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## The Impact of Vocational Training on Transition-aged Adults

### Abstract

**Purpose** – The paper examined the difference in attaining and maintaining employment between transition age youth (ages 19-22) with Emotional Behavioral Disorders (EBD) completing and not completing vocational training.

**Design/methodology/approach** – A quantitative causal comparative research design using existing data extracted from the National Longitudinal Transitional Study-2 (NLTS-2) via a restricted data use license issued by the National Center Special Education Research, Institution of Education Sciences, US Department of Education. One-way ANCOVA and multiple regression analysis with one independent variable and six control variables was used for the study.

**Findings** – The results showed there is a significant difference in employment status between transition age youth with EBD completing vocational training as compared to non-completion of vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience. Individuals who completed vocational training are more likely employed after two years, than those who had not completed vocational training.

**Originality/value** – The outcomes of the study showed that vocational training during the transitional period had a positive impact on outcomes such as employment status, participation in job skills programs, and perceived preparedness for employment. These findings support for the idea that vocational training during the secondary school period is an effective way to scaffold support for the transitional period. As a result, these findings justify the use of vocational training as part of the transitional preparation for students with emotional and behavioral disorders.

**Keywords:** Transition age youth, Vocational education, Vocational training, Youth employment

**Paper type** Research paper

## Introduction

As the current labor market in the United States has an increasing need for specialized workforce training as it relates to technology, unique work skill sets that demand higher levels of knowledge and mastery, vocational instruction is changing to accommodate these needs (National High School Center [NHSC], 2011; Olsen, 2010). Notably, the Carl D. Perkins Career and Technical Education Act of 2006 have placed further mandates on secondary schools regarding the preparation of students for the workforce (Friedel, 2011). This act has mandated public schools increase programs and programmatic rigor with respect to vocational/career and technical education (CTE) initiatives to prepare students for the 21st-century workforce (Council for Exceptional Children [CEC], 2011; Friedel, 2011). Prior to the Carl D. Perkins Act of 2006, federal legislation such as Section 504 of the Rehabilitation Act of 1973, the Individuals with Disabilities Education Act of 1993, and the Americans with Disabilities Act (Russo and Osborne, 2008) contained provisions related to preparation for employment for individuals with disabilities. Consequently, the provision of effective work-based skills programs that enable youth to best transition from school to work remains a challenge for many youth with emotional and behavioral disorders (EBD) whom often due to lack of funding, trained instructors, and uniform curricula that integrate academic and career skill building (Olsen, 2010). Complicating this issue is the lack of empirical evidence relating to the success of vocational training programs of youth with vocational training (Carter *et al.*, 2012).

In fact, the current labor market in the United States faces many challenges. The demand for specialized workforce training in the technology fields are increasing, and the unique work skill sets associated with technology fields are requiring higher levels of workforce training (Greenstone and Looney, 2011). Federal mandates to meet the needs of the 21st-century workforce can pose challenges for young people who have disabilities.

The provision of practical work-based skills programs that will enable youth to transition from school to work can be a challenge for young adults with emotional and behavioral disorders (Davis *et al.*, 2013). Lack of funding, instructors, and standardized curricula can see insurmountable to districts, especially when there is little empirical evidence relating to the success of youth with emotional and behavioral disabilities in vocational training programs (Carter *et al.*, 2012).

Throughout the global community, mental health issues are becoming an increasing challenge in the youth populations. These problems are especially severe because many disorders are developing during adolescence or the period from 12 to 24 years of life (Patel *et al.*, 2007). In many cases, such disorders remain undiagnosed until later in the individual's life. However, indications of the underlying mental illness or disability exists and can affect the young person's life during a critical stage.

Individuals in this age group are in transition, not only in the legal sense of transitioning from one developmental assistance program to another but also in the sense of transitioning from youth to adulthood. Most adolescents face challenges during this time of period, but individuals with mental health needs can find changing from teen to adulthood to be particularly

challenging. Young people who come from families with their issues (drug abuse, violence, alcohol addiction, mental health disorders) are particularly vulnerable due to lack of good role models. As Patel *et al.* (2007, p. 1304) stated, "Educational pressures, especially in the context of limited employment opportunities for out-of-school young people, is a risk factor for suicide and poor mental health".

Workforce preparation offers one possible solution to the issue of difficulty maintaining employment (Carter *et al.*, 2012). However, there is no empirical evidence of increased employability for disabled students who have received vocational training. In previous conducted studies (e.g., Carter *et al.*, 2012); there was not control for key variables, related to employment status such as gender, race, age, past use of mental health services, academic achievement, or prior work experience. When used, these variables served as control variables so that the effect of attending a vocational training program could undergo examination.

The purpose of this paper was to investigate whether transition-aged youth with emotional behavior disorders fare better when they have the support of educational and vocational training.

**Research Objective:** To examine the difference in attaining and maintaining employment between transition age youth (ages 19-22) with Emotional and Behavioral Disabilities (EBD) completing and not completing vocational training, controlling for the factors of gender, race, age, academic achievement, prior work experience and mental health services.

### **Theoretical Framework**

The theoretical framework supporting the research is based on Schlossberg's (1981) transition theory, which described how people relate to change due to transitions such as experiencing a death of a loved one, going to college or obtaining a new job. Schlossberg's concept is of great importance when dealing with transition age youth who have Emotional and Behavioral Disorders (EBD); because this may interfere with obtaining a job, retention of work, quality of life or other. Schlossberg's (1981) transition theory addressed transitions and their severity. Schlossberg stated that there are four things that affect how severe a transition is: the self, the situation, support provided, and strategies. The self-factor is represented by the variables gender, race, and age because these are intrinsic characteristics of the individual. Academic achievement and prior work experience represent the situation factor because they are life conditions and the support factor by mental health services; and, the completion of vocational training represents the strategy factor because this is a strategy used to increase employability.

### **Research Method and Design**

This paper explores the differences in attaining and maintaining employment between transition age youth (ages 19-22) with EBD completing and not completing vocational training, controlling for the factors of gender, race, age, academic achievement, prior work experience, and mental health services. The paper uses a causal-comparative research, since is well suited to achieving

the purpose of this paper because this type of research design enables researchers to compare differences in experiences and explain those differences based on those experience (Lodico *et al.*, 2010) because it utilizes previously conducted research and does not require new research, it is a very convenient and cost-effective method of research (Lodico *et al.*, 2010). The paper selected a causal-comparative research design over other designs because it is the type of design that allows for an examination of differences between groups based on pre-existing characteristics of the participants. In this study, the paper selected students aged 19 to 22, the population comprised approximately 474,000 at the start of data collection for the NTSL-2 Wave 1 study (Gaylord *et al.*, 2005). This student age range typically represents those individuals who completed high school and are at a point in their lives where they may attend vocational school or may attempt to find competitive employment. Data extraction from the NLTS-2 database for the variables of interest in this study via a restricted data use license issued by the National Center Special Education Research, Institution of Education Sciences.

## Findings

The purpose of this study was to examine how the factors of gender, race, age, academic achievement, prior work experience, mental health services, and the completion of vocational training influence transition age youth (ages 19-22) with EBD to cope with the transition to attaining and maintaining employment. To achieve this purpose, the paper used four research questions:

Q1. Is there a significant difference in employment status two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience?

Q2. Is there a significant difference in length of employment (in months) at same employer two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience?

Q3. Is there a significant difference in ever participating in programs aimed at enhancing job skills two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience?

Q4. Is there a significant difference in perceived preparedness for employment two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience?

The logistic regression model utilized was statistically significant,  $\chi^2(9) = 4,023.80, p < .001$ . Among the control variables, gender, age, and receiving mental health services were statistically significant, as was prior work experience and academic achievement. The independent variable

in this analysis, completion of vocational training, was also statistically significant, Wald =93251.48,  $p < .001$ , Exp (B) = 13.67. The Exp (B) value indicated that vocational training completers were over 13 times more likely to have maintained employment two years later than those who had not completed vocational training was rejected, and it was concluded that there was a significant difference in job status. R2 coefficient for this the analysis was .73, indicating that the independent and control variables explained 73% of the variance in the duration of employment at the same employer two years later. The details of which are depicted in Table 1 below.

Table 1: Summary of Multiple Logistic Regression Analysis Predicting Employment 2 Years After Program Completion

Group	<i>B</i>	<i>SE<sub>B</sub></i>	Wald	<i>P</i>	Exp( <i>B</i> )
Vocational Training	2.62	0.16	251.48	<.001	13.67
Gender	-2.13	0.08	657.56	<.001	0.12
Age group					
19 Years Old	0.25	0.34	0.53	0.46	1.29
20 Years Old	-2.18	0.10	449.78	<.001	0.11
21 Years Old	-1.96	0.09	471.38	<.001	0.14
22 Years Old			598.05	<.001	
Received Mental Health Services	-3.37	0.14	592.14	<.001	0.03
Prior work experience and academic achievement					
No Prior work experience and No Academic Achievement	4.12	0.26	248.78	<.001	61.30
Prior Work Experience	4.05	0.43	90.71	<.001	57.44
Academic Achievement	4.41	0.14	946.87	<.001	82.63
Both Prior Work Experience and Academic Achievement			948.54	<.001	

Individually, gender, age groups, mental health services, and employment and academic achievement information were statistically significant as covariates in this analysis. The independent variable, completion of vocational training, was also statistically significant,  $F(1, 1990) = 50.80$ ,  $p < .001$ . Completing vocational training was also statistically significant, Wald =

194.27,  $p < .001$ ,  $\text{Exp (B)} = 10.20$ . The  $\text{Exp (B)}$  value indicated that those who had completed vocational training were more than ten times more likely to have participated in employment programs aimed at enhancing job skills than those who had not completed vocational training. Individually, gender, age, receiving mental health services, academic achievement, and prior work experience were statistically significant. The independent variable in this analysis, completing vocational training, was also statistically significant,  $\text{Wald} = 37.01$ ,  $p < .001$ ,  $\text{Exp (B)} = 83.86$ . The  $\text{Exp (B)}$  coefficient indicated that those who had completed vocational training were over 80 times more likely to feel prepared for the workforce two years later than those who did not complete vocational training.

The findings in this paper support Schlossberg's (1981) transition theory. It was concluded that in this study, those participants who had completed vocational training were more successful in entering the workforce than those who had not completed vocational training. It was important to demonstrate the applicability of transition theory by implementing a test of whether Schlossberg's transition theory is useful in understanding the domain of vocational training for individuals with EBD due to the high unemployment rate of youth and young adults with disabilities (U. S. Department of Labor [DOL], 2013).

### **Evidence-Based Practices in Transition**

The National has identified thirty-three evidence-based practices Secondary Transition Assistance Center (NSTTAC). These methods are helpful for youth with EBD to transition. According to Mazzotti *et al.* (2013), the use of Kohler's Taxonomy emerged four general areas of these practices after these were formally categorized, i.e. the program structure, student-centered planning, family involvement, and student advancement (Test *et al.*, 2014). Consequently, 26 of the practices were relevant to student improvement.

The paper identified that additional progress among students that were taught self-management skills as compared to those who were not. Consequently, though it may probably seem that acquiring social skills, personal health skills, communication skills, life skills, of even teaching support skills might, on a superficial level, appeared family-based and beyond the limits of schooling, Test *et al.* (2014) reported more success among those youth in transition who acquired these skills. Similarly, literature accentuates, as has also been proven empirically, that students with greater self-esteem show improving self-advocacy and understanding (Carter *et al.* 2011). Literature also stresses that some of the developments relevant to self-esteem can reflect the beliefs of a skills trainer in the effectiveness of self-esteem (Turnbull-Humphries, 2012). The authors also concluded that teachers with self-esteem are more likely to transfer it to their students with an adequate value attached to the concept/construct.

Heyvaert *et al.* (2010) conducted a meta-analysis that proposed that support efforts that focus on challenging behaviors can also have a positive impact on the students when executed systematically. Their meta-analysis of the intervention program reported that more efficient way



is to offer different interventions interactively rather than a signal intervention that cannot be as effective. The authors advocated that further research should focus on diminishing challenging behaviors; such an approach would assist better inculcation of learning and social skills among students. The authors consider challenging behavior as those in which students can indulge in damaging property, irritation, compulsive symptoms, screaming, aggressive behaviors, manhandling, and so on. These surely may disturb the person's overall functionality, and holistically, the identified EBD may interfere with the student's learning ability as well as social interactions.

The Youth Transition Demonstration (YTD), conducted by the Social Security Administration (SSA), offered some case-based evidence for success and failure in the transition process (Luecking and Wittenburg, 2009). This program was set up for youth age 14-25 and provided a range of different types of services and interventions to assess their effectiveness in the long-term transition process. These programs offered flexibly, with the interaction between them and the existing transition program in place. The main types of interventions offered included individualized work experience, youth empowerment programs, family support, system linkages (mainly academic and vocational systems and service systems), social and health services, work incentive waivers from the SSA, and benefits counseling. Considered a comprehensive range of services that in many ways counteracts some of the critiques of such programs, including there is a disconnect and do not offer coordinated assistance (Osgood *et al.*, 2010). There are limitations to the Osgood *et al.* results, since the paper details only three cases. Specifically, in all cases, the youths received a customized selection of assistance and interventions, based on their specific needs and transition goals. However, the case studies do demonstrate that the programs were successful in overcoming barriers to work, and ultimately all three students transitioned successfully to the job market (Luecking and Wittenburg, 2009). Thus, the Osgood *et al.*'s research was a helpful guide to what types of programs and transitional interactions would be successful in an ideal situation, where resources and programs were available to meet individualized needs. In this situation, the transitional process was successful because all needs could be met. However, YTD has limitations in its application, meaning that most students will not have access to such a comprehensive spectrum of services. Consequently, there remains opportunities to incorporate a move from the ideal situation represented by such an experiment to full-time implementation for students. There are some areas where there is insufficient evidence to support a relationship between interventions and transitional success (Cobb and Alwell, 2009). In addition, Cole and Alwell (2009) conducted a meta-analysis of 31 studies that provided evidence for transition planning and interventions. These studies included many different disabilities as their focus, including some EBD studies. The authors examined five different types of interventions, including student-focused planning, student development, family involvement, collaborative service delivery, and program structure. However, the authors did not identify sufficient evidence to assess the effectiveness for most types of interventions, including family involvement, collaborative service delivery, or program structure. Specifically, the authors noted that studies focused on areas which often had methodological challenges, which

they determined made the studies inadequate for understanding the impact of this type of intervention on the transitional outcome. However, student-focused planning and student development interventions did have enough studies that could provide reliable information. The authors established that these types of interventions were effective at assisting in transition, although they also cautioned that such programs covered a wide range of different types of intervention activities. Overall, the key significance of this paper is that there is relatively little robust evidence for many transition practices; which can make it difficult to assess whether a particular assessment is likely to work. As the authors argue, there is a need for more analysis of specific transition interventions to understand their impact on the transition period. Consequently, their work also supported the idea that some types of transition interventions, including student-focused planning and student development, can be highly successful.

### **Evaluation of Findings:**

The potential benefits of vocational training examined in this paper are based on Schlossberg's (1981) Transition Theory. Schlossberg (1981) identified four factors, which affect how severe a transition is: the self, the situation, support provided, and strategies. This paper included these four areas. Specifically, the demographic variables of gender, race, and age were related to Schlossberg's self-factor; academic achievement and prior work experience were the situation factors; using mental health services were the support factor; and the completion of vocational training is identified as a strategy factor in transition theory because this is a strategy used to increase employability. Although the study included components of the self, the situation, and support, the key area of focus was on the strategy of vocational training and its effect on employment-related variables.

There was support for Schlossberg's (1981) transition theory in this current study. The paper concluded, that those participants who had completed vocational training were more successful in entering the workforce than those who had not completed vocational training. Across the various research questions, those who had completed vocational training were more likely remained employed two years later, had longer durations of employment with the same employer, were more likely to have participated in programs aimed at enhancing job skills, were more likely to feel prepared to enter the workforce than were participants who had not completed vocational training.

Throughout the global community, mental health issues are becoming an increasing challenge in the youth populations. These issues are particularly challenging because many disorders develop during adolescence, or during the time ranging between 12 - 24 years of age (*Patel et al., 2007*). While many of these disorders remain undiagnosed until later in life; there are however, existing indications of an underlying mental illness or disability; which can affect the young person's life where support and mental health services are needed during this critical stage.

Individuals in this age group are in transition, not only in the legal sense of transitioning from one developmental assistance program to another but also in the sense of transitioning from youth to adulthood. Most adolescents face challenges in this time period, but individuals with mental health needs can find changing from teen to adulthood to be particularly challenging. Young people who come from families with their own issues (drug abuse, violence, alcohol addiction, mental health disorders) are particularly vulnerable due to lack of good role models. As Patel *et al.* (2007, p. 1304) stated "...educational pressures, especially in the context of limited employment opportunities for out-of-school young people, is a risk factor for suicide and poor mental health."

In addition to providing support for the importance of the strategy of vocational training in preparation for and entry into the workforce, the current study provided tests of the other components of Schlossberg's (1981) transition theory in the areas of self (gender, race, and age), situation (academic achievement and prior work experience), and support (using mental health services). The importance of the self-factor was demonstrated by the statistical significance of gender and age. The statistical significance of the academic achievement and prior work experience factor demonstrated the importance of the situation factor. The importance of the support factor was demonstrated by the statistical significance of using mental health services.

In prior studies conducted to examine the applicability of transition theory in a variety of educational domains such as career transitions into professional nursing (Dela Cruz *et al.*, 2013), choosing to teach as a career and implications for teacher education programs (Castro and Bauml, 2009), and minority college students attending predominantly white institutions (Strayhorn *et al.*, 2013); transition theory was supported by providing a useful framework for understanding successful transitions regarding understanding the benefits of training, appropriate career selection, and support systems for minorities. This is consistent with the results from this current paper in which the applicability of transition theory were tested and supported in a new domain.

Consequently, based on these findings, all four areas of Schlossberg's transition theory were supported. Transition theory is applicable and relevant areas of employment following high school graduation for individuals with EBD. It was important to demonstrate the applicability of transition theory by implementing a test of whether or not Schlossberg's transition theory could be useful in understanding the domain of vocational training for individuals with EBD because of the high unemployment rate of youth and young adults with disabilities (DOL, 2013).

There was also support for recent studies regarding the role of vocational training within the transitional period, many of which have also built on Schlossberg's (1981) theory. Studies showed that those who have completed vocational training were more successful entering the workforce, including better initial employment and longer employment at two years, enhancing job skills, and perceived preparedness for employment. Consequently, there are likely other factors involved in the transitional period success. Frey *et al.*, (2009) identified perceived teacher

support as one of the critical factors in transition success. It is also apparent from the work of Arnett (2000, 2007) and Davis (2003) that students with learning and behavioral difficulties often do not receive as much institutional or teacher support as they need to be successful. Consequently, the findings of this study were particularly important because they emphasize the importance of not just of teacher support, but also the importance of institutional support in the form of vocational training.

The findings of this study suggested that vocational training is essential in effective transition. Consequently, this is likely to be particularly problematic for students in the future since the type of low-paid, unskilled labor students may have traditionally performed during the transitional period is steadily declining in favor of highly skilled, high technology jobs (Lerman & Schmidt, 1999). It is also important because of the instability of the transitional period, particularly for young men (Lefgren, 2009). This instability is associated with, among other factors, lack of appropriate fit between the transitional student's skills and employer needs (Lefgren, 2009). Transitional youth may still face many barriers to effective transition, like exclusionary barriers, lack of funding, lack of coordination and lack of knowledge among professionals (Osgood *et al.*, 2010). Thus, providing vocational training is not likely to be sufficient on its own, but it is a good first step in the direction of ensuring transitional competitive employment success.

This paper addressed four research questions. The first research question of this study was: Is there a significant difference in employment status two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience? Logistic regression to test the null hypothesis and answer RQ1. The Wald statistics showed that completing vocational training significantly predicted employment status two years later,  $p < .0005$ . The odds ratio is 13.67, indicating that respondents completed vocational training were over 13 times more likely maintained employment two years later than respondents did not complete vocational training. Thus, the null hypothesis was rejected; and the alternative hypothesis was accepted. The results showed that there was a significant difference in employment status two years later among transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience, with those having completed vocational training being more likely to be employed than those who had not completed vocational training.

The second research question was: Is there a significant difference in length of employment (in months) at same employer two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience? After accounting for gender, race, age, mental health services, employment and academic achievement, there was a significant difference in length of employment (in months) at same employer two years later between transition age youth with EBD completing vocational training and not completing

vocational training,  $F(1,1990) = 50.80$ ,  $p < .0005$  with a high effect size,  $R^2 = .73$ . The null hypothesis was rejected that there is no significant difference in length of employment (in months) at same employer two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience was rejected. The alternative hypothesis was accepted. It was concluded that there was a statistically significant difference in length of employment (in months) at same employer two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience.

The third research question was: Is there a significant difference in ever participating in programs aimed at enhancing job skills two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience?

Multiple logistic regressions were performed to test the null hypothesis and answer RQ3. The Wald statistics showed that completing vocational training significantly predicted participation in employment programs aimed at enhancing jobs skills,  $p < .0005$ . The odds ratio is 10.2, indicating that respondents completed vocational training were over ten times more likely participation in employment programs aimed at enhancing jobs skills than respondents did not complete vocational training. The null hypothesis was rejected therefore the alternative hypothesis was accepted.

Based on the statistical results, it was concluded that there was a significant difference in ever participating in programs aimed at enhancing job skills two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience.

The fourth and final research question was: Is there a significant difference in perceived preparedness for employment two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience? The results showed that there was a significant difference in perceived preparedness for employment two years later between transition age youth with EBD completing vocational training and not completing vocational training, controlling for gender, race, age, mental health services, academic achievement, and prior work experience, with those completing vocational training being much more likely to feel prepared to enter the workforce.

### **Recommendations for Practice and Future Research:**

Based on the results from this paper, it is imperative to encourage high school students with emotional and behavioral disabilities to attend vocational training programs since it increases the likelihood that they will obtain and maintain employment following graduation from high school. This paper did show that vocational training had a positive relationship with perceived readiness for employment, participation in work skills programs, and the chance of employment following the transitional period (although results were likely to vary depending on controlling variables like age, gender, and ethnicity). This study justified the exploration of vocational training programs as a means of improving the transitional outcomes of students. Programs at the high school level that facilitate attendance in vocational training programs for students with EBD may yield positive results for these students, although they will need to be developed carefully to be effective. This is unlikely to overcome all problems, especially since vocational training programs do have issues such as the use of one-size-fits-all standards (Daugherty *et al.*, 2008). Consequently, vocational training programs may need adjustment to meet the needs of students with EBD.

There are also some changes, which vocational training programming staff needs to consider. For example, administrators in vocational training programs could target students with EBD (and potentially students with other types of disabilities) for their programs, highlighting the positive employment outcomes for these students if they complete the program. Although this study only examined students with EBD, it is possible that vocational training would provide a similar level of support for students with other disabilities. Employers could also seek to hire students with disabilities who have completed vocational training because of the preparation for the workforce that vocational training affords. This could be particularly helpful for underrepresented students, such as minority students and those with disabilities, who remain typically disadvantaged in education transition to the workplace (Hawley *et al.*, 2013).

There are also several recommendations for future research that have emerged from this research and the literature review. First, future researchers track students with EBD for a longer period after high school to determine if the positive effects of vocational training found in this paper persisted. Future researchers could also include additional control variables, which this paper did not incorporate including specific diagnosis, disability services received in high school. This study could take place as a longitudinal study that examines a broader group, potentially as an extension of the National Longitudinal Transition Study 2 (NLTS-2) or similar longitudinal or cohort study. Given the wide range of potential control variable, there is an opportunity to extract additional variables directly from NLTS-2 data. Further studies could also make use of the oldest NLTS-2 students, rather than the younger group, to study the 21 to 24 years cohort rather than the 19 to 22 years cohort as in this paper. This type of extended study would provide further information about the impact of vocational training on later transitional periods (up to 7 years post-high school), as well as extending knowledge about different types of disabilities and their interaction with vocational training. It is noted in the literature that this is an area where there is still not as much knowledge as there could be (Cobb & Atwell, 2009). By extending use of the

NLTS-2 study, or implementing a longer-term longitudinal study, this may expand the knowledge base about the impact of vocational training or other types of training for students looking to transition into the workforce.

While there are numerous efforts reported in the literature to engage stakeholders at various levels, which include researchers and the community, going beyond those traditional boundaries to explore the use of vocational training as part of the transitional preparation for students with emotional and behavioral disorders at the international level has the potential to create a more comprehensive framework which would add depth, breath and scope of research. However, at this point, comparison between US data and that of other countries has not drawn the attention of global researchers. – so perhaps it now time to engage globally to compare transition age youth with EBD and the impact of vocational education using the existing data extracted from the National Longitudinal Transitional Study-2 (NLTS-2) for a comparative analysis between various countries who have similar EBD populations and initiatives to support transitioning EBD youth.

### **Summary**

Th findings of this paper support Schlossberg's (1981) transition theory. In fact, the results from this paper support all four components of transition theory including the self-factor (through the statistical significance of age and gender), the situation factor (through the statistical significance of academic achievement and prior work experience), the support factor (through the statistical significance of using mental health services), and most importantly, the strategies factor (through the statistical significance of vocational training). These findings discussed in the context of past research recommendations offer educational practice and future research potential.

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