Abstract

Objective: Unemployment and underemployment among individuals with mental health conditions (MHCs) can be associated with failure to obtain post-secondary education (PSE). Individuals with MHCs have a higher risk of dropping out of higher education compared to peers without MHCs. Supported Education (SEd) is a promising practice that assists individuals with MHCs educational goals. This scoping review examines published literature on SEd to identify outcomes of different SEd interventions. ***Method:*** PubMed, PsycINFO, Academic Search Premier, ERIC, and MEDLINE were searched for peer-reviewed studies published from 1980-2023 that examined SEd interventions geared towards individuals with MHCs to assist them in obtaining PSE. ***Results:*** Based on 54 eligible studies, results highlight the benefits of SEd interventions for persons with MHCs across educational, mental health, and employment outcomes, as well as promising components of SEd that have been implemented in real-world settings. ***Conclusions and Implications for Practice:*** Findings suggest the benefits of utilizing SEd interventions for persons with MHCsResults showed SEd interventions contributed to positive outcomes for education, employment, mental health, and functioning of individuals with MHCs. Findings have important implications for policymakers and service providers who work with persons with MHCs.

Keywords: mental health conditions, postsecondary education, supported education.

Supported Education for Individuals with Mental Health Conditions Seeking and Completing Post-Secondary Education: A Scoping Review

Mental health conditions (MHCs) such as affective, psychotic, anxiety, and mixed disorders affect around 15-20% of students in higher education and prevalence rates have increased over the past decade among persons in post-secondary education (PSE) (Lipson et al., 2019). Additionally, MHC prevalence rates among individuals with minoritized identities (i.e., LGBTQ+, students of color, first-generation, and international students) are likely higher (Belch, 2011; Kupferman, 2014; National Council on Disability, 2017).

MHCs often develop between the ages of 17 and 27, when young adults may wish to participate in higher education (Otto et al., 2020). MHCs are associated with educational barriers, including academic pressure, inadequate support, and financial stress, which can significantly impact attendance, grade point average, peer and faculty relationships, and graduation rates (Condra et al., 2015; McEwan & Downie, 2013; Timmerman & Mulvihill, 2015; Wyatt et al., 2017). Individuals with MHCs often have lower college enrollment (Breslau et al., 2008), course completion (Ginder & Kelly-Reid, 2013), and greater drop-out likelihood (Hunt & Eisenberg, 2010) than students without MHCs. Students with MHCs are more likely to withdraw from PSE and less likely to graduate compared to students with other disabilities and students without disabilities (36%) (Kupferman, 2014; Salzer, 2012; Salzer et al., 2008; McEwan & Downie, 2013; Wolanin & Steele, 2004). There is therefore great need for services to address the needs of students with MHCs.

SEd Helps Improve Education Outcomes for Individuals with MHCs

SEd is an emerging best practice that focuses on education outcomes for individuals with MHCs (Biebel et al., 2018b; Davis et al., 2022; Ellison et al., 2015). Previous literature has defined SEd as programs assisting and providing support to individuals with psychiatric

disabilities to access and succeed in postsecondary education (Collins & Mowbray, 2003; Unger, 1993). Guided by principles such as access to education, personal choice, integration with treatment, and strengths-based approaches, SEd supports ongoing recovery (Substance Abuse and Mental Health Services Administration [SAMHSA], 2011). SEd models commonly offer career planning, academic support, enrollment assistance, financial aid guidance, and linkage to campus resources (Mowbray et al., 2002). SEd interventions are often combined with approaches that support transition to employment (Ringeisen et al., 2017), address barriers in education, and facilitate skill recognition and educational goal identification (Biebel et al., 2018b).

Despite a consensus that SEd shows promise in improving educational outcomes, there has not yet been a comprehensive review of the impacts of SEd on educational outcomes. Rogers et al. (2010) systematically reviewed SEd literature from 1989 to 2009, which included 21 articles (four open trials, three RCT experimental, one quasi-experimental, nine correlational, survey or observational, and four post-only). A more recent review, Hofstra et al. (2023) only included three RCTs (Ellison et al., 2018; Gutman et al., 2009; Kidd et al., 2014), three open-trials (pre/post-test) (Killackey et al., 2017; Schindler & Sauerwald, 2013; Schindler, 2019), and one implementation study (Robson et al., 2010). Earlier studies excluded real-world SEd implementation studies.

In this scoping review, we expanded on Hofstra et al. (2023) since they only analyzed studies from 2009 to 2021. Our inclusion of studies was wider, allowing for a more comprehensive and nuanced overview of the contexts for each study. Despite the gold standard RCTs provide, randomization is a challenge for SEd research. This review addresses this through inclusion of diverse studies, offering insight into the real-world applications of SEd. Our inclusionary criteria allowed for a detailed and analytical process when evaluating the design and

methods from the SEd studies. The current study aimed to address the gap in SEd research by systematically reviewing different intervention modalities from the start of SEd to the present.

Method

We used scoping review methods described by the JBI methodological guidance (Peters et al., 2020) and PRISMA-ScR (Tricco et al., 2018). The review aimed to answer the following questions: (1) What outcomes have been reported for SEd interventions: positive, no difference, negative, or mixed? (2) What are the components in SEd interventions that have been tested and/or demonstrated effectiveness?

Search Strategy

Studies were drawn from the following databases: PubMed, PsycINFO, Academic Search Premier, ERIC, and MEDLINE. The search strategy examined literature published in English between 1980 and 2023 on SEd interventions, PSE individuals, and MHCs. Figure 2 illustrates the SEd literature timeline from 1980 to 2023, categorized by study type, methodology, and focus. The gap from 1980–1989 underscores the initial lack of research in SEd, while the subsequent decades demonstrate significant diversification and growth in the field. For PubMed and PsychINFO databases, the keyword used was “supported education” in the title and abstract.

The database search for Academic Search Premier, ERIC, and MEDLINE was conducted through EBSCOHost with keywords grouped into four categories: (A) Supported education: “supported education” (in Title or Abstract); (B) Education setting: “university students” / “college students” / “undergraduate students” / “higher education students” (in Abstract); (C) Psychiatric disabilities: “mental health” / “mental illness” / “mental disorder” / “psychiatric illness” (in Abstract); (D) Study type: “trial” / “study” / “experiment” (in Abstract). The following search string was used to search for relevant articles in EBSCOHost which included Academic Search Premier, ERIC, and MEDLINE: “TI supported education OR AB supported

education AND AB (university students or college students or undergraduate students or higher education students) AND AB (mental health or mental illness or mental disorder or psychiatric illness) AND AB (trial or study or experiment).” The search strategy in EBSCOHost was also supplemented by filtering articles with a population aged over 13 years old, which allowed for the removal of articles on children. Reviewers also hand-searched the reference lists of eligible articles to further identify records.

Eligibility Criteria

Included studies met the following criteria: (1) Published between 1980 and 2023 (1980 was chosen because SEd first emerged as a provisional concept in the 1980s); (2) Written in English; (3) Examined a SEd intervention; and (4) Used RCT, quasi-experimental, experimental designs, open trial, or implementation study design. Studies were also required to include individuals with MHCs interested in returning to school or PSE enrolled in: a) SEd programs or settings, including traditional or self-contained classrooms on a college campus, b) SEd programs at mental health organizations, c) PSE courses open to any student, d) credits that can be transferred to another postsecondary institution, and e) training/certification resulting in a recognized credential.

Exclusion criteria included: (1) Not related to a SEd intervention for individuals with MHCs; (2) Focus groups, surveys, individual case studies, review articles, book chapters, editorials, or commentaries.

Study Selection

Two independent reviewers screened the titles and abstracts of records for eligibility using the inclusion criteria. The full text of each study was further assessed for eligibility, and discrepancies were resolved through discussion with a third reviewer.

Data Extraction

Three reviewers extracted data that was manually entered into Excel. Data were charted on the SEd program name, participant characteristics, staff/modality (onsite vs. offsite/mobile), study design, components, and outcomes of the SEd program (Tables 1 and 2), and the study focus and implemented SEd program components in real-world settings (Table 3). Outcomes of interest focused on the impact of the SEd programs, including education, employment, and nonvocational outcomes such as mental health.

Results

Search Results

The initial search yielded 487 results and 129 duplicate records were removed before screening. Titles and abstracts of the remaining 358 records were screened for eligibility. From the screening, 301 records were excluded: 192 for not being related to SEd, MHCs, or PSE individuals, 49 for study design or article type, and 60 for non-English records. The full text of the remaining 57 articles was assessed for eligibility resulting in 12 articles excluded (seven for study design or article type, three unrelated to the topic, and two duplicates). An additional nine articles were included through hand search, resulting in 54 articles (see Figure 1). This included 11 RCTs (eight completed and three ongoing), 16 open trial studies three quasi-experimental (two completed and one ongoing), and 17 implementation studies.

Four types of articles on SEd intervention outcome were evaluated: RCT, quasi-experimental, open trial, and implementation studies. The following operational definitions have been used for each study design: 1) RCTs utilize randomization to the control and treatment group(s), assessing controlled treatment outcomes (see Table 1); 2) Quasi-experimental studies evaluate intervention outcome, but not in a randomized controlled experiment (see Table 2); 3) Open trials do not utilize a control group, rather with pre- and post-intervention and/or follow-up data (see Table 2); 4) Implementation studies examine the success of implementing SEd in real-

world settings, assessing feasibility, acceptability and outcome (see Table 3).

Implementation studies (Table 3) identified real-world promising components, such as career planning (Gilbert, 2004; Isenwater et al., 2002; Russell et al., 2004; Pettella et al., 1996), flexible service hybrid and mobile models (Cooper, 1993; Hain et al., 2004; Lieberman et al., 1993) and individualized support (Biebel et al., 2018a; Robson et al., 2010), while revealing barriers such as funding (Cohen et al., 2020; Gilbert et al., 2004; Hain & Gioia, 2004) and stigma (Russell & Strauss, 2004). Despite these challenges, SEd programs consistently demonstrated positive educational, emotional, and vocational outcomes, strengthening the integration of persons with MHCs in academic and career settings.

Types of SEd Interventions

Previous studies have outlined and developed classification systems for SEd interventions. As early as 1990, a classification of SEd interventions was developed based on delivery methods, which included the self-contained classroom model, the on-site model, and the mobile-supported education model (Unger, 1990; Unger et al., 2000). Building upon this, Mowbray et al. (2003) highlighted a lack of mobile support and SEd programs only operating in a classroom model and developed a classification scheme based on the organizational setting of the intervention: clubhouse–full model, clubhouse–partial model, on-site model, and free-standing model. A combination of Unger (1990) and Mowbray et al. (2003) was utilized in Rogers et al. (2010), which classified the SEd models as the classroom model, the onsite model, the mobile support model, and the free-standing model. The on-site model refers to a program located on a PSE institution campus. The free-standing encompasses models that offer some service components on campus or through mobile services and off-site services, such as a central office (Mowbray et al., 2003). A recent review (Hofstra et al., 2023) classified the types of SEd

interventions from 2009-2021 into four types: occupational therapy-based SEd, a combined program of SEd and SE, peer-delivered SEd, and SEd enhanced with cognitive remediation.

Similar to the classifications of Hofstra et al. (2023), this review included six types of SEd: (1) Self-contained classroom SEd, such as the Michigan Supported Education program (i.e., Collins et al., 1998, 1999; Mowbray, 2000; Mowbray et al., 1999, 2001, 2002); (2) Traditional SEd (i.e., Annapally et al., 2021 Hofstra et al., 2021; Morrison & Clift, 2006; Unger & Pardee, 2002); (3) Occupational therapy-based SEd (i.e., Gutman et al., 2009; Ponizovsky et al., 2004; Schindler & Kientz, 2013); (4) Peer-delivered SEd (i.e., Davis et al., 2022; Ellison et al., 2015, 2018; Kinney et al., 2020); and (5) Enhanced SEd, such as traditional SEd combined with cognitive remediation (i.e., Kidd et al., 2012, 2014; Mullen et al., 2017; Otto et al., 2020); (6) Combined SEd and SE model, such as the Individual Placement and Support (IPS)-SEd, used in early psychosis intervention programs such as RAISE and OnTrackNY (i.e., Humensky et al., 2019; Rosenheck et al., 2017). The chronological order of these studies is displayed in Figure 2.

Education Outcomes

The self-contained classroom SEd model, as demonstrated by the Michigan Supported Education Program (MSERP), offers noncredit classes, focusing on academic coping, stress management, and career development through small group exercises and experiential learning. Participants received support in navigating academic challenges, completing applications, and benefitting from peer and staff feedback, fostering readiness for higher education. MSERP participants exhibited increased learning rates (Collins et al., 1998), greater goal complexity (Collins et al., 1999), and higher school enrollment by the 12-month follow-up (Mowbray, 2000; Mowbray et al., 1999, 2001).

Traditional SEd interventions utilize standard SEd components and provide SEd services to persons with MHCs in higher education. One ongoing RCT (Hofstra et al., 2021) and five open trial studies (Annapally et al. 2021; Hoffmann & Mastrianni, 1993; Morrison & Clift, 2006; Unger, 1991; Unger & Pardee, 2002) explored traditional interventions, demonstrating successful college credit completion (Unger & Pardee, 2002), reduced need for learning support (Morrison & Clift, 2006), and lowered educational barriers (Annapally et al., 2021).

Occupational therapy-based SEd interventions that paired students with MHCs with mentoring by graduate students in occupational therapy programs showed improved basic academic skills and high rates of retention (Gutman et al., 2009; Schindler & Kientz, 2013; Ponizovsky et al., 2004). **Peer-delivered SEd interventions** provide SEd intervention delivered by a peer with lived experiences of MHCs (Davis et al., 2022; Ellison et al., 2015, 2018; Kinney et al., 2020). Increased enrollment rates over 12 months were demonstrated (Ellison et al., 2015). Participants reported reduced time to reach educational goals (Ellison et al., 2018), and results promoted academic self-efficacy (Kinney et al., 2020). Peer-delivered SEd found significant improvements in time management, resilience, self-efficacy, and self-determination measures over time (Davis et al., 2022).

Enhanced SEd interventions build upon traditional SEd, but also integrate cognitive skills training, such as cognitive remediation (Kidd et al., 2012, 2014; Mullen et al., 2017) and mindset training (Otto et al., 2020). Otto et al. (2020) has not been completed yet. Both combined SEd and SE models, and enhanced SEd, utilize SEd services with other evidence-based practices in attempts to improve outcomes. Enhanced SEd studies showed reduced educational barriers (Mullen et al., 2017), as well as better retention and improved academic functioning (Kidd et al., 2014). The Redirection Through Education (RTE) intervention,

combining cognitive remediation with Sed, further supported that the integration of SEd with cognitive remediation was feasible and students reported both enjoying cognitive remediation while also showing improvements in learning, concentration, and executive functioning (Kidd et al., 2012, 2014).

The combined SEd and SE model, i.e., the IPS-SEd model, focuses on integrating SEd and SE services with mental health treatment. For example, the SEd and Employment Services (SEE) in first-episode psychosis programs used the IPS-SEd model and significantly increased school participation, as observed in RCT studies (Nuechterlein et al., 2020; Rosenheck et al., 2017). Another study supported the feasibility of adapting IPS to focus on education (Killackey et al., 2017). Open trial studies supported the feasibility of adapting IPS to focus on education (Killackey et al., 2017) and found that the combined SEd and SE model increased supported education and employment service use and school enrollment (Humensky et al., 2019; Rinaldi et al., 2010).

Employment Outcomes

While SEd interventions include assisting participants in achieving educational goals, they can also develop skills for future employment opportunities after educational attainment.

The self-contained classroom model found that in the MSERP by the 12-month follow-up, 39% to 46% of participants were engaged in a job, while 21% to 28% were enrolled in vocational training (Mowbray, 2000), and in a later study, participants were twice as likely as the control group to be involved in vocational training or employment (Mowbray et al., 2002). An open trial study found that participants in one **traditional SEd intervention** reported an increase in participants who were competitively employed or enrolled in an education program after the intervention (19% before and 42% after the intervention; Unger et al., 1991).

For occupational therapy-based SEd, Gutman et al. (2009) found that for participants returning to school, the Bridge Program enhanced professional behaviors and increased employment rates among participants. Another open trial study (Schindler & Kientz, 2013) of the Bridge Program also found that the occupational therapy-based SEd focused on a customized approach that addressed supports and barriers to help participants reach their goals of employment.

An open trial study (Ellison et al., 2015) of the **peer-delivered SE & SEd** for Emerging Adults intervention, which included components of vocational support groups and activities, found that 49% of participants had started a job over a 12-month period. While the peer-delivered SEd intervention RCT study (Ellison et al., 2018) did not report on employment outcomes, the treatment group spent significantly more time in educational activities than the control group.

Combined SEd and SE interventions are traditionally based on SE principles and therefore participants can often pursue employment or vocational training along with education. All RCT studies of this modality found that participants reported greater participation in competitive employment (Nuechterlein et al., 2008, 2020; Rosenheck et al., 2017; Rudnick & Gover, 2009; Rinaldi et al., 2010; Ow et al., 2022). **Enhanced SEd interventions** in RCT, open trial, and quasi-experimental studies did not report any employment outcomes for participants.

Mental Health, Self-esteem and Quality of Life Outcomes

A main component of SEd interventions is to assist students with MHCs navigate higher education to attain educational goals, which can include teaching skills to manage mental health symptoms that can hinder education. The **self-contained classroom SEd model** found that the treatment group reported significant improvements in quality of life and self-esteem (Mowbray

et al., 2002). Participants also reported increased knowledge about campus counseling resources (Mowbray et al., 2001).

One open trial of **traditional SEd** across three different sites found that satisfaction with life increased (Unger & Pardee, 2002). The cohort reported improved learning effects which correlated with reduction of anxiety, social isolation, and low self-confidence (Morrison & Clift, 2006). Also, participants of another traditional SEd intervention identified mental health professionals' support as critical to continuing education (Annapally et al., 2021). A quasi-experimental study (Hoffmann & Mastrianni, 1993) found that participants reported receiving follow-up treatment following discharge from hospitals and were pursuing educational goals.

Enhanced SEd interventions further supported the impact of interventions on mental health outcomes. An open trial study (Kidd et al., 2012) found that the treatment group in the Redirection Through Education (RTE) program integrated with cognitive remediation demonstrated significant improvement in psychosis symptomatology. Another RCT study of RTE integrated with cognitive remediation (Kidd et al., 2014) found participants demonstrated improvements in self-esteem and negative symptomatology.

One RCT and one open trial study on **peer-delivered SEd** did not report any mental health outcomes (Ellison et al., 2015, 2018). Participants in another open trial study (Davis et al., 2022) showed significant improvements in executive functioning skills, resilience, and self-efficacy. These participants also showed a decrease in mental health help-seeking behaviors, which may support that the peer-delivered SEd intervention reduced this need for mental health services.

One RCT study and one quasi-experimental study on **occupational therapy-based interventions** did not report any mental health outcomes (Gutman et al., 2009). One quasi-

experimental study (Ponizovsky et al., 2004) reported based on findings that SEd interventions should target more adaptive coping resources to prevent emotional distress and decrease participant drop-out rates.

One open trial study (Maru et al., 2018) of **combined SEd and SE** found a significant decrease in depression, increases in self-efficacy, and near-significant improvements in emotional stability. Another study supported the impact of another combined SEd and SE intervention, Youth Employment Skills Strategy (YESS), with approximately 25% of participants reporting improvements across all mental health outcomes, especially in outcomes of life satisfaction and quality of life (Ow et al., 2022).

Real-World Implemented SEd Interventions in Practice Settings

Evaluating the real-world implementation of SEd programs involves determining promising components when implemented in settings, such as community mental health centers. Among the 18 studies that implemented SEd programs in routine service settings (see Table 3), only traditional SEd and combined SEd and SE (i.e., IPS-SEd) were implemented, leaving out occupational therapy-based SEd, self-contained classroom SEd, enhanced SEd, and peer-delivered SEd. Common SEd components associated with positive outcomes when implementing SEd in real-world settings were academic support (i.e., Pettella et al., 1996; Russell & Strauss, 2004), executive skill development (i.e., Cook & Solomon, 1993), and support from peers with lived experiences (i.e., Cook & Solomon, 1993; Hain & Gioia, 2004; Ringeisen et al., 2017). Other promising implemented components included educational or vocational goal development (i.e., Cohen et al., 2020; Cook & Solomon, 1993), and services aimed at improving the quality of life (i.e., Bateman, 1997; Hain & Gioia, 2004; Isenwater et al., 2002; Thompson, 2013).

However, barriers to implementing SEd include lack of funding, lack of engagement, attrition linked to stigma, and service provision difficulties (Cohen et al., 2020; Cooper, 1993; Gilbert et al., 2004; Hain & Gioia, 2004; Lieberman et al., et al., 1993; Russell & Strauss, 2004; Thompson, 2013). Service provision difficulties ranged from SEd staff lacking access to student records, which hindered knowledge about student whereabouts or class status (Cooper, 1993), as well to offsite/mobile SEd staff who ran into issues of confidentiality, where college staff or psychiatric center staff were cautious of referring participants or were unable to due to disclosures (Cooper, 1993; Lieberman et al., 1993).

Discussion

This study conducted a comprehensive review of the literature on the impact of SEd on outcomes among individuals with MHCs seeking and completing PSE. The studies reviewed support the benefits of SEd for persons with MHCs, demonstrating positive outcomes across educational, employment, mental health, self-esteem, and quality of life domains. The findings identified promising components and barriers in real-world SEd interventions.

Specifically, SEd interventions positively impacted college enrollment (Ellison et al., 2015; Hoffman & Mastrianni, 1993; Humensky et al., 2019; Mowbray et al., 1999, 2000, 2001; Rinaldi et al., 2010) and school participation (Nuechterlein et al., 2020; Rosenheck et al., 2017). Additionally, these interventions were associated with improved academic performance and functioning (Collins et al., 1998; Gutman et al., 2009; Kidd et al., 2014; Ponizovsky et al., 2004; Schindler & Kientz, 2013; Unger & Pardee, 2002) and a reduction in academic barriers (Annapally et al., 2021; Mullen et al., 2017).

Given the interdependence of education and employment, there is a growing trend among SEd programs to address both challenges (Ringeisen et al., 2017). Findings indicate that

SEd interventions significantly aid participants in obtaining employment or vocational training (Ellison et al., 2015; Mowbray et al., 2000, 2002; Nuechterlein et al., 2008, 2020; Rinaldi et al., 2010; Rosenheck et al., 2017; Schindler & Kientz, 2013; Ow et al., 2022; Unger & Pardee, 2002).

Moreover, studies suggest that SEd interventions contribute to improvements in life satisfaction (Hoffman & Mastrianni, 1993; Mowbray et al., 2002; Unger & Pardee, 2002) and reductions in symptoms (Kidd et al., 2014; Maru et al., 2018; Morrison & Clift, 2006). When implementing SEd in real-world settings, common modalities are traditional SEd model which provides SEd services by SEd specialists and combined SEd + SE program, suggesting the practicality and feasibility of these two models. Implementation studies highlight the importance of providing individuals with MHCs access to essential resources such as academic support (Pettella et al., 1996; Russell & Strauss, 2004), executive skill development (Biebel et al., 2018a; Cook & Solomon, 1993), peer support (Cook & Solomon, 1993; Hain & Gioia, 2004), vocational goal development (Cohen et al., 2020; Cook & Solomon, 1993), and quality of life enhancement (Bateman, 1997; Hain & Gioia, 2004; Isenwater et al., 2002; Thompson, 2013). These components are commonly associated with implementation fidelity in SEd interventions.

Limitations

The review focused on SEd intervention studies but was limited to studies utilizing RCT, open trial, quasi-experimental, and implementation designs; Gill et al. (2021) was excluded as it is a research poster despite being a completed clinical trial. At the time of submission, three ongoing RCTs (Hofstra et al., 2021; Jäckel et al., 2023; Otto et al., 2022) were noted. Another limitation is the assumption regarding the quality of research findings from non-RCT studies. The scoping review did not assess the effectiveness of SEd interventions. While effective

components were identified in each study, it remains unclear what specific aspects contribute to their effectiveness. Thus, these components should be referred to as promising improvements in intervention.

While all classified SEd interventions have shown promising outcomes for individuals with mental health conditions (MHCs), there is no clear method for identifying which intervention is most effective. Previous reviews have highlighted critical gaps in understanding potential synergies (Hofstra et al., 2023; Rogers et al., 2010). This review also emphasizes a lack of symptom management for individuals with MHCs undergoing SEd interventions, undermining holistic support. Integrating SEd services with other evidence-based treatments could facilitate positive educational outcomes by reducing symptomatology.

None of the reviewed studies incorporated telehealth, missing an opportunity for accessible intervention delivery. There is a lack of evaluation regarding telehealth SEd services; however, telehealth improves access and reduces costs (Gentry et al., 2019; Madigan et al., 2021; SAMHSA, 2021). Future studies should include telehealth and integrate evidence-based practices like CBT when delivering SEd services. including marginalized populations.

Recommendations

Results from this review support findings that SEd interventions often lack rigorous designs, adequate representation of minority individuals, and longitudinal evaluation data, raising questions about the generalizability and reliability of findings (Hofstra et al., 2023). Future research should prioritize larger and more diverse samples, control groups, and a clear framework to assess educational outcomes and student satisfaction. There is a need for further development in SEd implementation science, particularly in integrating SEd into mental health service frameworks. Existing mental health services can adapt to provide educational support, and mobile-based therapy apps can combine SEd with mental health delivery. Telehealth

services improve access and reduce costs (Gentry et al., 2019; Madigan et al., 2021; SAMHSA, 2021), and meta-analyses demonstrate the effectiveness of tele-mental health services (Hollis et al., 2017; Lau et al., 2021; O'Connor et al., 2018; Patel et al., 2020; Speyer et al., 2018). Future studies should incorporate telehealth and integrate other evidence-based practices such as CBT when delivering SEd services.

Policymakers should mandate funding for SEd research, especially RCTs and longitudinal designs, to aid in developing evidence-based practices. Current SEd research has not adequately addressed specific populations, including minority students, trauma-exposed individuals, those facing academic challenges, neurodivergent individuals, and first-generation students. Funding should focus on diverse samples to improve representation of marginalized populations. Collecting student perceptions and feedback is essential for developing socially acceptable SEd curricula.

Funding for implementing SEd services in communities and on college campuses remains limited, as SEd programs are primarily provided through community mental health centers (Ringeisen et al., 2017). Recent initiatives like the Workforce Innovation and Opportunity Act and SAMHSA Block Grants for early interventions provide opportunities to increase SEd implementation (Ringeisen et al., 2017). Policies should ensure these services are available not only for individuals with first-episode psychosis but also for those with a broader range of psychiatric disabilities. Even though some community colleges or state universities have reported offering SEd services (Biebel et al., 2018a; Isenwater et al., 2002; Gilbert et al., 2004), SEd is not available through campus disability services or counseling centers in most states. Partnerships between SEd programs and post-secondary education institutions can play a vital role in helping individuals achieve their educational goals. Outreach on college campuses

should prioritize educating faculty, staff, and students about accommodations available and SEd resources while fostering partnerships with campus resources such as disability services, career services, and counseling centers. Research indicates that faculty with personal experience of mental health conditions tend to have more positive perceptions of students with such conditions (Brockelman et al., 2006).

Integrating SEd into Certified Community Behavioral Health Clinics (CCBHCs) could significantly enhance service delivery by ensuring educational support is part of holistic care for individuals with psychiatric disabilities. This integration aligns with models like the Collaborative Care Model (CCM), which has effectively improved mental health outcomes (Archer et al., 2012). To accurately evaluate the implementation and efficacy of SEd programs, there is a pressing need to standardize these interventions using fidelity scales (e.g., SAMHSA, 2011). Such scales ensure program components are implemented as intended and facilitate reliable measurement of outcomes across different settings. This would enable researchers and practitioners to comprehensively assess the quality and impact of SEd services, leading to better services and more targeted improvements (Bond et al., 2017).

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Table 1

Comparing Outcomes of SEd Programs in 11 Randomized Controlled Trials (RCTs)

Author, Year	Program Name	Participants	Staff/Modality	Design	Content	Outcomes	Duration/Frequency /Country
Completed Studies							
Collins et al. (1998); Collins et al. (1999); Mowbray (2000); Mowbray et al. (2001); Mowbray et al. (1999); Mowbray et al. (2002)	Michigan SEd Program	Psychiatric Disability (n=397)	SEd Program Staff (Onsite)	RCT	*Career planning & development of an educational plan *Working on educational competencies & social development *Facilitating referrals with campus resources or other agencies *Goal is to help participants establish future plan, receive support and resources, and cope with problems related to mental health. *Focus on developing and practicing skills for academic and professional settings *Assistance with academic tasks (i.e. applying for financial aid, using library)	High participant rates, Improved QoL, Self-esteem	*Two 14-week semesters (approx 7 months) *Intervention: 2.5 hrs 2x/week *USA
Gutman et al., 2009	Bridge Program	Adults w/ Psychiatric Disabilities (n=38)	OT Students (Onsite)	RCT	*Weekly modules focused on academic skills & vocational topics	Improved academic skills, Return to school/work	*6 weeks *Twice per week, 2-hr training module and 1-hr individual mentoring per session

					*Hour of one-on-one mentoring after each module		*USA
Nuechterlein et al., 2008	IPS Model Adaptation	First-Episode Schizophrenia (n=69)	IPS Specialist (Onsite/Offsite)	RCT	*Formulating individualized goals for participants (competitive employment or schooling) *IPS services integrated into mental health treatment *Work with family members	Competitive employment, Schooling engagement	*18 months *Weekly for 6mths, then 12mths fading frequency *USA
Rosenheck et al., 2017	SEE	First-Episode Psychosis (n=404)	SEE Specialists (Offsite)	RCT	*Active benefits counseling and follow-along supports after job obtainment or school enrollment *Focus on patient preferences for job/school	↑participation in work/school	*24 months *Weekly *USA
Nuechterlein et al., 2020	IPS-WFM	First-Episode Schizophrenia (n=69)	IPS Specialist, (Offsite)	RCT	*IPS principles of focusing on competitive employment or schooling & individualized support *WFM group sessions focused on social & problem-solving skills	83% in competitive employment/school	*18 months *Weekly for 7mths, then 1x every 2wk for 4mths, then monthly *USA

Kidd et al., 2014	RTE (integrated w/ CR)	SEd Participants w/ Psychosis (n=37)	SEd Specialists (Onsite)	RCT	*Cognitive remediation integrated into Redirection Through Education SEd program, *Educational supports, Academic, cognitive, self-esteem, & symptom assessments *courses for credit and noncredit *1:1 counseling sessions	Better retention & improvement	*10 weeks (CR + SEd) *2x/wk for computer-based cognitive exercise sessions, Weekly group discussion sessions *Canada
Mullen et al., 2017	FAST	College Students w/ Psychiatric Conditions (n=72)	Not specified (Onsite)	RCT	*Concepts taught & practiced through interactive exercises *FAST was a 12-week strategy-focused CR intervention to improve academic functioning *Focus on academic skills (i.e. creating a study schedule, using a calendar, & focusing in class)	↑ self-efficacy, ↓ academic difficulties	*12 weeks *Weekly *USA
Ellison et al., 2018	VetSEd Manual	Veterans w/ PTSD (n=33)	Trained Veteran Peers (Modality Unspecified)	RCT	*VetSEd is a structured program tailored for veterans, featuring worksheets and a guide that applies SEd principles (choose, get,	Reduced time to educational goals, Increased participation	*6 months, weekly meeting with trained veteran peers *USA

					keep) along with elements from civilian SEd models, to create customized educational plans for veterans with MHCs *Peer coaching by veterans w/ MHCs *Personalized educational plans for each veteran		
Ongoing Studies							
Otto et al., 2020	Mindset Training	Students Seeking Mental Health Services (plan to recruit60)	Professionals in cognitive remediation (Offsite)	RCT	*Improving academic outcomes, *Formulating personal educational goals	Ongoing study	*12 weeks *Weekly *Netherlands
Hofstra et al., 2021	COMPARE	Students w/ MHCs (Plan to recruit 100; study protocol only)	SEd Specialist (Onsite)	RCT	*Coaching *Teaching the student critical skills (cognitive, social & emotional) *Organizing critical support systems	Ongoing study	*12 months *N/A *Netherlands
Jäckel et al., 2023	SEEearly	Adolescents/ Young Adults	SEE Specialists (Offsite)	RCT	*Based on the nine IPS principles for SE & SEd *Interventions range from engagement techniques to individualized assistance in	Ongoing study	*12 months *N/A *Germany

					career & academic searches		

Note. Articles are organized based on program type: **Self-contained classroom, Orange**; **Traditional SEd, Green;** **Occupational therapy-based SEd, gray**; **Peer-delivered SEd, Yellow**; **Enhanced SEd (i.e., cognitive remediation), Purple**; **Combined SEd and SE, Blue**.
COMPARE= Community Participation through Education; CR= Cognitive Remediation; FAST= Focused Academic Strength Training; IPS= Individual Placement & Support; IPS-WFM= Individual Placement & Support-Workplace Fundamentals Model; MHCs= Mental Health Conditions; QOL= Quality of Life; RTE= Redirection Through Education; SE= Supported Employment; SEE= Supported Education and Employment Services; SEd= Supported Education; SEEearly= Supported Employment and Education; SEER= Supported Education Enhancing Rehabilitation; StAB= Start in education and employment; TAY= Transition-age youth.
* Although Mowbray et al. (2001) and Mowbray et al. (2002) were identified as RCTs, we have indicated these as follow-ups of the Michigan Supported Education. The studies in 1st column for Table 1 should be counted as one RCT.

Table 2

Comparing Outcomes of SEd Programs in 19 Quasi-Experimental and Open Trial Studies

Author, Year	Program Name	Participants	Staff/Modality	Design	Content	Outcomes	Duration/Frequency/ Country
Completed Studies							
Unger et al., 1991	SEd Program	Young adults w/ severe psychiatric disabilities (n=52)	SEd staff (Onsite)	Open Trial	*Aim to develop skills to choose and implement a career plan.	42% employed or enrolled in education program	*4 semesters *Not specified *USA
Hoffmann & Mastrianni, 1993	Four Winds-Saratoga College Service	Young adults (n=97)	Inpatient therapists/ community college faculty (Offsite)	Quasi-experimental	*Four Winds-Saratoga College Service is affiliated with a local college to offer opportunities for patients to initiate, maintain, or advance education goals into treatment. Four Winds-Westchester offers similar treatments but not academic opportunities *College Service patients participate in individually	↑re-entry in normative settings & maintained academic aspirations	*Saratoga avg. stay: 19.2 weeks *Westchester avg. stay: 17.5 weeks *Not specified *USA

					focused academic activities with local college faculty or continuation of academic work at home institution.		
Unger et al., 2000; Unger & Pardee, 2002	3 settings w/ SEd programs	Students w/ psychiatric disorders (n=124)	Trained staff members (Onsite, Offsite, Onsite/mobile)	Open Trial	*The first two settings are in traditional mental health settings (CAUSE Program & Laurel House) and the third is on college campus (Transition to College Program) *List of program components were developed and similar (ongoing support, service coordination, etc.) *Extensive interviews and on-site observations conducted with students and staff	↑ Successful completion of college credits, ↑ life satisfaction No significant differences across programs	*3 years *Not specified *USA
Morrison & Clift, 2006	SEP	Students w/ long-term mental illness (n=148)	Not specified (Onsite)	Open Trial	Antonovsky's health model, Personal tutor support	Positive gains in Sense of Coherence Scale	*3 academic years *Not specified *UK
Annapally et al., 2021	SEP	College students w/ SMHCs (n=14)	Not specified (Onsite)	Open Trial	*Two main themes: SEP with students & caregivers; SEP with academic colleges or institutions settings *18 components provided over the course of a year based on student needs	Feasible in helping reintegrate into academics	*1 year *Not specified *India
Ponizovsky et al., 2004	SEP	Service-user students (SUS) w/	Social worker/ Occupational therapist (Offsite/mobile)	Quasi-experimental	*Assessment measures of psychological distress, social support, coping styles	SUS participants utilized emotion & avoidant coping	*3-6 months *1-2x/wk; 3-4hr sessions *Israel

		schizophrenia (n=70)			*Small groups (15-25 students) were guided to achieve group cohesion and facilitate integration into education setting		
Schindler & Kientz, 2013; Schindler & Sauerwald, 2013	Bridge Program	Adults aged 20-70(n=48) 42% bipolar, 33% schizophrenia, 25% depression	Occupational therapy graduate students (Onsite)	Open Trial	*Self-contained classrooms, on-site services, and principles of IPS within SE model *1:1 mentoring *Higher education and/or employment goals *Weekly classroom modules focusing on academic & vocational topics *3 components: 1) 1:1 mentoring with graduate OT students 2) Personalized higher education 3) Individually developed educational & employment goals Weekly vocational and academic modules	Customized approach efficient in reaching goals Significant increase in participants enrolled in education while employed ($p < .001$) Seven participants currently enrolled in education maintained or completed their studies No significant increase in participants enrolled in education without employment ($p = .125$)	*Not specified *Weekly *USA
Schindler 2019	OT-Based SEd program	Undergraduate students with DSM-5 diagnosis (n=83) enrolled from 2008-2017	Master's level OT students (Onsite)	Open Trial	*1:1 mentoring, pairing OT masters students with OT undergraduate students *The same MSOT student mentors his or her assigned mentee for the	78% continued or finished their studies. ↑ GPA from first SEd semester to last ($p \leq .028$) ↑ GPA from past enrollment in SEd	*2x per week for 2 semesters *2-hr sessions *Weekly mentoring session

					mentee's duration in the program. *Addressed skill development, time management, organization, social skills, graded components *Occupational evaluation of college-related problems for systematic goal setting in mentoring sessions *Individualized occupationally based interventions *Uniform written procedures for goals (time management & organization, skills: studying, writing, presenting, socializing)	program to ($p \leq$ .014)	
Kidd et al., 2012	RTE (w/ CR)	Students with psychosis (enrolled in cognitive remediation) (n=16)	SEd specialists/ Clinical Psychologist (Onsite)	Open Trial	*CR was integrated into RTE in two components over 10 weeks *Participants engaged in 20 computer-based cognitive exercise sessions twice per week & weekly one-hour group sessions *Assessments of symptoms, self-esteem, educational attainment and learning/attention.	Feasible integration of CR into SEd, Enjoyable with improvements	*10 weeks (CR intervention + Supported Ed.) *2x/wk for computer- based cognitive exercise sessions; 50- min session *Weekly group discussion sessions; 50 min *Canada
Ellison et al., 2015	SE & SEd for Emerging Adults	Early-emerging adults w/ serious	SEd specialist & Peer mentors (Onsite)	Open Trial	*Peer mentor matched w/ interest & experience	49% started job/education program in 12 months	*12 months *SEd service - 1x/mth

		mental health conditions (n=35)			*Weekly vocational support groups & monthly vocational activities (career fairs, college visits) *Vocational team activities (weekly groups, regular vocational outings) *Assessments conducted at enrollment & 12 months post-enrollment		*Peer mentorship - 1x/mth *USA
Kinney et al., 2020	NSSV SEd services	Veterans in SEd services (n=94)	Trained veteran peers (Onsite)	Open Trial	*Multifaceted educational services (academic skills and advising, resource linkage, health and wellness, community reintegration) *Individualized supports provided by trained veteran peers	Apply trauma-informed care, ↑ academic self-efficacy	*N/A *Not specified *USA
Davis, et al., 2022	PASS	Young adult college students w/ MHCs (n=12)	Peers with or without MHCs (Onsite)	Open Trial	*Students matched to a peer coach based on shared interests & gender *Coaching helps students identify their academic challenges & plan to achieve goals	Attracts & retains students, Promising support for students w/ MHCs	*Two academic semesters *At least once/week; at least 50-min session *USA
Rudnick & Gover, 2009	SE & SEd Program	Individuals w/ psychiatric disabilities (n=96)	Trained SEd professionals (Onsite)	Open Trial	*Project consists of three stages for each participant *Stage 1 consisted of preparatory education, Stage 2 consisted of supported education in skilled occupation, Stage	Competitive employment, Individual training, Job searching	*Stage 1 - 3 mths; Stage 2 - 1 yr * 5 days/wk *Israel

					3 consisted of posttraining in supported employment.		
Rinaldi et al., 2010	IPS combined w/ SEd	Young people with first episode psychosis (n=166)	Employment specialist (Offsite)	Open Trial *Naturalistic Evaluation	*Focus on vocational issues, vocational needs, assistance gaining work/education sources, welfare benefits advice *Individualized vocational/educational goals	Gaining/retaining open employment & mainstream education	*2 yrs *Fidelity ratings at 6, 12, 18, 24 months *UK
Killackey et al., 2017	Adapting IPS SEd	Young adults w/ SMI (n=19)	Education specialist (Offsite)	Open Trial	*IPS principles informed SEd & SE *Education re-engagement, educational course & goal matching *Enrollment preparation *Supports with transportation, classroom & homework *Educational support staff	Feasible adaptation of IPS to focus on education	*6 months *Not specified *Australia
Maru et al., 2018	Integrated SE - SEd	Participants w/ diagnosed mental illness (n=57)	Trained specialists (Onsite)	Open Trial	*Based on principles of psychiatric rehabilitation, SE, & SEd *Participants were paired with specialist based on developed individual rehabilitation goals *Other standard coaching strategies were employed	Integration of SE/SEd, ↓ Depression, ↑ Stability	*1 year *meet freq. based on goals *USA

					(goal setting, planning for success, etc.)		
Humensky et al., 2019	SEE	Individuals w/ non-affective psychosis (n=779)	SEE specialists (Offsite)	Open Trial	*SEE services are included in coordinated specialty care programs to provide access to early intervention services for psychosis *SEE services geared toward client preferences, (i.e. finding work or enrolling in school) *Provision of on-going support after job start or school enrollment	↑ enrollment	*6 mths up to 2 yrs *Not specified *USA
Ow et al., 2022	YESS	Youths w/ mental illness (n=110)	Two IPS specialists, peer support worker, program coordinator (Offsite)	Open Trial	*1:1 coaching w/ IPS specialist on work readiness & job-matching support *Supports included small group training workshops, vocational counseling/assessments, assistance w/ job search	More than 25% improved, ~33% gained employment	*16 weeks (5-wk intervention; 11-wk follow up) *Twice per wk; 1-hr session *Canada
Ongoing Studies							
Schniedermann et al., 2022	StAB	Adolescents & young adults w/ MHCs (n>75)	Coaches trained by project team (Offsite)	Quasi-experimental	*Individualized IPS coaching, *Address stagnations in development, setbacks, or crises (Coaches trained by project team (Offsite)	Ongoing Study	*2 years *meet as needed *Germany

Note. Articles are organized based on program type: **Self-contained classroom, Orange; Traditional SEd, Green; Occupational therapy-based SEd, gray; Peer-delivered SEd, Yellow; Enhanced SEd (i.e., cognitive remediation), Purple; Combined SEd and SE, Blue.** CR = Cognitive Remediation; IPS = Individual Placement & Support; MHCs = Mental Health Conditions; NSSV SEd = New Start for Student Veterans Supported Education; IP-SEd =

Individual Placement & Support to Education; PASS = Peer Academic Supports for Success; RTE = Redirection Through Education; SE = Supported Employment; SEE = Supported Education and Employment Services; SEER = Supported Education Enhancing Rehabilitation; SEd = Supported Education; SE & SEd = Supported Employment and Supported Education; YESS = Youth Employment Skills Strategy; SEP = Supported Education Program/Supported Education Programme; SMHCs = Serious Mental Health Conditions; SMI= serious mental illness; StAB = Start in education and employment.

Table 3

Effective Components, Implementation Barriers, and Outcomes in 17 Supported Education Real-World Implementation Studies

Author, Year	Program	Participants	Staff/Modality	Design	Focus	Promising Components	Implementation Barriers	Outcomes
Isenwater et al., 2002	College Link Program	Adults w/ long-term mental health issues (n=37)	Psychology grad student (Onsite)	Mixed method/ Implementation	Outcome evaluation of SEd	*Classes encourage peer support & interaction through group work, skill & confidence development for future planning *Designed exclusively for students in population *Focus on recovery & improvement in QOL for community engagement	None	Improved self-esteem, social functioning
Gilbert et al., 2004	RTE	Consumers (n unknown)	Program staff (Onsite)	Implementation/ history	History, challenges, outcomes of RTE	*1980s: two developed phases for transitioning: Phase 1 (self-assessment, self-esteem, confidence building), Phase 2 (vocational orient) *A work placement in local businesses was arranged for participants and Phase 3 was added	Funding barriers, lack of therapeutic supports	RTE adapts over the years

						to build vocational skills & employability *1990s: learning outcomes and specific core competencies to allow for student and program evaluations. *2000s: accommodate an influx of students returning to school, RTE began providing post-secondary courses (study skills, planning and time management, general education courses, computer courses)		
Dougherty et al., 1992	SEd Program (Clubhouse Model)	Laurel House members (n=27)	SEd staff (Onsite/Offsite)	Implementation/ integration	Integration of SEd into clubhouse model	*Four distinct components: assessments of past educational functioning & strengths, development of education & career choices, coordination of services, & administration *Weak social support as influential as academic	None	75% enrolled in community colleges

						difficulties, students in SEd program became more likely active in some other program or organization *SEd integration in clubhouse (Laurel House) complimented existing services		
Cook, & Solomon, 1993	CSP	Students w/ SMHCs (n=125)	CSP staff (Offsite/mobile)	Implementation/ Outcome	Changes & accomplishments for PSE & trade schools	*Core components included career counseling, preparatory classes, tutoring, support groups, & mobile education support *CSP curricula was divided into 3 objectives: clarifying career goals & making the decision to enter college, study & time management skills , research & writing skills *Weekly peer support & tutoring to enhance self-esteem	None	Outcomes included: completing an average of 3.6 classes per semester, receiving degrees ranging from associates to masters, and completing training programs, Increased employment rate, self-esteem, and coping mastery Anxiety did not increase.
Cooper, 1993	ACES Program	Students w/ psychiatric diagnoses (n=22)	MHA staff (Mobile)	Implementation	ACES mobile SEd	*Based on feedback collected from a	Lack of college status for mobile support	All students utilized services

						variety of interested parties *Mobile-support program *Phase 1: academic & financial support (assistance w/ applications, academic advisement, etc.) & a 25-hour orientation prior to semesters to provide college transition, assess student strengths & weaknesses, teach time management & organizational skills Phase 2: start of the semester, continues for enrollment with an education coach available every day on campus (individualized support & peer support)		
Lieberman et al., 1993	SBPC SEP	Adults w/ major psychiatric diagnoses (n=30)	SBPC staff (Offsite/mobile)	Implementation	Hybrid mobile-type SEP & counseling	*Offer outpatients individual support to attend college & maintain enrollment *Provide support to attending colleges *Coordinators assess patient readiness, define & develop appropriate	Cautious clinician referrals	26.6% attended college

						educational goals, assess academic skills, provide information about colleges, & provide initial support during application process *SEP enrollees appreciated the staff & valued the program		
Parten, 1993	Four-site study in California Community College System .	Enrolled students w/ MHCs (n=209)	College/SEd staff (Onsite)	Implementation/ 18-month pilot	Efficacy of accommodation provisions	*3-component systems approach included disability services, special class instruction to promote transition, & temporary crisis intervention *Educational accommodations for students w/ psychological disabilities can include changes in the environment *On- and off-campus resources, crisis intervention, psychotherapy and disability-related counseling, assessment of student needs related to stress, student peer supports	None	Students with MHCs rarely requested inappropriate services 14% drop-out rate in new students and 21% drop-out rate in continuing students

Unger, 1993	Development and Evaluation of Models to Use Community Resources to Meet Client Needs for PSE	Students aged 19-58 (n=94) from four sites, 90% receiving income/benefits	Seven sites with site staff and consultants	Implementation	Community-based SEd	*Explicit instruction of effective mental health & education services *Create programs that incorporate current community resources to address needs of young adults with MHCs *Create models with clear descriptions for replication *Evaluate program effectiveness using established procedures and methods	None	Learned to utilize community resources, acknowledge positive impacts of SEd, and identify challenges
Pettella et al., 1996	Kennedy Center's S.E.P.	Adults w/ psychiatric disabilities (n=15)	S.E.P. staff/Consultant Psychologist (Mobile/Onsite)	Implementation/ Case study	Functional techniques for SEd	*Candidates explore career interests, skills & abilities for long-term vocational goals & educational planning *Support group decides discussion topics based on needs, summer workshops ahead of school year *Individualized tutoring & support skills	None	Techniques facilitate academic success
Bateman, 1997	Statewide SEd Program	Adults w/ psychiatric	Research team (Modality Unspecified)	Implementation/ Focus groups	Phase 1 development of statewide SEd	*Intensive consumer & parent interviews generated three	None	Consideration of family input

		disabilities (n=42); parents (n=18)				themes for their needs, beliefs and values *Theme 1: consumers are interested in attending college because it will help with careers, but fear of attending is stronger *Theme 2: both consumers & parents have little or no, confidence in colleges meeting the needs of students w/ psychiatric disabilities *Theme 3: role of non-cognitive factors is critical to decision making in consumers		
Hain & Gioia, 2004	SEER	Adults w/ psychiatric disabilities (n unknown)	SEER staff (Onsite/mobile)	Implementation	Unique components of SEER	*SEER incorporates values central to successful supported education programs (support, normalization, availability/access, individualized services, dignity, self-determination, flexibility, coordination, hope) *Open enrollment with no delay in	Ongoing funding issues, attrition	~10% go on to PSE within 6 months

						service delivery, multiple contacts made with referred students to increase involvement *Classes offered are individualized to the readiness of the student *Support services are available at all times		
Thompson, 2013	Supported Education Program	Students w/ MHCs /substance abuse (n unknown)	Peer support instructor (Onsite)	Implementation	Emotional well-being benefits	*100% of participants surveyed reported that just attending the peer support course improved their emotional well-being *Most improved area was better understanding of self, followed by better relationships with others and feeling more useful to others, some showed improvement in all areas of emotional well-being	Issues in rural provision of SEd	Improved emotional well-being
Ringeisen et al., 2017	3 SEd sites	Program agency/department leaders; community partners; individuals with	SEd staff (2 off-site/1 on-site)	Implementation	SEd site visits to focus on services offered, participant engagement, evaluation	*SEd staff were oriented towards four SEd objectives: supporting academic goal-setting, building academic	Funding challenges to support SEd program services. A lack of a widely	A need to specify a model of SEd services that can be evaluated and replicated. A need for a rigorous,

		mental health concerns (n unknown)			efforts, successes and challenges.	competencies, navigation, and improving motivation. *One-on-one contacts and group workshops focused on skill-building for academic success. *Coordination between post-secondary education and mental health supports *General supports and linkages with mental health counseling.	accepted and adopted model of SEd service.	multi-site demonstration trial of SEd.
Russell & Strauss, 2004	CAR	Adults w/ psychiatric disabilities (n=1077)	CAR staff (Mobile)	Implementation	CAR as SEE program	*Individualized plans & goals, provides access to a variety of activities for students to choose from, seek & maintain meaningful roles in communities *Basic skills training in computers, study skills, & employment preparedness *Employment preparedness (ADA, accommodation resources, benefits counseling)	Stigma, fear of return to school/work	Fear addressed through support plans

						*Employment within program through peer-tutor mentor program *Connect to funding sources in SEd portion		
McDiarmid et al., 2005	CAP Training	Individuals w/ SMHCs (n=47)	CAP staff (Onsite)	Longitudinal	Consumer employment prep	*Participants learn basic helping skills (verbal & non-verbal communication skills, active listening, interviewing skills, etc) *Opportunities to learn & practice engagement skills & develop strengths assessments *Facilitate recovery from psychiatric disabilities, learned how to develop accommodations *Four major components: classroom instruction, group supervision, internship, assistance to community support programs. *Guaranteed employment upon completion	None	63% employed at 6 months

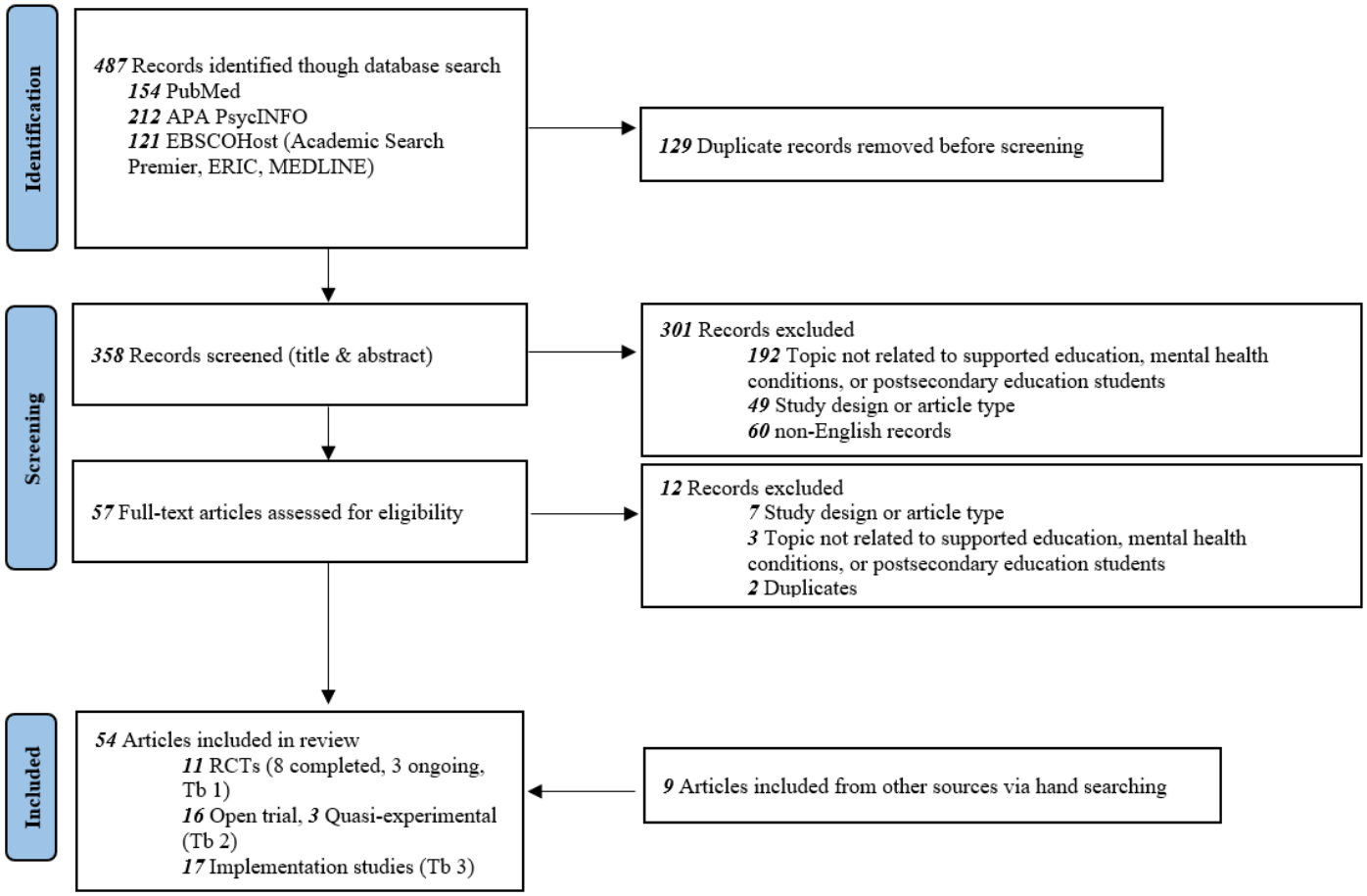
Robson et al., 2010	IPS, SE, & SEd	16–30-year-olds with psychotic diagnoses (n=20) .	Occupational therapists (on-site) at a community mental health service in Australia	Implementation/18-month period	SEd program coordinated with a larger SE program	*Communicated with the on-campus disability support team for any mental health changes or added needs *Individualized/client-centered approach *Consistent principles to both SE & SEd programs *Option to attend peer support Group *OT providers were not affiliated with PSE institutions	Reasons for non-participation include inability to manage workload and a work/school balance, worsening of mental health symptoms, or moved away	60% enrolled at a local university, 30% enrolled in TAFE courses, 10% enrolled in private universities, 70% continued or completed their chosen course of study.
Cohen et al., 2020	IPS & SE	TAY w/ MHCs	CMHP (Offsite)	Implementation/ Case study	Adaptations for TAY	*Two key TAY engagement practices were flexibility in communication & strategically involving family in the intervention *Expansion of rapid job search & follow-along supports (i.e. motivational interviewing) *Most vital part of supporting TAY with accessing & engaging in adapted IPS-services is the integration of	Engagement challenges, funding gaps	Advocacy for TAY-specific policies

						vocational services within clinical services.		

Note. Articles are organized based on program type: **Self-contained classroom, Orange**; **Traditional SEd, Green; Combined SEd and SE, Blue**. CAR = Career Advancement Resources; CAP = Consumer as Provider; CSP = Threshold Community Scholar Program; IPS = Individual Placement & Support; MHA = Mental Health Association; MHCs = Mental Health Conditions; QOL = Quality of Life; RTE = Redirection Through Education; SBPC SEP = South Beach Psychiatric Center Supported Education Program; SE = Supported Employment; SEd = Supported Education; SEER = Supported Education Enhancing Rehabilitation; SEP = Supported Education Program; SMHCs = Serious Mental Health Conditions; SMI = serious mental illness; TAY = Transition-age youth.

Figure 1

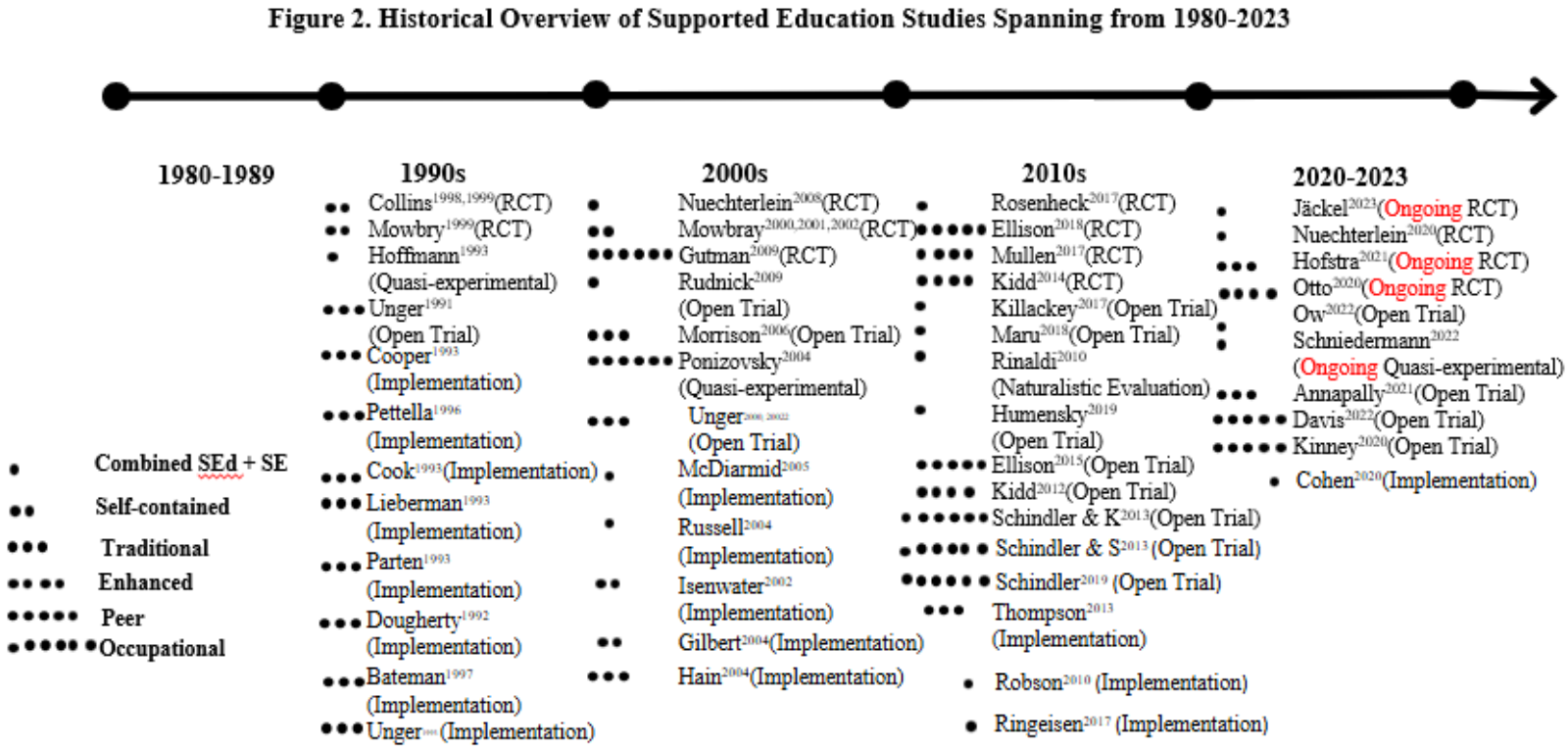
PRISMA Flow Diagram of Study Selection



Note. The Michigan Supported Education Study was counted as 1 RCT with 6 articles and the Bridge Program Study was counted as 1 open trial with 2 articles.

Figure 2

Historical Overview of Supported Education Studies Spanning from 1980-2023



Note. There were no studies between 1980 and 1989 that met inclusionary criteria.