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Interventions for Supporting Career Transition among Students with Visual Impairments

Intervensi untuk Mendukung Transisi Karir pada Siswa Tunanetra

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Abstract:

Purpose: Various interventions and career support services are necessary to aid visually impaired students in transitioning to a new career and becoming fully integrated into society. This article examined some interventions for assisting students with visual impairments (VI) to experience a smooth career transition.

Design/Methods/approach: This research was conducted using a narrative-integrative review research approach. From an array of data sources, an investigator can provide a viewpoint on a subject matter by using a narrative-integrative review.

Findings/Results: The interventions for assisting students with visual impairments in the career transition process were classified in this article as educational interventions, family participation interventions, work-based learning interventions, interagency and transition service intervention, career mentoring as an intervention, knowledge of career and job-searching ability as an intervention, and transition programs as intervention. The author in this article addressed various issues associated with the implementation of the interventions. Also, the author discussed strategies that can be adopted to facilitate the implementation of the interventions in order to promote the career transitioning of students with visual impairments.

Implications: There is a need for collaboration in implementing interventions toward facilitating career transition for students with VI. The interventions outlined in this article should be implemented collaboratively by a team of teachers, psychologists, career professionals, families, and other important agencies. Using the article as a point of reference, it will be possible to categorize and target interventions to facilitate career transition for students with VI.

Keywords: Career transition; Curriculum; Inclusive education; Intervention Strategy; Visual Impairment

Abstrak:

Tujuan: Berbagai intervensi dan layanan dukungan karir diperlukan untuk membantu siswa tunanetra dalam transisi ke karir baru dan berintegrasi sepenuhnya ke dalam masyarakat. Artikel ini mengkaji beberapa intervensi

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untuk membantu siswa tunanetra (VI) agar mengalami transisi karir yang lancar.
Desain/Metode/pendekatan: Penelitian ini dilakukan dengan menggunakan pendekatan penelitian review naratif-integratif. Dari berbagai sumber data, penyidik dapat memberikan sudut pandang terhadap suatu pokok permasalahan dengan menggunakan tinjauan naratif-integratif.
Temuan/Hasil: Intervensi pendampingan siswa tunanetra dalam proses transisi karir diklasifikasikan dalam artikel ini sebagai intervensi pendidikan, intervensi partisipasi keluarga, intervensi pembelajaran berbasis kerja, intervensi antarlembaga dan layanan transisi, pendampingan karir sebagai intervensi, pengetahuan tentang kemampuan karir dan mencari kerja sebagai intervensi, dan program transisi sebagai intervensi. Penulis dalam artikel ini membahas berbagai permasalahan yang terkait dengan implementasi intervensi. Selain itu, penulis juga membahas strategi yang dapat diadopsi untuk memfasilitasi implementasi intervensi guna mendorong transisi karir siswa tunanetra.
Implikasi: Perlunya kolaborasi dalam melaksanakan intervensi untuk memfasilitasi transisi karir bagi siswa dengan VI. Intervensi yang diuraikan dalam artikel ini harus dilaksanakan secara kolaboratif oleh tim guru, psikolog, profesional karir, keluarga, dan lembaga penting lainnya. Dengan menggunakan artikel ini sebagai referensi, akan dimungkinkan untuk mengkategorikan dan menargetkan intervensi untuk memfasilitasi transisi karir bagi siswa dengan VI.

Kata Kunci: Transisi karir; Kurikulum; Pendidikan inklusif; Strategi Intervensi; Gangguan Penglihatan

Introduction

Individuals with visual impairments (VI) may be unable to access conventional career pathways and may require specialized interventions and support in order to succeed. The term "visual impairments" describe conditions of vision loss to the extent that it affect an individual's ability to see clearly. Estimates showed that roughly 19 million children globally are visually impaired, with 14 million of them being blind (Mariotti, 2012). Globally, childhood blindness accounts for a minor fraction (4%) of the causes of blindness (Teplin et al., 2009). However, the illnesses that cause childhood visual impairments are highly diverse, and they can be associated with other issues necessitating comprehensive care measures for afflicted children (Rahi, 2005). The transition of visually impaired students from school to the workplace is fraught with many challenges, which highlights the importance of exploring different interventional strategies to aid in the smooth transition of visually impaired students into the workplace. In terms of employment rates, 39.5% of visually impaired students between the ages of 20-24 are employed compared to 63.8% of their sighted counterparts, which demonstrates a significant employment gap between visually impaired students and their sighted counterparts (Kirchner & Smith, 2005; McDonnall, 2011; Wagner & Blackorby, 1996). Due to the low employment rate of visually impaired students, specialized interventional programs have been developed to

address this issue. With the help of these programs, visually impaired students have been able to transition successfully into the workplace over the years. The first school-to-work intervention program was established at the Perkins School for the Blind which aims to assist graduates in obtaining gainful employment. Many other organizations that offer support to the visually impaired currently provide specialized transition programs intended to assist visually impaired students in their transition from school to employment (Cavenaugh & Giesen, 2012). Further, there is a need to conduct a scientific investigation of programs and interventions that will inform policies and practices that will close the disparities that exist between visually impaired students and their sighted peers in terms of employment rates.

Most psychologists in schools and other educational facilities have little professional development or insight about certain populations such as visually impaired students, and since there is a growing percentage of these children being integrated into regular educational settings, it is necessary for school-based psychologists to have a basic knowledge of specialized programs and intervention strategies for students with visual impairments (Erchul & Turner, 1987). The distinctiveness and intricacy of the problems associated with visually impaired students make effective addressing of the requirements of such students challenging. Thus, interventions are most typically used to offer a holistic evaluation and assistance to students with visual impairments (Erchul & Turner, 1987). When visually impaired students have educational and behavioural difficulties, there is a need to implement an intervention strategy to get them back on course. Interventions are actions used in the classroom that are targeted at assisting students with visual impairments to succeed in class, work of work, or reduce maladaptive behaviours. The intervention should be made as a collective agreement based on the requirements of the students and the obtainable resources (Marquis, 2017). In light of these, the purpose of this article is to discuss some interventions that promote career transitioning of students with visual impairments.

Education is a lifelong process aimed at maximising one’s potential and future prospects. For students who are blind or visually impaired to attend the general education core curriculum and participate actively in society, their specific learning requirements must be met. Special educational needs refer to a limitation in the person's willingness and capability to actively engage in and receive support from the educational environment due to a longstanding physiological, sensory, psychological wellbeing, or neurodevelopmental disability, including visual impairments, or any other ailment that causes a person to learn in a way that is different from a healthy person (Smith, 2010). A significant proportion of students with special

educational needs reside in resource-limited areas where they are frequently subjected to neglect, marginalization, and humiliation (Barbette et al., 20001). Change in this situation could be attributed to the passage of policies that mandate that students with special needs, including those suffering from visual impairments, be included in the regular educational system. Educating children with disabilities is fundamental to their well-being, as it is to all children, but it also serves as a springboard for their participation in work and other activities of civic engagement. Many cultures place a high value on attending school as a means of developing oneself. Individuals with disabilities can benefit from social relationships that can transform their social status and affirm their rights (Nott, 2008). When students with disabilities have the opportunity to interact with non-disabled children in a supportive, inclusive school environment, they gain a greater level of familiarity and a reduced level of prejudice.

Cameto and Nagle (2007) stated that around 28% of out-of-school visually impaired students are in workforce. As a result, educators confront a huge challenge in offering educational services that will improve career transition success rates. A detailed awareness of the student's specific requirements is required to establish and administer successful programmes and services for visually impaired students. Furthermore, achieving adult independence requires a comprehensive understanding of the interventions necessary to achieve this outcome. It is extremely valuable for administrators to have a thorough understanding of specialist staff, resources, facilities, and classroom settings. This will enable them to design individualized educational programs to meet the needs of this particular student group (Virginia Department of Education., 2017). Learning by experience is important for students with visual impairment. Sighted newborns observe and arrange their surroundings before they even begin to crawl. In their early years, children classify objects in their surroundings based upon their size or shape, similarity or dissimilarity, roughness or smoothness. There is a constant search for ways to be in contact with items that are beyond their reach. Parents, teachers, and others frequently provide assistance to children who are visually impaired so that they may experience items that are not within their reach. In order to create an optimum learning environment for visually impaired students, informed parents and instructors must get involved. Visually impaired students require the ability to learn and access knowledge just like their sighted counterparts who are able to pick it up on the spur of the moment. Also, these students should be exposed to the extended core curriculum (ECC) as early as possible. This will assist to address issues directly related to their eyesight problem in conjunction to the standard education that all students acquire (National Association of State

Directors of Special Education, 1999). Communication skills, orientation and mobility (O&M) skills, and the ability to live independently are among the topics covered in the ECC.

In addition, to be able to adjust to regular educational settings, students with visual impairments must also develop alternative skills. In mainstream schools, most of the curriculum is tailored to meet the needs of sighted students. There are a number of changes and improvements that need to be made so that visually impaired students can fully participate in the classroom. These include teaching braille, using optical devices to add to printed text, and using auditory resources to analyse and understand sensory images (Virginia Department of Education, 2017). Students with visual impairments may be able to attain academic achievement in the least restrictive setting regardless of their disability. Thus, instructors for special educational needs also contribute to the development of Individualized Education Plans (IEPs) for students with disabilities including the visually impaired students. An Individualized Education Plan (IEP) establishes specific goals centred on a student's needs and ability. Teachers collaborate closely with parents to educate them about their social – emotional, and intellectual development as well as to assist them in the development of their emotional well-being, their ability to handle social situations comfortably, and their awareness of socially acceptable behaviour (Coleman, 2005). Similarly, parents, counsellors, educational psychologists, occupational therapists, allied health professionals, and physiotherapists engage and cooperate with special education professionals (Oyez et al., 1987). This form of partnership will make it more convenient to satisfy the educational demands of visually impaired students and thus prepare them for future career transitions.

Research Question

What are the interventions that promote career transitioning of students with visual impairments?

Method

A narrative-integrative review research design was used by the author. A narrative-integrative review allows an author to generate perspectives on a topic from a range of data sources and electronic literature search databases such as PubMed, ERIC, JSTOR, Google Scholar, PsycINFO, and Scopus which were consulted using desired keywords. The literature search included peer-reviewed papers published over the years. The keywords used during the search include interventions for visually impaired students, strategies to promote career transitioning of visually impaired students, students with special education needs, and career transition.

Results and Discussion

Generally, education has as its primary objective to foster the development of self-sufficient adults and engaged citizens. Students with visual impairments may find career transition challenging. However, with appropriate interventions and support, they can overcome barriers to career transition and pursue successful careers. It is possible that through implementation of strategies like adapting career resources, offering educational and assistive technology training, providing career coaching and mentorship, employers, schools and other relevant stakeholders can contribute meaningfully to the career transition success of students with visual impairments. As a result, various interventions and career support services are necessary to aid visually impaired students in transitioning to a new career and becoming fully integrated into society. These interventions should be aimed at ensuring that they have access to school on an equal basis with their sighted peers, as well as the opportunity to enhance their independence and social participation(Lindstrom & Beno, 2020). This section showed among others that family participation, work-based learning interventions, and career mentoring interventions are some of the interventions that may enhance the transition to employment for students who are visually impaired.

Educational interventions

Interventions that promote the participation of visually impaired students in educational settings may have a major influence on the employment of visually impaired pupils. Currently, the education system is designed to ensure equal access for both visually impaired and non-visually impaired students. However, with this development, visually impaired students may maximise their potential to grow as independent learners within the educational system as well as prepare for adulthood, independent living, and a career. Many vision impairment education specialists have suggested various approaches for monitoring the success of school - based interventions programmes for visually impaired, while reflecting different perspectives on the nature and purpose of an educational intervention for students with visual impairments, such as desired academic performance, the design of coursework, and the availability of inclusive/specialized services (Douglas et al., 2016; Hewett et al., 2017; McLinden et al., 2016; McLinden & Douglas, 2014). It is pertinent that visually impaired students be provided with educational settings that promote inclusion, learning, and equal access to education and training that will enable them to develop independent skills that will promote independent learning and social inclusion. This is one of the focuses of interventions in place in most schools. The expanded core curriculum (ECC) is an important aspect of the educational intervention. The ECC according to Sapp and Hatlen (2010) represents a broad notion of independence. The ECC provides instruction on every aspect of learning that visually

impaired students are required to master in order to achieve their career goals. ECC covers a wide range of topics, including accessing career education, ability to live independently, orientation and mobility skills, relaxation and outdoor adventure skills, ability to motivate oneself, communication and social skills, assistive technology use, and sensory responsiveness skills (Hatlen, 1996; Koenig & Holbrook, 2000; Sapp & Hatlen, 2010).

Also, educational interventions that promote career transition for students with visual impairments foster social interaction, mathematical skills, access to exams, mobility and independence, intellectual functioning, behavioural-emotional functioning, braille printing, vision-impaired mentoring, instructional support, and ensuring minority language and cultural participation. Education has provided many interventional strategies to promote the communication abilities of visually impaired students through early conversation and linguistic training, as well as supplementary and augmented communication technologies. This approach is referred to as compensatory or functional academic skills and communication in the expanded core curriculum (Holbrook & Ellen Croft, 2017). This section of the ECC includes modalities of communication for challenged pupils, particularly those with sight problems. The ECC includes facilities for students with disabilities, especially those with visual impairments, such as tactile graphics, a scheduling system, gestures, and taped lectures (Holbrook & Rosenblum, 2017). Students with visual impairments require a high level of compensatory and functional skills. Compensatory abilities, as defined in the ECC, allow visually impaired students to study in the same way as their sighted counterparts (Sapp & Hatlen, 2010). On the other hand, functional skills provide visually impaired students with skills that will enable them to work, play, socialize, and live independently (Holbrook & Rosenblum, 2017). Inclusive regular schools that utilise generic teaching approaches adopt compensatory and functional skills to guarantee that visually impaired pupils have equitable access to educational opportunities. They do this by combining ways to improve visual presentation, like high-contrast line drawings, with other, non-visual ways to show things, like touch and sound. The augmented communication system, on the other hand, is included in the ECC. This part of the ECC is also used to support the communication development of visually impaired students as it provides them with physical symbols, such as three-dimensional cards packed with items meant to depict people, a location, an event, an artefact, a concept, or an action (McLinden & McCall, 2002). Each of these symbols serves a specific purpose, such as making career decisions, daily timetable activities, and expressive communication, all of which can have a significant implication on the career transitions of visually impaired students. A study carried out by Ivy et

al., (2016) integrated the Picture Exchange Communication System with tangible symbols to help the students have access to symbols. The study's finding showed that with tangible symbols and communication partners, visually impaired students can maintain learning for so long and develop their communication skills, which are needed in the workplace. The most popular educational intervention is microswitch interventions. This type of educational intervention provides a supportive speech-output system or devices that facilitate communication skills or choice-making through vocalisations for disabled students who are visually impaired (Parker et al., 2008). The educational interventions provide visually impaired students with occupational skills that promote career transitions (Terlektsi et al., 2019).

Family participation interventions

Family plays an essential role in the lives of students with disability including those with visual impairments and as such can have a positive impact on their career transition. Parental engagement is beneficial in the career transition and implementation plan for visually impaired students (Crudden, 2012). Previous research shows that disabled students including those with visual impairments have a higher chance of finding work after schooling if their parents are interested and actively participating in their schooling. Also, the participation of parents in the education of their visually impaired wards at home has a positive impact on the postsecondary school enrolment than those whose parents were not involved (Papay & Bambara, 2014). Additionally, the participation of family in the education of their children especially those with visual impairments plays a major role in the successful transition of from school to work environment. The interventions provided by family ranges from serving as a role model to their visually impaired wards by providing them with consistency and stability during career transitioning. The family is also an integral part of the individual educational planning (IEP) contributing to decisions with regards to the IEP goals, services and support that promotes career transition for students with visual impairment (Lindstrom & Beno, 2020). Furthermore, family are well-versed in the learning progress of their children, hence providing chances for families to communicate their understanding of their children's entire development process was a beneficial method in identifying the educational needs of the student. This type of information is used by professionals in addressing the career need of the visually impaired student (Yesilkaya et al., 2021). Similarly, parents are the most definitely long, consistent support network that a visually impaired student will have over the many periods of transition (Hutchins & Renzaglia, 1998). Their personal knowledge of these individuals is a valuable asset for teachers and rehabilitation specialists (Houser et al., 1987). The family also provide social support to visually impaired students which facilitate their psychosocial development (Luthar

et al., 2000; Masten, 2001). Student with visual impairments require social support which the family provides, in order to improve their social functioning and interaction and be able succeed in the work environment.

Work-based learning interventions

An integral part of transition best practises is the use of work-based learning as an effective means of preparing students with disabilities, including the visually impaired, in order to find work and professional prospects. For many years, studies in special education have consistently shown that participation in work-based learning plays a significant role in predicting post-school employment among students with visual impairment (Dong et al., 2016). A study indicates that students with disabilities who engage in compensated or voluntary jobs experiences throughout college and university education are significantly more likely to obtain employment after graduation (Luecking & Wittenburg, 2009). Students with visual impairments can take part in a wide range of work-based learning activities such as workplace training/career mentoring, community engagement, relevant career courses and tracks, school-based business, and paid or unpaid internships. The work-based learning intervention gives visually impaired students a suitable platform to develop soft skills, decision-making and problem-solving abilities, job-related skills and hands-on experience, career awareness, and connections with possible employers (Lindstrom & Beno, 2020). This has a positive impact on career transition of visually impaired students as it enables them make informed decisions.

Interagency and transition service intervention

The transition from school to work for visually impaired students is a complicated operation that necessitates collaboration across the organisations concerned (Kohler & Field, 2003; Noonan et al., 2008; Test et al., 2009). An interagency collaboration aims to bring actors together to combat challenges spanning many different systems. Facilitating career exploration and transition for students with visual impairments can be made possible by collaborating with stakeholders to drive career activities (Frentzel et al., 2021). Transition services are intended to help students with disabilities as they get ready for employment or a post-school educational setting, and interagency collaboration has also been shown to be a significant predictor of post-school employment and academic success for students with disabilities as well as those who visually impaired. In order to facilitate the transition from school to after-school activities for visually impaired students, a transition plan must be created by his or her IEP team prior to their 16th birthday. Several agencies provide services that assist children with disabilities in

navigating a demanding and diverse transition process. This transition plan in schools is one of many programs available to children (Lindstrom & Beno, 2020). To support successful career transitioning for students with visual impairments, collaborative efforts are needed from orientation and mobility (O&M) practitioners, community support providers, instructors of disabled students, educational agencies, adult partner agencies, qualified vision rehabilitation therapists, general educators, or even the family (Brown et al., 2013). According to the Individuals with Disabilities Education (IDEA) Act of 1990, efforts involving multiple agencies are required. At least sixteen years of age, the Individualized Transition Plan must include a description of the predicted services the student will require in order to transition to independent living, as well as a description of any affiliations or commitments with agencies other than the student's own (Noyes & Sax, 2004). Thus, interagency collaboration is a critical component in delivering excellent transition services to students with visual impairments that will assist them in successfully moving to a job.

Career mentoring as an intervention to promote career transition for SVI

Visually impaired students often encounter difficulties in getting full-time employment especially in a poorly performing economy (Coffey et al., 2014; McDonnall et al., 2013). Among the difficulties encountered include a lack of early job experience, mobility issue, inadequate access to career mentors, hostile nature and attitude of employers, poor development of professional skills and blindness skills, and low self-advocacy and assertiveness (O'Mally & Antonelli, 2016). Students with visual impairments struggle to find jobs despite having the greatest percentage (78%) of university education enrolment among students with disabilities (Burgstahler, 2001; Newman et al., 2011; Roessler et al., 2007a).

The role of career mentoring on fostering career transitioning of student with visual impairment cannot be overemphasized. Numerous methods have been employed to help students with impairments transit from school environments to the workforce (Getzel et al., 2000; Getzel & Briel, 2008; Roessler et al., 2007). Job clubs, employability classes, work experience programmes, and career counselling are among these initiatives. Some studies have concentrated on the usage of career mentors who build connections through in-person interactions, correspondence through email, or telephone (Burgstahler & Cronheim, 2001; Getzel & Briel, 2008; Knouse, 2001; Whelley et al., 2003). In addition to serving as role models offering success tips, encouragements and professional guidance, career mentors may also help transitional vision impaired students to enhance their self-efficacy, job flexibility, and assertiveness. According to research, mentoring helped students with vision impairments to

make more effective job decisions and feel more hopeful about the future (Bell, 2012; Cavenaugh et al., 2010).

Career mentoring of visual impaired students can involve career options counselling, assistance in job shadowing and subsequent placement. Mentors can also act as role models and provide experiences that speak to the particular issues faced by students with visual impairments as they prepare for the workforce. For students with visual impairments, increasing self-efficacy—or confidence in one's own skills to do a certain task—might be especially important. In order to secure future employment, visually impaired graduates are required to have little job experience as this impacts their employability (Landmark et al., 2010; McDonnall, 2010, 2011b; McDonnall & O'Mally, 2012). In a study conducted on the impact of career mentoring on the employment outcomes of visually impaired students, the researchers indicated that mentor relationships help legally visually impaired students become more confident when applying for jobs. The findings of the study suggested that self-efficacy and career flexibility may also increase with career mentoring, and that considerable improvements in these areas would be found over a longer mentorship period (O'Mally & Antonelli, 2016). Career mentoring is efficient in addressing the low employment rate of student with visual impairment and facilitate the students' career transitioning.

Increasing knowledge of career and job-searching ability as an intervention to promote career transition for SVI

In a study conducted to investigate transition intervention impacting the employability of students with visual impairments, training these students on social skills improves verbal abilities in job interview circumstances, Whitman (1990) found evidence that students who took part in a two-week orientation and an eight-week work experience had increased their understanding of work using a pre-post single-group design. Mcconnell, (1995) discovered that students who utilized the Partner's Program curriculum in addition to job information specific to blindness and parental involvement, had improved career transition certainty and clarity and decreased career indecision. Leonard et al., (1997) observed that involvement in career development activities together with training in daily living skills led to better career awareness following training using a pre-post single-group approach. However, participation in theatrical games, group activities with sighted peers, athletics, and group therapy are just a few of the therapies that have been proven to enhance the social skills or acceptance and self-concepts of visually impaired students. Additionally, it was discovered that interventions such as job searching abilities, independent living skills and career knowledge are improved

outcomes that correlational study had identified as indicators of transition-age students' performance in the labour market (Cavenaugh & Giesen, 2012; McDonnall, 2011b; McDonnall & Crudden, 2009b; Shaw et al., 2007). Thus, adequate knowledge about careers, future aspirations and being able to identify job opportunity are relevant skills and interventions that promote the career transitioning of student with visual impairments.

Transition programs as an intervention to promote career transitioning for SVI

The characteristics that are linked to successful career transition for transition-age students with visual impairments were the subject of one of the first empirical studies in this area. In the study that examined the variables influencing career transition of youths with visual impairment, work experience, academic proficiency, and self-determination, among other factors that were linked to successful career transitions for students with various disabilities, were similarly linked to employment for students with visual impairments. While self-esteem and counsellor participation were unrelated to employment, the usage of assistive technology and locus of control significantly correlate. To validate the findings and assess the efficacy of these elements when included in a transition program for visually impaired students, more study is required. Many transition programs will continue to struggle to fulfil the requirements of students with visual impairments unless we can pinpoint the elements that are essential to a successful transition for this group and design and implement transition programs that emphasize such elements. This study reflects an effort to start the process of developing transition programs that may successfully place transition-age students with visual impairments in the workforce (McDonnall & Crudden, 2009a). The role of transition programmes in promoting career transitioning of students with visual impairment cannot be overemphasized. The goal of career transition services is to provide students with visual impairments with a continuum of collaborative services across the academic and occupational rehabilitation institutions, which will eventually translate in preparing these students for job market and eventually securing employment.

Conclusion

This article covered interventions that can possibly promote the career transition of students with visual impairment. To meet the educational requirements of visually impaired students, a variety of interventions have been devised. It is noteworthy that competent experts who educate students with sight difficulties do not work alone to achieve effective implementation of interventions for these students. The interventions outlined in this article should be implemented collaboratively by a team of teachers of the visually impaired, professionals, families, and other important agencies. The collaboration would benefit visually impaired

students who are transitioning into new careers. The collaborative effort would reduce some of the remarkable real-time problems associated with special education needs in mainstream classrooms and also post-school employment of students with visual impairment.

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