



Employment Support Needs of People with Schizophrenia: A Scoping Study

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Abstract

Purpose People with schizophrenia continue to encounter barriers to employment acquisition. The aim of this scoping study was to identify and synthesize existent evidence about the employment support needs of people diagnosed with schizophrenia. **Methods** Five relevant databases were used: CINAHL, Medline, PsycINFO, SCOPUS, and Web of Science. Additional material of potential interest was identified through the references of the retrieved articles. A manual search for publications from the 3 months immediately prior to the electronic search was carried out in specialized journals. Searches covered the period between 1945 and August 30, 2017 without language restrictions. Two approaches were used to display the data: descriptive analysis and thematic analysis. **Results** Twelve articles met the inclusion criteria, most of which discussed experiences of participation in individual placement and support programmes. Thematic analysis identified four support needs: developing skills, vocational intervention, support and encouragement, and a supportive work environment. **Conclusions** There is a paucity of literature examining and evaluating employment support needs from the perspectives of people with schizophrenia. Future research must look beyond individual factors affecting employment outcomes to consider societal attitudes, stigma and work-related legislation.

Keywords Employer · Employment specialist · Individual placement and support · Paid job · Work-related skills

Introduction

For most people, employment is a core area around which everyday life is organized, interpersonal network are created, and physical and mental activities are carried out. It is therefore unsurprising that people spend much of their lives preparing for the practice of a remunerated activity,

from the first childhood role plays to learning a trade or profession. Previous research in people with psychiatric disabilities has found work participation to have a positive influence on health, daily structure, development of coping strategies, and meaning of life [1–4]. Employment also offers opportunities for leisure and socializing, as well as providing financial gain [5]. Work benefits are particularly valuable to people with schizophrenia because of the high level of disability associated with the disorder [6]. Impairments in neurocognitive and social function contribute to deficits in everyday functioning that extend to all domains, including social, vocational, and everyday living [7, 8]. Therefore, returning to work or engaging in employment are important intervention goals because they are visible signs of recovery [9], indicating less severe expression or sufficient control of symptoms to enable a connection to the social world [10, 11].

Research in vocational rehabilitation can be broadly classified into two approaches: studies about the effectiveness of different vocational rehabilitation models, and studies of work-related abilities and capacities [12]. Findings from the first approach showed that vocational rehabilitation using

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different approaches can improve the employment rate of individuals with schizophrenia [13–15], while findings from the second approach showed the most consistent predictors of employment to be recent work history, motivation and self-efficacy [12, 16, 17]. Research focused on variables affecting the employment rate of this population has also identified the need for wider implementation of and access to supported employment to help individuals with schizophrenia achieve their employment goals [18].

Qualitative studies involving people diagnosed with severe mental illness have found that there are a number of requirements associated with job characteristics and work environment which may affect employment outcomes. For example, the study by Henry and Lucca [19] of people with psychiatric disabilities and employment service providers concluded that quality consumer-provider relationships and individualized employment services were the most important factors in helping clients to achieve their employment goals. For Tse and Yeats [20], goodness of fit between the worker and workplace characteristics, maintaining a sense of hope, and self-determination may help individuals with bipolar disorder to achieve their vocational goals. Despite significant progress, these efforts have not yielded effective solutions for assisting job acquisition and improving job tenure among individuals diagnosed with schizophrenia. As such, research suggests that the subjective experiences of people with schizophrenia must be explored in order to gain greater insight into their needs [21, 22]. With this in mind, there has been little study of employment support needs from the perspective and through the experience of people with schizophrenia who want to work. We believe that an approach focused on understanding employment support needs in this population is crucial not only to improving the employment rate but also to designing models and programmes more specifically adapted to their individual contexts and requirements. Therefore, the purpose of this study was to explore the knowledge available in the literature about the employment support needs of people with schizophrenia. The scoping study methodology was used to explore the literature, enabling us to examine, summarize and disseminate research findings in the particular area of study [23]. The research question addressed by the scoping review was: What do people with schizophrenia need in order to work?

Method

We conducted a scoping study following the approach of Arksey and O'Malley [23], with recommendations provided by Levac et al. [24] to clarify and enhance each stage. Five steps proposed by Arksey and O'Malley [23] were followed.

Identifying the Research Question

Step one involved formulating the research question and designing a search strategy that would identify relevant articles as comprehensively as possible [23, 24]. We focused on the employment support needs of people diagnosed with schizophrenia. Considering that *employment support needs* is an ambiguous term that could encompass various forms of support provided by both employment services and social security services, we restricted the definition to those facilitators relevant to obtaining a competitive job and remaining employed from the perspective of people with schizophrenia. These may include encouragement, on-site counselling and problem-solving. The criteria for competitive job were employment with minimal or higher remuneration, in an integrated setting, and not reserved for people with a mental health diagnosis. We also considered for inclusion people participating in supported employment programmes or individual placement and support, because programmes of this type target competitive employment. Following recommendations by Arksey and O'Malley [23], a wide approach was used to generate breadth of coverage, as reflected in the research question: What do people with schizophrenia need in order to work?

Identifying Relevant Studies

In order to identify primary studies for answering our research question, a scholarly literature review was conducted using five relevant databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, PsycINFO, SCOPUS, and Web of Science. These databases were chosen due to their broad coverage of mental illness, rehabilitation and recovery. The selection of search terms and inclusion criteria was an interactive process based on capacity to respond to the research question. The following search terms were initially selected: schizophrenia, psychotic, psychosis, severe mental illness, severe mental disorder, serious mental illness, serious mental disorder, employment, occupation, job, work, placement, need and support. The preliminary terms were piloted in order to refine and add new terms to the search strategy [23]. The literature search covered the period from 1945 to August 30 2017 and studies from any country or reported in any language, although only reports in English were found. Additional documents were identified through the references of the articles retrieved in the initial search. Next, a manual search for the three months immediately prior to the electronic search (June through August) was carried out to increase confidence in the search. The

following specialized journals were inspected: *Cult Med Psychiatry*, *Int J Occup Med Environ Health*, *Int J Soc Psychiatry*, *J Ment Health*, *J Vocat Rehabil*, *Psychiatr Q*, *Psychiatr Rehabil J*, *Psychiatry*, *Psychiatry Res*, *Scand J Caring Sci*, *Schizophr Res*, *Schizophr Res Treatment*, *Soc Psychiatry Psychiatr Epidemiol*, *Work*, and *Work Occup*. These journals were examined because they were found to contain relevant material in the initial search. Inspection of journals did not identify additional studies that were not found in the database search, indicating that the database search was sufficiently comprehensive. Although a scoping review includes non-published literature in order to examine as broad a knowledge base as possible [23], we decided to focus on published literature to ensure that the implications are relevant to evidence-based practice. More details can be found in Appendix.

Study Selection

A total of 841 potentially interesting abstracts were selected, after identifying and removing duplicate studies. Following recommendations by Levac et al. [24], abstracts were inspected by two researchers working independently. Next, copies of the full articles were obtained and examined by reviewers to assess their relevance to the research question and their best fit with the following inclusion criteria: (a) Studies providing knowledge about the employment support needs of people diagnosed with schizophrenia, psychosis or severe mental illness; (b) Articles including participants with severe mental illness, provided that at least 50% of the participants were diagnosed with schizophrenia or psychosis; (c) Studies focused on competitive employment.

The following articles were excluded: (a) Reviews, meta-analyses, editorials, dissertations, conference abstracts and letters to editor; (b) Articles focused on general daily occupations or unpaid activities. We excluded meta-analyses and reviews because their individual studies and references were inspected and assessed for inclusion at previous step. Since the scoping study does not seek to assess quality of evidence and cannot therefore determine whether particular studies provide robust or generalizable findings [23], we did not use the methodological quality of studies as a criterion for inclusion.

Authors were contacted by e-mail in cases where the proportion of participants with schizophrenia diagnosis was unclear. Where a single research group had published more than one paper for the same target with the same population, only the article with the largest sample was included. If the same research group had published more than one paper with the same population but for different purposes, all of the papers were considered. Two independent reviewers carried out the study selection; any discrepancies were discussed at a consensus meeting with a third reviewer.

Charting the Data

This stage involved charting the data collected into key categories to synthesize and interpret the results and their relevance to employment support needs. A data-charting form and code-book were developed for this study, and the form was continually updated via an interactive process [24]. The initial categories were: year, author, country, title, journal, affiliation of authors, sample and study characteristics, and outcomes relevant to the research question and purpose of the scoping study. The data charting form was modified over the course of the charting phase to incorporate other data pertinent to the key question. Two reviewers independently extracted data from the first five studies using the data-charting form and met to determine whether the approach to data extraction was consistent with the research question [24]. Changes to the form were made after pilot testing and throughout the extraction process. Two reviewers performed data extraction; any disagreement in the codification process was addressed by discussion at consensus meeting involving a third reviewer.

Collating, Summarizing and Reporting the Results

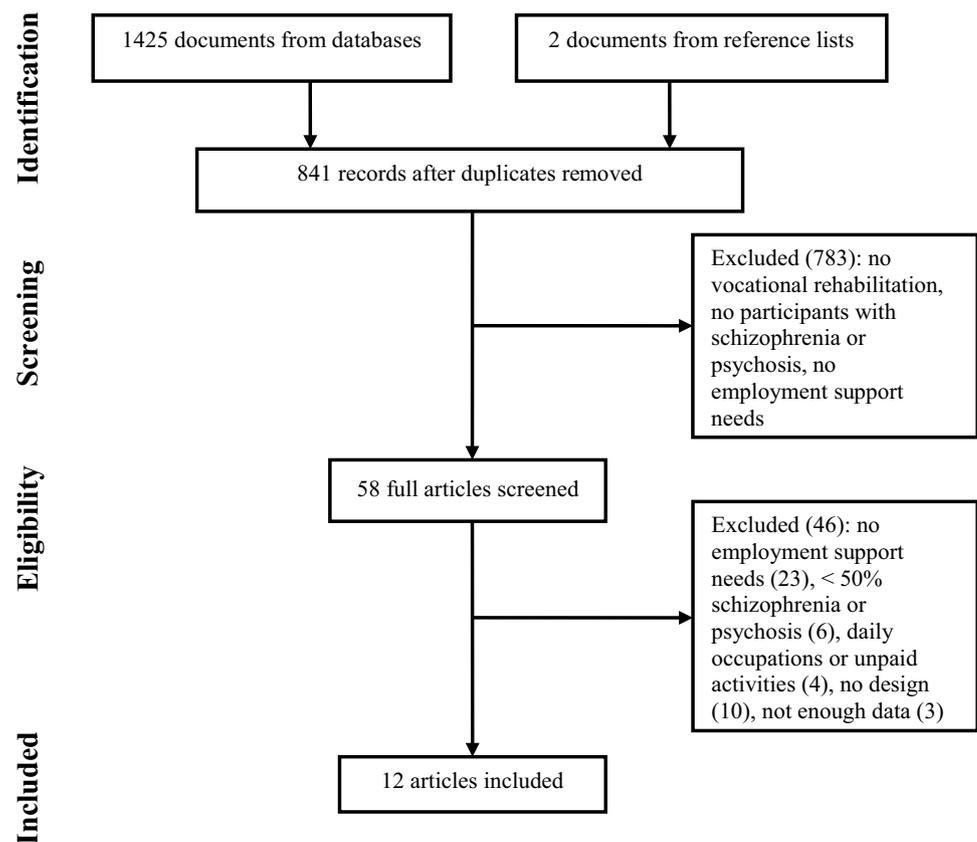
Following recommendations by Arksey and O'Malley [23], two approaches were used to display the charted data as a narrative description in this study. First, a descriptive analysis was made of information pertaining to the scope, nature and distribution of the articles using numerical calculations of frequency. The descriptive analysis focused on country, type of study, design, data analysis and synthesis technique, and the demographics characteristics of the sample. These initial analyses identified the predominant research methods and geographical locations in the literature [23]. Second, the articles were organized and analyzed by identifying and synthesizing recurring themes, points of agreement and points of disagreement [25], as is recommended by Levac [24]. All of the articles were reviewed independently by two authors and summarized to extract information on employment support needs of people with schizophrenia. Four emerging themes were identified: developing skills, vocational intervention, support and encouragement, and a supportive work environment.

Results

Descriptive Analysis

A list of 58 abstracts was retrieved from the databases and reference lists. Of these, 46 studies were excluded and 12 met the inclusion criteria. Details of the selection process are illustrated in Fig. 1.

Fig. 1 Selection process for study inclusion



The articles were published between 1999 and 2017. Australia, Canada, Sweden, United Kingdom, and United States contributed 83.33% of the production, with articles published mainly in journals in the fields of psychiatry and occupational therapy. Research was classified in three categories: qualitative studies, mixed studies and quantitative studies. Ten of the 12 studies had qualitative designs, and five of these used a grounded-theory approach. One article used a mixed approach integrating grounded theory and quantitative methods, and one study used a quantitative approach only. None of the 12 articles directly addressed employment support needs. Six articles explored experiences of participation in individual placement and support programmes. Of these, four articles used convenience sampling considering available and volunteer participants. The remaining six studies focused on employment perspectives such as barriers, recommendations to improve employability, and the relationship between employment and vocational recovery. A purposive sampling method was described in five of these articles. Eleven studies collected information through face-to-face interviews, which were described as structured or semi-structured. Only three articles included 100% of participants diagnosed with schizophrenia or psychosis [26–28]. The remaining articles included between 53.33% [29] and 80% [30] of participants with these diagnoses. The studies involved a minimum of seven and a

maximum of 60 participants. Studies by Areberg et al. [31] and Lexén et al. [32] included the same sample from an individual placement and support trial. More details can be found in Table 1.

Thematic Analysis

Developing Skills

The need for acquiring and developing abilities was reported in six of the articles [26, 28, 31–33, 35]. People with schizophrenia participating in these studies and interested in working emphasised that a job entailed implicit requirements at two levels: employees should work responsibly, independently and perform the required tasks; and they should have specific social skills, such as the ability to cooperate, converse with co-workers and adapt to social demands [32]. This suggests that beyond performing the required work activities, social skills, problem-solving abilities and better coping skills are needed to ensure employment success [28, 32]. Furthermore, having knowledge, skills and education increases the chances of receiving support from an employment specialist and finding an employer [31].

People with schizophrenia also described useful contexts for skill learning. Two studies defined paid employment as a context that provides opportunities to develop job-related

Table 1 Summary of articles included in the scoping study

Authors	Country	Approach	Sampling procedure	Data collection	Data analysis	Participants
Areberg et al. [31]	Sweden	Qualitative approach	Purposive sample from IPS trial	Interview	Qualitative content analysis inspired by Graneheim and Lundman	N = 17, 41.17% female, 64.71% schizophrenia diagnosis, 11.8% employed
Becker et al. [33]	United States	Mixed approach	Convenience sample from IPS trial	Semi-structured interview	Grounded theory: constant comparison through Glaser and Strauss method and descriptive and inferential statistical analysis	N = 38, 41.17% female, 49.2 mean age, 68.42% psychotic disorder diagnosis, 47.3% working competitively
Besse et al. [34]	Switzerland, Singapore, Canada	Qualitative approach	Convenience sample from IPS programme	Semi-structured interview	Grounded theory: constant comparison through Glaser and Strauss method	N = 16, 25% female, 39 mean age, 62.5% psychotic disorder diagnosis
Dunn et al. [35]	United States	Qualitative approach	Purposive sample (criterion-based and maximum variation sampling)	Semi-structured interview	Grounded theory: Strauss and Corbin method	N = 26, 30.4% female, 69.6% schizophrenia diagnosis, 19.2% working full-time
Gladman and Waghorn [27]	Australia	Qualitative approach	Purposive sample	Interview	Applied thematic analysis	N = 39, 41.02% female, 33.13 mean age, 100% psychotic disorder diagnosis
Khalaf et al. [36]	Iran	Qualitative approach	Purposive sample	Semi-structured interview	Qualitative content analysis based on Graneheim and Lundman	N = 10, 20% female, 39.0 mean age, 60% schizophrenia diagnosis
Lexén et al. [32]	Sweden	Qualitative approach	Convenience sample from IPS trial	Semi-structured interview	Qualitative content analysis based on Graneheim and Lundman	N = 19, 42.1% female, 40 mean age, 63.16% schizophrenia diagnosis, 21.05% employed
Liu et al. [26]	Canada	Qualitative approach	Purposive sample based on criteria	Semi-structured interview	Grounded theory: Strauss and Corbin method	N = 7, 57.14% female, 100% schizophrenia diagnosis, 57.14% employed
Mak et al. [30]	China	Quantitative study	Convenience sample from IPS programme	Chinese job termination interview	Descriptive and inferential statistical analysis	N = 60, 66.67% female, 32.4 mean age, 80% schizophrenia diagnosis
Marwaha and Johnson [29]	United Kingdom	Qualitative approach	Purposive sample	Semi-structured interview	Thematic analysis	N = 15, 46.7% female, 53.33% schizophrenia diagnosis, 20% working competitively, 26.67% sheltered or voluntary employment
Nithsdale et al. [37]	United Kingdom	Qualitative study	Purposive sample	Interviews	Interpretative phenomenological analysis outlined by Smith	N = 8, 50% female, 42.13 mean age, 62.5% schizophrenia diagnosis, 37.5% working competitively
Peckham and Muller [28]	Australia	Qualitative approach	Not informed	Semi-structured interview	Thematic analysis	N = 7, 100% schizophrenia diagnosis

IPS individual placement and support

skills [35, 36]. For Khalaf et al. [36], the continual provision of new circumstances makes the workplace an ideal context in which to acquire new experiences and competences. Similarly, daily contact and social interactions with co-workers increase the individual's sense of belonging and the possibility of building a social network. However, acquisition of work-related skills was not exclusive to the competitive work context. There were a variety of useful contexts for developing specific skills that increased employability, including part-time or volunteer employment, returning to school, or participating in a vocational programme [28, 35].

Vocational Intervention

Four of the articles [26, 31, 33, 35] reported that support from an employment specialist was a critical resource for job acquisition. Two studies described specific facets of employment specialists that contributed to their effectiveness [31, 34]. Participants in the study by Areberg et al. [31] noted that abilities such as the sensitivity to needs, a focus on solutions and an attitude that does not question individual experiences or dwell on difficulties were key to building positive relationships. Similarly, practical help in finding a job and a “neutral third party with whom participants could talk about their difficulties at work and search for solutions” (p315) made the job search more effective [34]. In fact, for some people, individual placement and support workers provided crucial assistance in times of instability due to the cyclical nature of their mental illness [33]. Despite these advantages, one study described that over-assistance could be a hindrance in work-related situations, as it could cause some people to doubt their own competence and diminish their self-confidence [26]. Moreover, given the limited support received by some participants with previous employment experiences in the private sector, it was concluded that the employment specialist should have a proper knowledge of companies in the area in order to support participants with different needs and preferences [31].

Three studies [26, 32, 33] identified the supported employment approach—particularly individual placement and support—as a useful form of intervention to help people to obtain competitive employment. An individual placement and support programme, the evidence-based model of supported employment, involves a rapid job search, eligibility focused on client preferences, ongoing follow-up with individualized support, and integration of mental health and employment services. These characteristics give people with schizophrenia the opportunity and support to access and perform a worker role, not only as a first job but also after several previous jobs, in the development of a career, and in the maintaining of a stable worker role [32]. However, some people with schizophrenia in a study by Liu et al. [26] noted that supported employment was only a useful tool to remove

barriers in the search for a job, whereas personal readiness and job-seeking effort were the key factors in obtaining employment.

Support and Encouragement

Six studies described support and encouragement as important to employment success [28, 31, 33–35, 37]. Supportive relationships with family, mental health professionals, employers and co-workers were sources of hope and encouragement, which enhanced the confidence to work and increased work-related skills. Participants who worked in a family business experienced a level of support and flexibility, and ongoing assistance that would have been hard to find elsewhere; however, these participants also noted that they needed to be willing to accept this support from family members [35]. Support and encouragement from health professionals were also essential to strengthening the confidence to work, especially when a trusting therapeutic relationship was established and when health professionals provided advice about mental health and gave ongoing support through fluctuations in participants' mental health. In fact, clinicians who had a good relationship with the participants were more likely to persuade them to accept help from services [37]. Furthermore, support provided by mental health-care teams and welfare systems increased the participants' belief that finding employment was a realistic outcome [31].

Some intrinsic characteristics were also identified as sources of self-encouragement in two studies [27, 34]. For participants engaged in competitive employment, the belief that they could succeed and an overall trust in themselves were the major factors that had helped them to find or maintain a job [27]. Similarly, confidence of others in their capabilities increased their self-confidence, providing a buffer against stress in the workplace. Thus, participants' readiness, effort toward job-seeking [26], and work-related self-efficacy [27] appear to be relevant aspects to understanding continuity in a particular job.

Supportive Work Environment

Two studies described a range of employer attitudes that influenced work integration [31, 32]. Employers who provided feedback on work performance and adaptations in the workplace helped to foster connection and integration at work [31]. Similarly, employers perceived as being supportive, tolerant and friendly played an important role in creating a welcoming social environment in the workplace. By contrast, employers perceived as being demanding or controlling had a negative effect on participants' work performance [32].

An appropriate adjustment between job and worker and a flexible working schedule were identified as relevant

requirements in four studies [29, 30, 33, 35]. Ensuring person-job fit in terms of vocational interests, abilities, experiences and career goals [30, 35] not only helped the worker feel connected to the workplace [35], but also increased job tenure [30]. Similarly, working a few hours a day rather than a whole day and working a few days a week rather than a whole week were identified as very helpful measures, with two particular advantages: participants were subjected to fewer demands than in full-time work but maintained access to social security and health care benefits [33]. Moreover, participants who were unemployed noted that part-time work was preferable because they could not envisage coping with full-time work [29]. Other important requirements were that employers made some time allowances at the start of employment and provided a structure with step-by-step instructions for carrying out the work, supervising and giving feedback about performance [32]. Specific characteristics of the job itself such as not involving overly challenging or repetitive tasks and receiving a stable and a reasonable salary also encouraged people to continue working [30].

Discussion

Access to employment is a central factor to psychosocial integration, contributing to health improvements, facilitating the organization of daily life [1, 3] and increasing opportunities for recreation and socialization [5]. For people with schizophrenia, access to employment entails overcoming a series of obstacles and dealing with a series of needs, appropriate handling of which can improve not only the likelihood of getting a job but also the chances of remaining in employment.

This scoping study shows that the literature on employment support needs is scarce and was published between 1999 and 2017. The studies included were found in several journals in the fields of psychiatry and occupational therapy. High-income countries—Australia, Canada, Sweden, United Kingdom and United States—were the major contributors. Most studies reported qualitative research using a grounded-theory approach. Sample sizes varied across the studies and the proportion of participants diagnosed with schizophrenia and psychosis ranged from 33 to 80%. Four themes were identified in the thematic analysis, which broadly summarize the current knowledge and may serve to guide future research and evidence-based intervention designs.

The findings suggest that, in addition to job-specific abilities, there is an unmet need for training in practical abilities such as work-related social skills, coping skills and problem-solving skills among individuals with schizophrenia who want to work. This may be partially attributed to early illness onset, which hampers the completion of formal education and preparation for employment. As a result, people

with these conditions are likely to remain unemployed or have only brief and discontinuous employment experiences. These findings also suggest that people with schizophrenia face a major challenge in the workplace: establishing proper social relationships, which are essential to professional adaptation and integration. Indeed, the literature notes that employers focus on workers' social and emotional skills once their professional skills and qualifications have been assessed [38, 39]. As such, finding employment is contingent on more than simply possessing the skills and competences to perform the functions of the desired role. Addressing social, emotional and coping abilities to enhance employment prospects, in addition to education and training, can help people with severe mental illness to gain the competitive work skills needed to move beyond entry-level employment [19].

Beyond these initiatives, it is evident that the brief job tenure of workers diagnosed with severe mental illness or schizophrenia continues to be a problem [14, 40]. Consequently, a receptive and comprehensively trained employment specialist and an individual placement and support intervention were also identified as essential employment support needs [26, 32, 33]. Support from an employment specialist capable of building good relationships with employers and adopting a client-centered approach can not only improve employment rates [41] but also help people with mental health diagnoses to cope better with challenges in the workplace, thereby contributing to improved job tenure. Moreover, characteristics of individual placement and support as flexibility and accommodation for varying degrees of disability, an emphasis on finding a job that fits each individual's skills and experiences, and effective relationships between employment specialists and clients were key factors in facilitating access to employment [42]. Consequently, a combined vocational intervention comprising a model aimed at enhancing the employment rate and other interventions targeting the significant deficits associated with schizophrenia, such as neuro-cognitive therapy and job-related social skills training, appears to hold the key to addressing job acquisition and job tenure [14, 43].

Different sources of support and encouragement were also described as resources for coping with working life and illness. For people who wanted to work, the encouragement and support of family, health professionals and employers increased their confidence in the value of employment as an important means of recovery. The ability of health professionals and welfare workers to provide individualized and flexible support was essential to empowering people to achieve their employment goals, particularly for those with restricted employment experiences. However, there is also evidence that health professionals and welfare systems play a contradictory role in job-seeking depending on resource availability. Support for job acquisition is difficult to attain

when consultation time is limited and integrated employment services are unavailable [44]. Moreover, the views of health professionals influence the type of support they provide and the work roles that they consider suitable for people with schizophrenia. Indeed, some health professionals consider that the most appropriate jobs are those that require low levels of technical skill and are not always offered on the open market [45]. Welfare systems provide benefits for many people with schizophrenia, yet this also makes them a barrier to employment, as many people who could work do not attempt to for fear of losing these benefits [18, 42]. Also, the availability of adapted companies and social enterprises, or benefits such as free public transport for participants in sheltered employment programmes, can be considered obstacles to the pursuit of competitive employment [46].

At the healthcare level, incentives for recovery must go beyond treatment of symptoms to include as far as possible the appropriate intervention to enable people with severe mental illness to operate in the community. An intervention conceived in these terms offers several advantages to people with schizophrenia, such as increasing their chances of interacting with other people and putting into practice the social skills and problem-solving abilities needed to adapt to the workplace, as well as ensuring the support of patient organizations and associations. This scenario calls for health professionals with the training and willingness to treat employment and life in the community as relevant recovery goals. It also requires health professionals to be competent at developing strategies that enable individuals to envisage a vocation or personal future, and to provide extensive assistance in re-learning the nature of decision-making and the steps involved in goal-setting [20].

Consistent with the current literature [47, 48], positive attitudes from employers were described as a decisive factor for connection and adaptation at work among people with schizophrenia. Employer attitudes clearly play a central role in the success of workplace inclusion, both in the extent to which people with disabilities are accepted in professional life and in the degree to which reasonable job accommodations are made. Those employers who report positive interactions with individuals with mental illness are more willing to hire a person with such a diagnosis [49]. Again, employers with experience of a diverse workforce find it easier to accommodate a person with a disability because they consider disability to be another form of diversity [47]. Employer attitudes can also influence the willingness to make reasonable job accommodations for staff with disabilities. In this study, similar to previous findings [48, 50], we found job accommodations needed to enhance the job tenure of people with schizophrenia, such as flexible work-schedule, modified training and supervision. Moreover, a proper fit between vocational interests, talents and job goals was reported as relevant not only to meeting the demands

of the job itself but also to feeling competent and qualified, which boosts self-confidence. In fact, there is evidence to suggest that achieving a proper job match for people with mental disorders who are working competitively and receiving employment support services is associated with higher job satisfaction and longer job tenure [19, 39]. However, studies involving employers indicate that individuals with mental disability must overcome a series of barriers to employment deriving from concerns about their condition, potential job performance and ability to deal with money and confidential information [48]. Lack of knowledge and understanding among employers about the respective disability and what constitutes reasonable accommodation, and concerns over high accommodation costs and training time, are also barriers to employment [50]. Consequently, employment outcomes can be enhanced if employers have more accurate information about what is entailed in hiring individuals with mental health needs and if the rehabilitation community provide active support to employers with less experience and limited internal personnel resources [47].

Gaps and Limitations

Although the literature included in this study has contributed to the knowledge base on employment support needs, certain gaps and limitations were identified. First, our aim was to explore current knowledge about the employment support needs of people diagnosed with schizophrenia. Given that there was no specific published literature on the topic, we mainly considered the needs or requirements identified by people who participated in individual placement and support programmes, which use a model intended to improve access to competitive employment. Therefore, the findings presented here must be interpreted within a context where people received individualized and sustained support over time, which helped them to identify their interests and employment goals. Second, despite the broad approach used to identify potential studies, we only found articles in English, most of them from high-income countries, where there is extensive and widely documented experience of research in the field of vocational rehabilitation. Therefore, the trends and gaps identified in the literature can only be considered for the countries in question and are not representative of other contexts in which people present different needs in relation to the labour market, the welfare system and disability inclusion legislation. Third, consistent with scoping study methodology [23], we did not assess the quality of the literature included; nevertheless, this could hamper the detection of gaps in the literature, particularly when the quality of existing research is uncertain. Finally, given the dearth of studies in which all participants have been diagnosed with schizophrenia, we included studies of mixed samples with at least 50% of people with schizophrenia

or psychosis. Despite the limitations, this examination of employment support needs identified certain factors that affect employment retention in people with schizophrenia.

Conclusions

It is clear that treatment for people with schizophrenia must target more than the simple alleviation of symptoms, enabling people to pursue a life plan that provides sufficient autonomy to maintain satisfactory occupational, recreational and emotional lives in the community. Employment support needs must be addressed for people with schizophrenia who wish to work, to tackle the barriers to job acquisition and the difficulties of remaining in employment. This requires an approach that targets—but is not restricted to—individuality and rehabilitation, stressing the importance of education to reduce stigma, amendments to existing legislation to facilitate job acquisition, and the adaptation of welfare systems to allow workers with serious mental illness continued access to social benefits. Future research should also address employment support needs from the perspective of all participants in the job acquisition process, from the jobseekers themselves to those who take the hiring decisions. This should provide answers to some of the questions regarding the poor job tenure of people with schizophrenia and provide the knowledge to design programmes through which the problem can be addressed.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

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