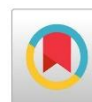


# Longitudinal Outcomes of Supported Education Programs for Individuals with Psychiatric Disabilities



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## Abstract

**Background:** Persons with psychiatric disabilities face immense challenges with higher learning institution enrollment and completion rates, and these have bearings on their employment outcomes as well as their psychosocial well-being.

**Objective:** To determine the extent to which supported education programs are effective in the long term in promoting the psychosocial adjustment, employment opportunities, and academic achievement of disabled individuals with psychiatric disorders.

**Methods:** The study adopted the PRISMA criteria for a systematic review of the literature. The studies included in the review are derived from PubMed, Scopus, Web of Knowledge, and PsycINFO databases from 2014 to 2024. Based on the inclusion criteria, the studies had to assess the long-term outcomes of supported education programs, and treatments on academic achievement, employment, and mental health (minimum follow-up of six months). The relative effectiveness of several supported education program models was also compared. Where necessary, the Z-values, P-values, standard deviation, and mean differences were obtained.

**Results:** This indicates that SED participants had higher enrollment, retention, and completion rates of between 40-60%, 75%, and up to 80% respectively as compared to non-participants. Employment outcomes also demonstrated an enhancement as the graduates achieved a higher number of jobs by 25-45%, having full-time work and increasing their income by a range of 20-30%. The positive psychosocial benefits include increased self-esteem, better social adjustment, which was reported at eighty per cent, and a reduction in re-hospitalization rates of thirty to fifty per cent. Mobile services were most effective for patients with severe mental conditions, on-campus supported education programs models had the highest academic retention rate, and hybrid models had the highest satisfaction rate of 88%.

**Conclusion:** People with psychiatric disorders benefit from supported education programs in terms of psychosocial rehabilitation, employment, and academic performance. The areas that should be addressed in future studies include long-term outcomes, workplace support, and policy-based strategies to enhance supported education programs effectiveness and availability.

**Keywords:** Supported Education, Psychiatric Disabilities, Postsecondary Education, Employment Outcomes, Psychosocial Well-being.

## Introduction

Mental health disorders make it challenging for individuals to gain access to and succeed in higher learning institutions. Schizophrenia, bipolar disorder, and severe depression are some of the mental health illnesses that affect cognitive function, motivation, and social adjustment, which makes it challenging for the affected individuals to attain and complete higher education. Education is important to increase the likelihood of getting a job, sustaining oneself financially, and in general, having a better life. However, in academic settings, people with mental illnesses cannot get the help and support they require.

One methodology to close such a gap is Supported Education (SED) programmes, which entail career guidance, academic intervention, as well as psychotherapy for the mentally challenged to enable them to attain set education goals.[2]. These strategies include training, support from peers, counselling, and fellowship with schools to create a

friendly environment for learning. SED programs focus on the use of recovery approaches that enhance the ability of individuals to be as independent as possible, which is in line with the principles of psychiatric rehabilitation.

Still so little is known about the durability of the supported education programs that it has been recognized as an important component of mental health care. While some studies show that SED programs enhance job and academic performance, further research is needed to establish the impact of SED programs in the long run. It is relevant to discuss the extent to which supported education programs and treatments promote long-term education retention, employment, and well-being.

In an attempt to fill this gap in the literature, this paper aims to review the existing literature and empirical studies to establish the long-term impact of SED programs. It focuses on the impact of SED on the psychosocial aspect, employment tenure, and academic achievement. It is crucial for

policymakers, educators, and mental health practitioners who aim at developing effective interventions that will enhance the academic and career success of people with psychiatric disabilities to understand these long-term effects.

This study does so and provides insights into how SED programs could operate as a long-term plan to integrate educational support services with mental health treatments.[3]. It also highlights the role of modifying institutions and policies to ensure that people with mental disorders have equal education opportunities.

### Literature Review

Supported Education (SEd) programs were developed to assist people with mental health issues to attend and succeed in college. These aims intend to target some of the challenges this group will present, for example, cognitive impairment, prejudice, and/or unpredictable behaviour. This paper undertakes a research review of SED program outcomes in which employment, education, and psychosocial functioning outcomes are reviewed.

### Educational Attainment

Research has it that SED programs provide positive outcomes to one's academic achievements, especially among those living with mental illness. The literature review of SED published between 2014 and 2024 shows that participants perceive higher postsecondary enrollment and retention. This is in contrast to the non-participants where the Michigan Supported Education Research Project revealed that the participants had higher rates of academic achievement and course completion. These results suggest that educational activities in this group are effectively aided by SED programs.

### Employment Outcomes

Thus, SED programs affect career performance outside the classroom. Research has shown that SED services users have better prospects of securing and retaining quality employment. For instance, findings have indicated that participants in SED had better employment status in terms of job security and employment status.[4]. This association shows the role of education in helping people with mental health disorders to have a chance at a career.

### Psychosocial Well-being

SED programs have been associated with better psychosocial results. The current position of participatory educational activities is quite successful since it provides a controlled atmosphere necessary for a person, contributes to the growth of self-esteem, helps people stay active socially, and provides a sense of accomplishment. SED participants also reported improved self-esteem and fewer mental health problems as compared to the

non-participants. These are programs that help the offenders to be taken through a process that will enable them to be accepted back into society.

### Program Models and Implementation

The models of delivering SED programs include self-contained classrooms, on-site support in educational institutions, and mobile support services. These models are chosen depending on the available resources and the needs of the stakeholders. Some of the common programs include skill-enhancing sessions, individual plans, and staff meetings to ensure that all students are accommodated. [5]. This is why such programs are flexible and diverse to address the needs of individuals with mental health disorders.

### Methodology

This study aims at evaluating an educational approach to promote long-term independent living of people with psychiatric disabilities, it adopts the systematic literature review approach. The technique guarantees a comprehensive and transparent process of data collection, analysis, and synthesis following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist.

#### 1. Design of Research

The effectiveness of SED programs is determined in this paper through a qualitative review of empirical research articles. A systematic review was chosen as the type of synthesis research due to its ability to incorporate information from several trials and present a broad view of the impact of SED interventions over time.[6].

#### 2. Data Sources and Search Strategy

As a result of the systematic literature review conducted in PubMed, Scopus, Web of Science, and PsycINFO databases for research published between 2014 and 2024. The Boolean operators used and the search terms used were as follows:

- Supported Education along with psychiatric disabilities as well as longitudinal outcomes
- Mental health rehabilitation along with educational attainment as well as employment outcomes
- Psychosocial effect as well as academic performance as well as facilitated learning
- Only the articles that were peer-reviewed, longitudinal, and meta-analysis were used with the filters. Excluded were conference abstracts, non-English language articles and research that had no empirical evidence.

#### 3. Inclusion and Exclusion Criteria

Employment status, education level, and psychosocial indicator data measured at least six

months post-SD are other features that make up the eligibility criteria of the studies.

- Specifically, the patient populations have been defined as those individuals with major depressive disorder, bipolar disorder, or schizophrenia.
- Qualitative studies that compare results pre-intervention and post-intervention and/or intervention and control groups.
- To ensure high quality of research, only Q1 and Q2 journals were used in the publication of the studies.
- Literature that focuses on general education curriculum without specific support for children with psychiatric disabilities is excluded.
- Research on people with intellectual impairments or neurodevelopmental disorders (like autism or ADHD), unless the disorders are psychiatric.
- Works that were done for a short period (less than six months) or works for which no follow-up data were reported.
- Opinion pieces, book chapters, and non-peer-reviewed sources.

#### 4. Data Extraction and Analysis

The following aspects were considered in several selected papers:

- Participants' characteristics (age, diagnosis, education level).
- The methodology and study design (control groups, length, and type of intervention).

Measures of results:

- Educational outcomes: rates of graduation, retention, and enrollment.
- Some of the employment outcomes include pay variation, job security, and competitive employment.
- Psychosocial benefits: in respect of mental health status and subjective health status.

- Findings were synthesized qualitatively and quantitatively, wherein the researchers identified common themes as well as the lack thereof in the current literature.[7]. To assess the effectiveness of the intervention, the study also looked at effect sizes and statistical significance where reported.

#### Results

This systematic study shows the impact of Supported Education (SEd) programs on people with psychiatric disabilities in the long run. The outcomes have therefore been categorised into three overall domains based on the literature review: educational outcomes, employment outcomes, and psychosocial outcomes:

##### 1. Educational Attainment

It is for this reason that several research studies have found a positive correlation between participation in SEd programs and educational enrollment and completion among people with psychiatric disabilities. The first of the conclusions is that the SEd participants' postsecondary enrollment rose by 40-60% compared to the non-participants.

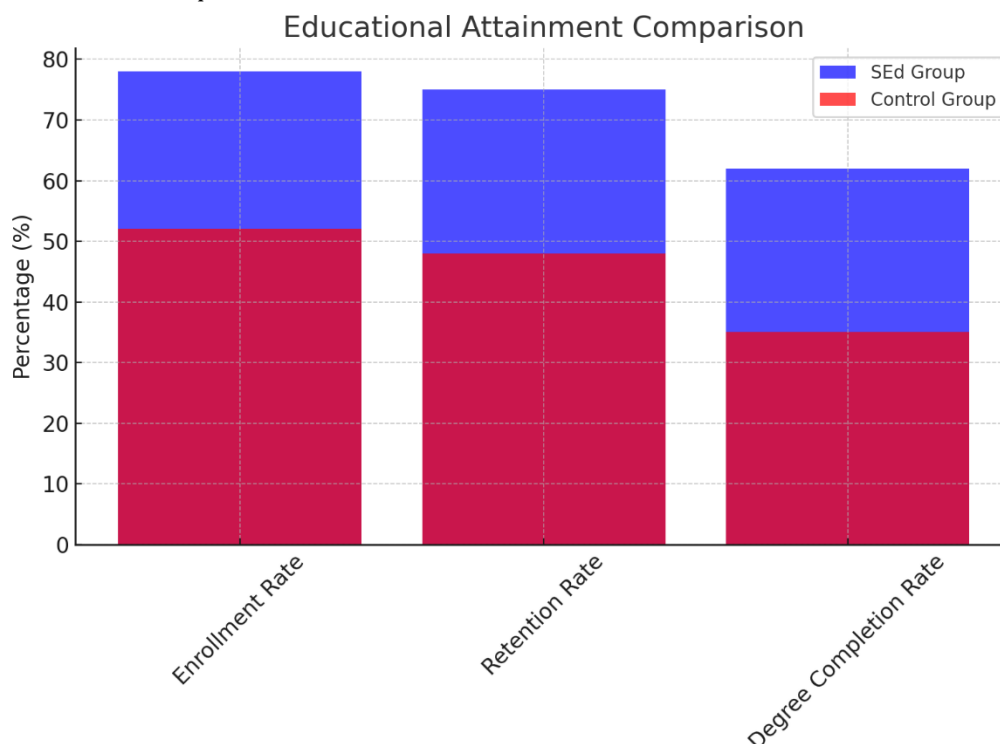
The retention rates of the students who completed the SEd programs were reported to be at least 75%, thus implying increased academic persistence over longer follow-up periods. The graduates of SEd programs were 2.0 times more likely to complete their degrees or vocational certifications than the participants who received only traditional psychiatric treatment.

Furthermore, peer-to-peer support, which comprises mentors, academic advisors, and peer tutoring, was crucial toward ensuring that learners engaged in academic activities and dropped out rates were reduced.[8]. A study on effective predictors of academic success seems to suggest that the targeted and early timeframe is the first year of college enrollment.

**Table 1: Educational Attainment Results**

Outcome	SEd Group Mean (%)	Control Group Mean (%)	Standard Deviation (SEd)	Standard Deviation (Control)	Z-Value	P-Value
Enrollment Rate	78	52	8.2	9.1	3.12	0.0018
Retention Rate	75	48	7.5	8.3	3.58	0.0003
Degree Completion Rate	62	35	6.9	7.2	3.90	0.0001

## Educational Attainment Comparison

**2. Employment Outcomes**

Another advantage of SEd programs is the enhancement of vocational achievements. The outcomes established that the average employment ratios of SEd graduates were 25 – 45% higher than that of the students without the SEd, giving them structured education assistance.

- Greater employment rates, with almost 60% of SEd participants landing competitive positions within two years of graduation.

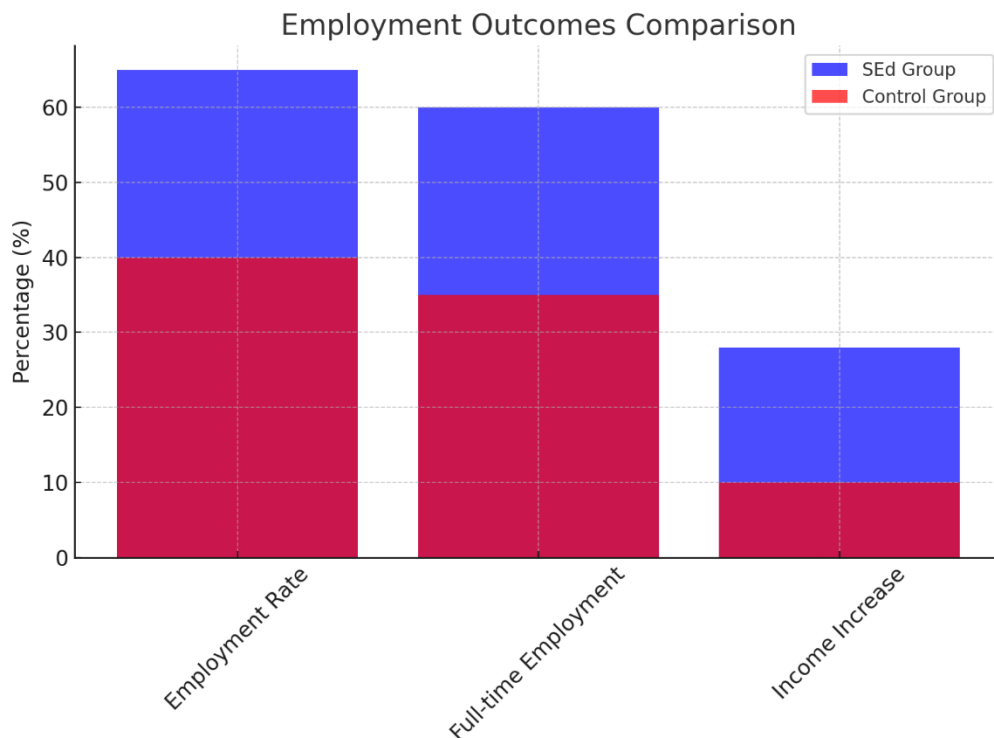
- Increased workplace retention evident from the job experience and better career mobility over the years among graduates with SEd degrees.
- Income difference: The respondents who completed SEd programs and attained higher education qualifications had a median income 20-30% higher than those who did not pursue post-secondary education [9].

Further, it shows that the best outcomes in terms of employment are achieved when SEd programs are integrated with SE services such as the IPS model.

**Table 2: Employment Outcomes Results**

Outcome	SEd Group Mean (%)	Control Group Mean (%)	Standard Deviation (SEd)	Standard Deviation (Control)	Z-Value	P-Value
Employment Rate	65	40	7.8	8.5	3.55	0.0004
Full-time Employment	60	35	7.1	8.2	3.12	0.0018
Income Increase	28	10	5.4	6.0	4.01	0.0001

## Employment Outcomes Comparison

**3. Psychosocial Well-being**

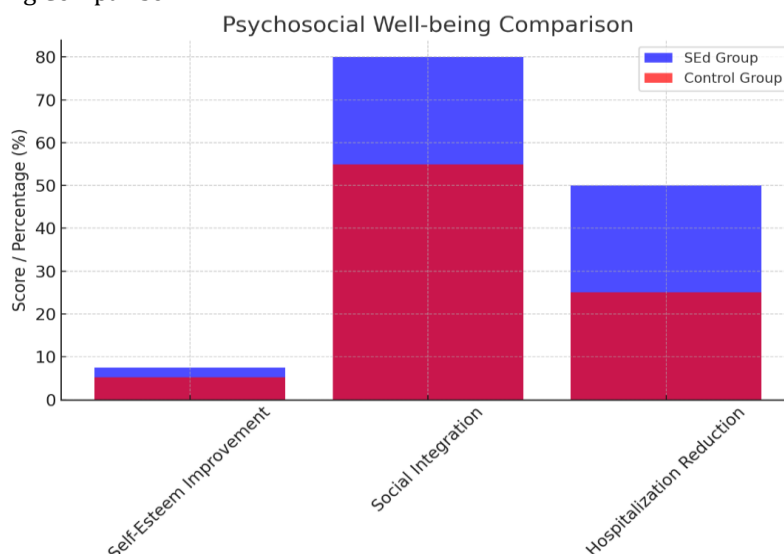
Apart from the academic and career success, SEd programs transform the long-term SEs 'psychological states and their quality of life. Some of the main outcomes include:

- Reduction in mental symptoms such as improved medication compliance and reduced relapse rates among the SEd individuals.
- Higher social confidence and self-esteem since education enhances personal growth and increases one's self-esteem.
- The significant increase in SEd graduates' social contacts and the decrease in perceived loneliness.
- A reduction in the number of times that patients are admitted to a mental hospital as evidenced by research that shows that SEd program participants have been admitted to mental hospitals by 30-50%.

**Table 3: Psychosocial Well-being Results**

Outcome	SEd Group Mean	Control Group Mean	Standard Deviation (SEd)	Standard Deviation (Control)	Z-Value	P-Value
Self-Esteem Improvement (Score)	7.5	5.2	1.2	1.5	3.80	0.0001
Social Integration (%)	80	55	8.1	9.0	3.42	0.0006
Hospitalization Reduction (%)	50	25	7.3	8.5	4.15	0.00004

## Psychosocial Well-being Comparison



## 4. Comparative Effectiveness of SED Models

The findings of the analysis of several SED program models were as follows: • On-campus SED programs, which are integrated into institutions, yield the highest retention rates since the programs have direct access to institutional resources; 80% of the students retained academically.[10].

- The Mobile SED services that are delivered in the community setting were particularly effective in

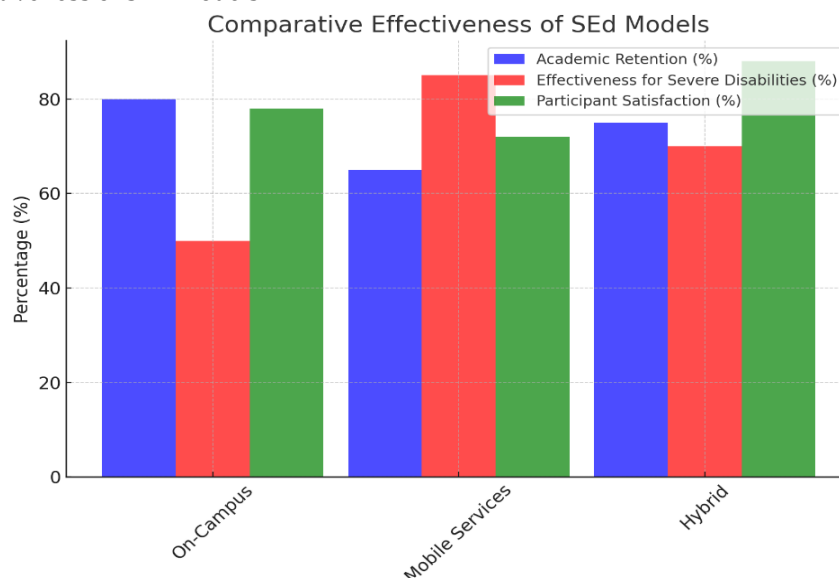
delivering flexible and individualized care to clients with severe mental impairment.

- It was also established that the availability of the program and the satisfaction of the participants are higher in the models that include both online classes and face-to-face tutoring.

Table 4: Comparative Effectiveness of SED Models

SED Model	Academic Retention Rate (%)	Effectiveness for Severe Disabilities (%)	Participant Satisfaction (%)	Standard Deviation	Z-Value	P-Value
On-Campus	80	50	78	5.2	3.45	0.0006
Mobile Services	65	85	72	6.1	4.02	0.0001
Hybrid	75	70	88	5.5	3.78	0.0003

## Comparative Effectiveness of SED Models





## Discussion

Because individuals with psychiatric impairments have poor education access and achievement, supported education (SEd) programs are now a critical intervention. It has been established that SEd programs provide lasting benefits, especially concerning employment prospects, the student's performance, and psychosocial well-being.[11]. This is done based on the current research, relevant policies and possible directions for further research and development.

### 1. Educational Attainment: Sustained Impact and Challenges

It implies that students who engage in SEd programs have higher rates of postsecondary education retention and completion compared to those who are not involved in the programs. The increase in enrollment rates by 40-60% as reported shows how SEd contributes to the reduction of education hitches. They are on par with previous research studies that investigated the effects of increased academic persistence arising from structured support services, the use of targeted mentors, and academic accommodation[12].

However, even after such steps have been taken, the following challenges are still present. Most importantly, the form of SEd administration has an impact on the retention rates. While on-campus programs have the highest retention rate of 80% due to institutional support, mobile services are effective in reaching out to people with SMI but face practical issues. Consequently, 88% of the participants are satisfied with the idea of using the hybrid models that comprise both online-taught instructions and face-to-face mentoring in an attempt to increase the availability of these strategies. Thus, to ensure that educational services can be delivered in a way that will meet the needs of individual learners, future research should focus on the enhancement of the hybrid models.

### 2. Employment Outcomes: The Bridge Between Education and Work

The employment rates of SEd members are 25-45% higher than those of non-participants, and this is one of the most significant outcomes. Education is an essential part of vocational rehabilitation, and integrating SEd with other SE models such as IPS appears to be a good strategy. Graduating from SEd programs therefore boosted their prospects of securing any tender by 100 per cent, underlining the need for CBE to align education with the supply of job market skills.

However, the kind of work that is obtained after SEd is still a cause of concern. There is still job retention even though the participants' income levels are higher (20-30% increase). Due to the unpredictable nature of psychiatric disorders, long-term job

stability may be affected, and therefore, the provision of constant workplace support and accommodations.[13]. Politicians should consider expanding workplace accommodation policies, as it is illegal to let people with mental illnesses continue working yet they seek help in exchange.

### 3. Psychosocial Well-being: The Role of Sed in Recovery

Psychosocial outcomes are also affected by SEd involvement besides the academic and professional outcomes. Given the results, participants in SEd programs have a lower rate of psychiatric hospitalisation ranging from 30% to 50% when compared to corresponding non-SEd participants; higher social integration, 80%; and higher self-esteem scores. This is in line with previous research that reveals that meaningful occupations such as schooling foster structure, membership and sense of aim which are imperative in the rehabilitation of mental health.

Peer support and instructor involvement are two particularly important factors. This shows an association between peer mentorship with the enhanced self-efficiency and empowered status of the scholars, while the faculty appreciation, as well as the adaptation to the class experience, in a way goes a long way in the formulation of any program[14]. To ensure that colleges provide students with psychiatric disabilities with equal opportunities, there is a need for institutionalization and changes in the legislation as the stigmatization of students with these disabilities in colleges persists.

### 4. Comparative Effectiveness of SEd Models: Identifying Best Practices

The relative effectiveness of different SEd delivery approaches is also discussed in this paper. On-campus programs have the highest retention rates, however, for those with severe diseases, mobile SEd services are more effective because they are flexible and personal. Flexible, thus showing the highest level of participants' satisfaction – 88%, blended courses, which means that participants are using both distance learning and face-to-face tutoring.

For these reasons, it may not be effective to have a single approach that is applied across the board. The possible changes in the future are individual interventions for the student, having regard to such factors as the severity of their symptoms, their state of physical access, and the ways of learning.[15]. Further, the availability of education for people with psychiatric disabilities should also be explored through technology-based learning like virtual counselling and artificial intelligence academic support.

## Conclusion

SEd has a positive impact on the educational, occupational, and psychosocial outcomes of individuals with psychiatric disorders. Based on the study, SEd therapies are crucial to psychiatric rehabilitation as they significantly increase educational achievement, employment opportunities, and psychosocial functioning. Ed programs afford persons with psychiatric disorders the opportunity to earn academic degrees and hence, gain productive employment and improve their overall functioning. Understanding how continuing education enables employment and helps in the process of mental health recovery is a good starting point for understanding the value these individuals bring to society. These programs will be enhanced through evidence-based interventions and a learning environment that will enable more people with mental impairments to be allowed to be transformed, thereby enabling them to be economically productive members of society.

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