported Education programs reflects their level of beliefs, feelings and agreement that Supported Education would assist them in their academic pursuit. The measure of support for SED was created based on an idea borrowed from Mowbray & Megivern (1999) on how “Needs” was measured by posing the question using some statements. The researcher thus devised statements eliciting the respondents’ beliefs whether specifically-mentioned key components of SED programs

would benefit them. The researcher-designed support for SEd scale can be referred in Appendix D1.

1.12 Conclusion

A summary is appropriate as a conclusion to this chapter. The background to Supported Education, both in SEd literature and in the Malaysian scenario, was described. Problems faced by higher education students with psychiatric disabilities were put forward and justifications to carry out this study proposing SEd and the significance of how this study would benefit both the mental health and education field were explained.

In stated terms, Supported Education is essentially an empirically effective rehabilitation approach in aiding the recovery of higher education students with psychiatric disabilities. It is demonstrated too by a global interest in it. This study on SEd in Malaysia would benefit mental health professionals and co-workers, educators, caregivers and consumers in Malaysia; as well as extend knowledge for SEd researchers worldwide.

The next chapter describes the theoretical framework explaining the cause and treatment of mental disorders, the role SEd plays, and previous studies supporting the claims and proposition of this research.