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Supportive Environments Providing Social and Emotional Learning Explain Success in People with Learning Disabilities

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Although students with learning disabilities (SwLD) are at greater risk (compared to typical learners) for dropping out of high school, not attending college, and unemployment, some SwLD lead successful lives (Aro et al., 2019; Mazzotti et al., 2021; Wagner et al., 2005). Little, however, is known as to what factors support this subset of SwLD in defying the odds and achieving success by graduating from college and leading satisfying lives. Alumni from Winston Preparatory School (Winston), a school exclusively for SwLD that has a strong track record for high school graduation and college attendance, were recruited for this study. Results from a previous study on Winston alumni indicated all attended college and most: graduated college, were employed, and had someone who socially supported them. The present study described in this paper built on these findings. Results indicated that when students felt supported by teachers and people at home, they were more likely to report high levels of three social and emotional learning skills which predicted several measures of student success. These results may offer possible explanations for why certain SwLD succeed but more research, possibly longitudinal, is needed to gain a more thorough understanding of the factors involved.

Keywords: *Learning disabilities, social and emotional learning, student success*

Introduction

People with specific learning disabilities[1] (LD) face challenges that their counterparts without LD do not, including psychosocial challenges that create potential disparities in achievement including: academic achievement, employment, and mental health. For example, people with LD have higher rates of unemployment (Siperstein et al., 2013; Shattuck et al., 2012), are less likely to finish college (Cortiella & Horowitz, 2014), have lower college grade point averages or GPAs (Hen & Goroshit, 2012) and have higher rates of depression and suicide (Fuller-Thompson et al., 2018). Furthermore, as compared to people who do not have LD, people with LD experience difficulties in daily living, socially isolate, and have emotional health problems (Gerber, 2012). Nevertheless, there are many people with LD who are achieving success in employment, academic study, and in their overall well-being (Cortiella & Horowitz, 2014). Research suggests that several factors—such as self-advocacy, self-determination, and social support—are predictive of people with LD achieving success in these areas (Wagner et al., 2006; Test et al., 2009; Mazzotti et al., 2016).

[1]Specific learning disabilities, includes disorders "in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations" (IDEA, 2004) and related disorders (Frolov & Schaepper, 2021; Learning Disabilities Association, 2021) such as: dyslexia, dysgraphia, dyscalculia, written expression disorder, and ADHD.

Self-Advocacy

Self-advocacy is defined as a person's ability to communicate their wants and needs to find the support required to fulfill them (Stodden et al., 2003). People with LD often need self-advocacy skills so that they can face the challenges they encounter in college and employment (White et al., 2014). Despite plentiful research that points to the importance of self-advocacy, skills tied to self-advocacy are not typically taught in school, even though these skills may be particularly important for LD student success (Daly-Cano et al., 2015). In one study, when college special services centers were asked how "secondary schools could better prepare students with LD for college" (p. 468), the most popular response was that secondary schools should improve students' self-advocacy skills (suggested by 66.7% of the sample; Janiga & Costenbader, 2002).

Self-advocacy is also predictive of many positive psychosocial outcomes. In one experimental study, students with LD (SwLD) who were assigned to participate in a self-advocacy program had higher basic psychological skills, such as competence, than SwLD who did not participate in the program (Kotzer & Margalit, 2007). In addition to competency, a literature review on self-advocacy in LD populations concluded that self-advocacy could improve: understanding of the self, social connectedness, access to opportunities (e.g., advisory boards), and feelings of control that prompt individuals with LD to advocate for their rights (Tilley et al., 2020). Additional research also indicates that self-advocacy can improve students': awareness about employment and academic support services; understanding of their roles as both individuals and learners with LD; understanding about their LD diagnosis; and awareness of opportunities for their careers and education (Sebag, 2010). More specifically, a case study suggested that a self-advocacy behavior management program was able to support a student with LD transform from a student with failing grades and classroom behavior problems into an "A" student who became a role model to her peers (Sebag, 2010). Indeed, self-advocacy is a strong predictor of achievement as it relates to a student's GPA, a frequently used indicator of student success, for college students with disabilities (Fleming et al., 2017). Clearly, a strong case exists for self-advocacy being critical to student success.

Although most research on self-advocacy focuses on how it impacts post-secondary education, some promising research shows that self-advocacy helps people with LD adjust to their employment (Doren & Kang, 2016). Indeed, self-advocacy skills are predictive of successful employment for individuals with LD (Cheong et al., 2013). This type of research is limited, but critical, because people with LD struggle to find employment, compared to their non-LD counterparts (Siperstein et al., 2013; Shattuck et al., 2012).

Self-Determination

Self-determination is defined as a person's ability to make choices based on an understanding of one's own goals and personal needs, and it includes an individual's ability to accept the consequences of those choices (Martin & Marshall, 1995; Rowe et al., 2015). Self-determination is closely related to self-advocacy, and studies have also shown self-determination to be an underlying factor in several successful outcomes for individuals with LD. This includes results from a longitudinal study on people with learning and cognitive disabilities (Wehmeyer & Palmer, 2003). Findings from this study indicated that when people with LD have high levels of self-determination, they are more likely to live independently, be financially independent, and be employed (including employment with medical and vacation benefits). Other research showed that self-determination is positively and significantly correlated with GPAs, an indicator of student success (Brockelman, 2009). Additional research replicated the finding that self-determination has a positive impact on GPAs and demonstrated that self-determination increases student retention, employment and reduces distress (Jameson, 2007; Solberg et al., 2012). Self-determination may also be an important predictor of success measures that are not directly related to academics and employment. For example, one study found a positive relationship between self-determination and life-satisfaction for people with LD (Arunashree et al., 2016). These studies indicate that self-determination may be a potent predictor of multiple student success measures.

Social Support

Social support for people with LD can come from multiple sources, such as family, teachers, and peers. Feeling socially supported is predictive of life satisfaction (Stack-Cutler et al., 2015), positive self-perceptions (Demaray et al., 2009), successful adjustment to post-secondary education (Murray et al., 2013), mental health (Harandi et al., 2017), employment (Perreault et al., 2017), and college GPA (Dennis et al., 2005). More specifically, research shows a multitude of positive outcomes for students with LD who feel support from their families. Families that provide emotional support (Ginieri-Coccossis et al., 2013) can increase self-esteem (Nalavany et al., 2015), because this type of support acts as a buffer for the negative emotional experiences stemming from LD (Carawan et al., 2016). Consequently, SwLD with more supportive families were found to have higher levels of academic achievement (Heiman & Berger, 2008; Wagner et al., 2006) and were

more likely to achieve their career goals (Lindstrom & Benz, 2002). More specifically, parental involvement (Wagner et al., 2014) and expectations (Mazzotti et al., 2016) for their children to live independently and to be employed may be important predictors for postsecondary outcomes.

This population of students may also benefit from having supportive teachers, who spur persistence in learning (Núñez et al., 2020). SwLD who have supportive teachers also have positive academic (Gatlin & Wilson, 2016; Kiuru et al., 2013; Suldo et al., 2009) and employment outcomes (Fullarton & Duquette, 2015). In one longitudinal study of SwLD, their overall use of support systems was a better predictor of success than other factors, such as IQ and academic achievement (Raskind et al., 1999). Therefore, social support, particularly from teachers and families, may play a key role in determining success for students with LD.

Student Success

While much published work primarily focuses on specific student success measures for SwLD, such as college attendance and employment (Mazzotti et al., 2016), the Higher Learning Commission recently proposed a more inclusive definition of student success as the "attainment of learning outcomes, personal satisfaction and goal/intent attainment, job placement and career advancement, civic and life skills, social and economic well-being, and commitment to lifelong learning" (Higher Learning Commission, 2018, p. 7). Thus, while college attendance and employment remain important to the assessment process, they provide a limited view of success that are not representative of the whole student, particularly students with LD. To provide a more comprehensive metric of student success, researchers have proposed to broaden how researchers measure student success to include satisfaction measures, such as life satisfaction (Trapmann et al., 2007). Indeed, satisfaction measures may better assess an individual's overall happiness with life (Tay et al., 2015). Researchers are making strides to broaden the definition of student success (e.g., Krachman et al., 2016) and, in practice, colleges (e.g., Indiana State University, Nazareth College, Youngstown State University) are moving to a broader definition of student success, one that includes satisfaction and achievement of academic, personal, and employment goals (Cuseo, 2007). In the present study, student success is measured in a broader way through both traditional measures of student success (e.g., college attendance, employment) and by further expanding the definition of student success to include several satisfaction measures that are less commonly used to measure student success, but are more commonly measured in LD populations and other underrepresented groups: employment (Madaus et al., 2008), relationship status (Jackson et al., 2018), post-secondary education (Rabren et al., 2013), and current living situation (Raskind et al., 1999).

Gap in Knowledge

While plentiful research exists on factors that contribute to student success, comparatively fewer studies have investigated factors that predict student success for SwLD (Raskind et al., 1999; Mazzotti et al., 2016; Rowe et al., 2015; Test et al., 2009). Indeed, much research tends to focus on SwLD's susceptibility to unsuccessful outcomes, such as unemployment (Aro et al., 2019) and incarceration (McKenzie et al., 2012). Few studies have investigated a population of SwLD who have found success as well as the factors that have contributed to that success, such as what underlying factors (e.g., supportive teachers and families) may foster these predictors (e.g., self-advocacy). Also, studies have examined more expansive views of student success to include satisfaction with life outcomes (e.g., employment, relationship status). The study reported in this paper will address this knowledge gap.

Study Site: Winston Preparatory School

Winston Preparatory School (Winston) is an independent school in the United States with eight campuses (including an online campus that provides a live, full-day curriculum to students across the nation) nationwide exclusively for K-12+ students with LD, all but one located in the northeast. A large proportion of Winston's students are public school students who receive funding from government sources to attend Winston; Winston campuses range from 11%–49% of students who are publicly funded as Connors cases (in states where this information is reported to Winston). In short, Winston's mission is to "facilitate the independence and meaningful participation of students with specific learning disorders" to develop skill acquisition and become independent learners (Winston Preparatory School, n.d.).

At Winston, teachers provide intense skill remediation and explicitly foster social and emotional learning (e.g., self-advocacy). This educational model has demonstrated some impressive student outcomes: Winston students are over 30% more likely to graduate from high school (Winston: 99.7%, SwLD nationwide: 65.5%) and 25% more likely to attend college (Winston: 79.3%, SwLD nationwide: 54%; Hirano, 2018; Cortiella & Horowitz, 2014; U.S. Department of Education, 2017). Winston developed a research department, the Winston Innovation Lab, which partnered with an outside organization, the National School Climate Center, to develop research studies with the aim of better understanding SwLD and their lives post-graduation. Their first study together demonstrated other

remarkable outcomes for Winston students, including high levels of: job satisfaction, happiness, physical/mental health, and self-reported success (DeBono et al., 2021). They also rated the quality of their relationships highly. This entire sample reported attending college, and most were employed (61.1%). Nearly all participants reported having someone who they could rely on for support (94.4%). The present study was developed to better understand these findings.

Hypotheses

Researchers anticipated that social and emotional learning (i.e., self-advocacy and self-determination), social connections, and social support from family and teachers would predict several student outcomes: overall life satisfaction, employment satisfaction, current relationship status, current living situation, and satisfaction with their post-secondary education. This study also included an exploratory component—researchers wanted to better understand what Winston does well to prepare students for adulthood and how Winston could improve its practices.

Method

Participants

Winston alumni who graduated between 2000-2015 ($N = 515$) were eligible to participate and were recruited via email. Sixty-three alumni (12.2% of eligible alumni) chose to participate and reported that they either graduated from Winston's New York campus ($N = 46$), Connecticut campus ($N = 16$) or the Transitions campus, a campus for SwLD not yet ready to graduate high school and designed to prepare them for life after high school ($N = 1$). Most participants indicated their learning or attention issue was identified in elementary school (63.5%) and relatively fewer in middle school (15.9%) or high school (1.6%). Some participants could not remember when their learning or attention issue was identified (9.5%) and others did not respond to this question (9.5%).

In terms of gender, 20 participants identified as female, 20 as male, one identified as neither gender, and 22 did not respond to the gender question. The racial makeup of the sample was mostly White (60.3%), but also included several other racial groups: Asian (9.5%), Latino/Latina/Hispanic (7.9%), Black/African (4.7%), American Indian/Alaskan Native (3.2%), and Other (1.6%). The remaining participants ($N = 8$) did not respond to the race question.

Regarding their learning and attention challenges (see Table 1), a minority reported difficulties with speaking, listening, reading, and memory. Most participants reported difficulties with math, social and emotional skills, attention, and writing.

Table 1
Participants' Learning and Attention Issues

Learning and Attention Issue	Percentage
Math	68.3%
Social and Emotional	61.9%
Attention	61.9%
Writing	60.3%
Memory	44.4%
Reading	31.7%
Listening	20.6%
Speaking	20.6%

Research Design

Researchers designed this survey study to examine the predictors of student outcomes (e.g., satisfaction with relationships, employment, life). These predictors included: supportive teachers, supportive home life, self-advocacy, self-determination/perseverance, and social connections.

Measures

Demographic Survey

Participants reported their race, gender identity, employment status, relationship status and education history (e.g., which Winston campuses they attended, and the highest level of education completed). To assess learning and attention issues, researchers asked participants to checkmark items from the following list, if they experienced difficulties with any of them: social/emotional, math, attention, organization, writing, memory, speaking, reading, and listening.

National Center for Learning Disabilities (NCLD) Student Voices Survey (2015)

NCLD developed the Student Voices Survey specifically for people with LD to collect information about their transition from high school to adulthood (NCLD, 2015). Researchers selected items from this survey to assess factors (e.g., supportive teachers and home life) that may predict satisfaction with: life, relationships, employment, post-secondary education, and current living situation. Researchers combined several survey items to form subscales and their internal consistency was acceptable: supportive home life in high school (5 items, e.g., I felt my parents/guardians always had high expectations of my success, $\alpha = .81$), high school social connections (12 items, e.g., I had a set of close friends, $\alpha = .81$), high school self-determination/perseverance (9 items, I considered both my strengths and weaknesses when setting goals for

myself, α = .89), high school self-advocacy (7 items, e.g., I knew what my strengths are, α = .88), supportive high school teacher (3 items, e.g., I had a teacher or teachers who made sure I understood things, e.g., α =.90), post-secondary social connections (10 items, e.g., I have a set of close friends, α= .81), post-secondary self-advocacy (10 items, e.g., I can approach and talk to teachers on my own to discuss my needs, α= .76), and self-determination post-secondary (7 items, e.g., I take credit for good decisions in my life, α = .81). Participants rated the items composing these subscales on a 0 (strongly disagree) to 4 (strongly agree) scale. A single item from this survey also assessed how much the participants' LD affected their employment, rated on a 0 (caused no problems) to 3 (causes a lot of problems) scale.

Open-Ended Questions

Participants responded to two open-ended questions: "How did Winston Prep most help you prepare for and/or adjust to life after high school?" and "What could Winston Prep offer to help current students and/or alumni prepare for and/or adjust to life after high school?"

Procedure

Researchers emailed participants a link to an anonymous online survey (see Measures), which did not capture participants' names or other identifying information (although the survey did capture, for data integrity, email addresses to create an approved list of login IDs). Participants could skip questions they did not want to answer. Researchers provided participants with an electronic gift card to thank them for their participation.

Results

Descriptive Statistics

Generally, participants reported that they were several years past their high school graduation (M_{years} = 5.13, SD_{years} = 4.07), and all participants reported that they had at least some post-secondary education. Most participants indicated that they had been employed since attending high school (71.4%), but a minority reported current employment being either full-time (20.6%) or part-time (26.0%). Some participants reported that they took part in internships and apprenticeships (9.5% paid, 6.3% unpaid). When reporting their highest level of education, a minority indicated some college experience (35%) and others responded that they had a two-year college degree/associate's degree (11.1%), four-year college degree/bachelor's degree (27%), or an advanced degree (6%).

This sample of Winston alumni notably indicated their LD caused few problems at work (M = .89, SD = .78) and that they were satisfied with life and employment (see Table 2 for means and standard deviations). These alumni also reported satisfaction with their current living situation, romantic partner, and current relationship status —a minority reported being single (42.9%). However, only one participant reported being married. No one reported being divorced, separated, or widowed. Participants also reported that during high school, they rated highly their: supportive home life, social connections in high school, participation in high school activities, self-determination/perseverance, self-advocacy, and having supportive teachers.

Predictors of Student Success Measures

Pearson correlation analyses revealed several significant relationships between measured variables (i.e., supportive homelife, supportive teachers, self-advocacy, self-determination/perseverance, social connections) and life satisfaction measures (overall life satisfaction, employment satisfaction, satisfaction with current living situation, satisfaction with post-secondary education, and satisfaction with current relationship status) that researchers predicted would correlate (see Table 2). Although having a supportive homelife and teachers did not significantly correlate with life satisfaction measures, these two variables significantly related to three high school characteristics: self-advocacy, self-determination/perseverance, and social connections. These three characteristics, in turn, correlated with self-advocacy, self-determination, and social connections in post-secondary education. Researchers also identified consistent and significant relationships between the five life satisfaction measures and these three post-secondary characteristics. All satisfaction measures were positively correlated and most significantly correlated with one another.

Non-parametric, Spearman correlation analyses were conducted using the above measured variables with employment status and enrollment in a 2 or 4-year college. Several significant correlations emerged; high school self-advocacy and enrollment in a 2-year college were positively and significantly correlated (r = .59, p < .001), but a surprisingly negative correlation for enrollment in a 4-year college (r = -.38, p = .014). Satisfaction with current living situation was significantly and negatively related to enrollment in a 4-year college, r = -.33, p = .026. Employment status was not significantly related to any measured variables, *ps* > .08.

Self-Advocacy

Researchers conducted several regression analyses to assess how well supportive teachers and supportive homelives predicted participants' self-advocacy in high school (see Table 3). Supportive high school teachers and

Table 2
Descriptive Statistics and Correlations for Continuous Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. HS Supportive Homelife	3.35	.75	-											
2. HS Supportive Teachers	3.53	.81	.20	-										
3. HS Self-Advocacy	3.14	.85	.36*	.77**	-									
4. HS Social Connections	2.75	.71	.40**	.37*	.48**	-								
5. HS Self-Determination	2.98	.82	.36*	.69**	.67**	.36*	-							
6. PS Self-Advocacy	2.82	.61	.56**	.01	.31	.31*	.27	-						
7. PS Social Connections	2.70	.75	.39*	.19	.14	.54**	.27	.38*	-					
8. PS Self-Determination	3.32	.57	.31	.24	.34*	.30	.48**	.70**	.46**	-				
9. Life Satisfaction	3.02	.95	.59**	.17	.30*	.49**	.45**	.66**	.64**	.57**	-			
10. PS Education Satisfaction	2.76	1.18	.19	.18	.28	.38*	.34*	.63**	.44**	.55**	.57**	-		
11. Living Situation Satisfaction	2.76	1.20	.43**	.27	.15	.46**	.20	.51**	.47**	.46**	.47**	.27	-	
12. Relationship Status Satisfaction	2.80	1.28	.18	.01	.01	.19	-.02	.34*	.62**	.28	.32*	.17	.25	-
13. Employment Satisfaction	2.55	1.15	.40**	-.06	0.09	0.20	0.14	.47**	.32*	.38*	.60**	.41**	.34*	.09

Note. All items were rated on a 0 to 4 scale. *p < .05, **p < .001

homelives both significantly predicted higher levels of high school self-advocacy. To determine whether having supportive teachers or a supportive home life was a better predictor of high school self-advocacy, both predictors were entered simultaneously in a multiple regression analysis. Results indicated that both remained significant predictors. In turn, high school self-advocacy predicted post-secondary self-advocacy. Post-secondary self-advocacy significantly predicted all satisfaction outcomes: satisfaction with current living situation, satisfaction with employment, satisfaction with post-secondary education, current relationship status satisfaction, and overall life satisfaction.

Table 3
Simple and Simultaneous Regression Analyses

Regression Type	Outcome	Predictor	B	SE	t	p
Simple	High School Self-Advocacy	Supportive High School Teachers	.80	.11	7.60	<.001
		Supportive Homelife	.42	.17	2.47	.018
Simultaneous	High School Self-Advocacy	Supportive High School Teachers	.76	.11	7.26	<.001
		Supportive Homelife	.25	.11	2.19	.034
Simple	Post-Secondary Self-Advocacy	High School Self-Advocacy	2.19	1.09	2.01	.052
Simple	Living Situation Satisfaction	Post-Secondary Self-Advocacy	.09	.02	3.78	<.001
	Employment Satisfaction	Post-Secondary Self-Advocacy	.09	.03	3.33	.002
	Post-Secondary Satisfaction	Post-Secondary Self-Advocacy	.12	.02	5.24	<.001
	Relationship Satisfaction	Post-Secondary Self-Advocacy	.07	.03	2.26	.030
	Life Satisfaction	Post-Secondary Self-Advocacy	.11	.02	5.63	<.001
Simple	High School Self-Determination/ Perseverance	Supportive High School Teachers	.72	.12	6.10	<.001
		Supportive Homelife	.40	.17	2.37	.023
Simultaneous	High School Self-Determination/ Perseverance	Supportive High School Teachers	.68	.11	6.14	<.001
		Supportive Homelife	.29	.12	2.38	.023
Simple	Post-Secondary Self-Determination/ Perseverance	High School Self-Determination/ Perseverance	.34	.10	3.35	.002
Simple	Living Situation Satisfaction	Post-Secondary Self-Determination/ Perseverance	.84	.26	3.30	.002
	Employment Satisfaction		.81	.31	2.62	.012
	Post-Secondary Satisfaction		1.15	.27	4.26	<.001
	Relationship Satisfaction		.60	.33	1.83	.074
	Life Satisfaction		.96	.22	4.41	<.001
Simple	High School Social Connections	Supportive High School Teachers	.32	.13	2.51	.016
		Supportive Homelife	.38	.14	2.75	.009
Simultaneous	High School Social Connections	Supportive High School Teachers	.26	.12	2.12	.041
		Supportive Homelife	.32	.13	2.38	.022
Simple	Post-Secondary Social Connections	High School Social Connections	.56	.14	3.97	<.001
Simple	Living Situation Satisfaction	Post-Secondary Social Connections	.77	.22	3.42	.001
	Employment Satisfaction		.51	.23	2.17	.035
	Post-Secondary Satisfaction		.70	.22	3.24	.002
	Relationship Satisfaction		1.10	.22	5.09	<.001
	Life Satisfaction		.83	.15	5.48	<.001

Self-Determination/Perseverance

Like the self-advocacy analyses, regression analyses were performed with self-determination/perseverance as the predictor. Having supportive high school teachers and a supportive home life both uniquely and significantly predicted self-determination/perseverance for participants in high school. Like the self-advocacy analyses, when researchers simultaneously entered both supportive high school teachers and a supportive home life as predictors of high school self-determination/perseverance, both remained significant predictors. High school self-determination/perseverance significantly predicted post-secondary self-determination/perseverance. Post-secondary self-determination/perseverance had a significant and positive ef-

fect on most satisfaction measures: overall life satisfaction, current living situation, employment, and post-secondary education. Post-secondary self-determination/perseverance predicted satisfaction with current relationship status, but this finding was marginally significant.

Social Connections

Again, researchers performed regression analyses, but used social connections in place of self-advocacy and self-determination. When individually entered, supportive high school teachers and a supportive home life were significant predictors of high school social connections. When researchers simultaneously entered both as predictors, supportive high school teachers and a supportive home life both remained significant predictors of high school social connections. Likewise, high school social connections predicted social connections in post-secondary school. These post-secondary social connections significantly predicted all life satisfaction outcomes: overall life satisfaction, employment satisfaction, current relationship status, current living situation, and satisfaction with their post-secondary education.

Open-Ended Questions

Thirty-five participants responded to the question, "How did Winston Prep most help you prepare for and/or adjust to life after high school?" Four main themes emerged from a thematic analysis of participants' responses. Sixteen participants referenced skills and strategies that they learned while attending Winston, such as social skills and essay writing. For example, one participant stated, "By teaching me social skills. This enabled me to interact with my peers and fashion friendships after Winston." Eight participants stated that Winston helped them develop their confidence, as illustrated by this participant's response: "Gave me confidence in the legitimacy of my intellectual capabilities, even if as a young person I still had many confidence issues that were very complex in nature." Six participants stated that the self-advocacy they learned while attending Winston helped them greatly after high school, as indicated by this participant's statement: "Winston taught me how to self-advocate, and not to be ashamed of my learning difference." Four participants referred to the supportive environment Winston created, such as this alum: "It created an environment for me to effectively learn subjects and ready to take on some college level work."

One fewer participant responded to the next open-ended question ($N = 34$): "What could Winston Prep offer to help current students and/or alumni prepare for and/or adjust to life after high school?" Five main themes emerged from a thematic analysis of the responses to this question. Ten participants wished Winston had done more to prepare them for adulthood. For example, one alum stated, "I would say one of my biggest struggles after graduating high school was keeping good track of my personal budget/spending…", while another alum suggested:

> I would say that it would be much easier if there was a way to prepare students for the sudden rise in responsibility that they will be faced with, because it can be really frightening to think about making a transition to a more independent life.

Six participants wished the curriculum at Winston was tougher on students, as demonstrated by this alum: "I was not academically challenged at Winston, and I feel thus I was not conditioned to put effort into my work. I would offer more challenging courses at Winston." Another six also wished they were more prepared for college, as exemplified by a participant who stated, "A few lecture based classes to seniors on the difference in course load between high school and college." Five participants wanted more interactions with alumni, as indicated in this participant's response: "Bring in alumni to speak to classes and give there (sic) college or work advice to students or parents during open houses." Two participants thought that Winston should maintain the status quo, as indicated by this alum:

> I believe that their system is just fine the way it is. It had (sic) helped hundreds of students become successful, and given them the opportunity to get a higher education rather than allow their disabilities to take hold of their lives.

Discussion

These results provided possible explanations for why Winston and NSCC's first collaborative study revealed that Winston alumni were generally quite satisfied with their lives after attending Winston. Clearly, support from their teachers and families played an important role in their successful outcomes. Notably, both quantitative and qualitative data suggested that learning social skills such as self-advocacy and self-determination, as well as having good social connections, may be outcomes of having these two strong support systems, which may explain why these types of support are predictive of alumni success.

The qualitative findings also indicated what Winston was doing well to prepare their students, which may be helpful to teachers and administrators at other schools serving an LD population. The participants indicated that Winston taught them skills and strategies that were helpful post-graduation. Indeed, social and emotional learning

was a common theme in the student responses. Learning social skills, gaining confidence, and becoming self-advocates were important lessons for this sample of LD alumni. This bolsters the quantitative evidence indicating the importance of social and emotional learning on life outcomes.

These results also highlighted how Winston might improve, which also may be helpful for other schools teaching students with LD. A substantial portion of the respondents suggested that Winston could better prepare them for adulthood. For example, the school could provide lessons to help them learn how to keep a budget. Financial literacy, once commonplace in schools nationwide, is today only required in high school in 15 states (Fox, 2021). This oversight may be particularly detrimental for SwLD, because people with learning disabilities may be at greater risk of being victims of financial fraud or other types of financial abuse (Brown, 1999). While the current findings were limited to Winston alumni, it is quite possible that SwLD at other schools would greatly benefit from having financial literacy and other lessons related to the responsibilities of adulthood in their curriculum.

Notably, most of these skills and types of social support did not predict several student success measures as predicted: employment, attendance at a four-year college, or the highest level of educational attainment. Consequently, these findings add to a broader conversation around the question, "What is student success?" Is student success related to finding happiness and satisfaction in multiple life domains? Or is student success limited to measures such as GPA and graduating college in four years? Indeed, what is the point of these measures if these high-achieving students are unhappy and unsatisfied with life? Future research would likely benefit from a clearer definition of student success, particularly one that addresses LD student success.

Limitations and Future Directions

While these findings fill in a gap in the current knowledge about success for SwLD, this study has several limitations. Although researchers made greater efforts to obtain a larger sample size than their first collaboration with NSCC by expanding eligibility, which nearly doubled the sample size since their first collaborative project, the sample in this study was still not large enough to determine if self-advocacy, self-determination, and social connections mediated the relationship between the two social support measures and the life satisfaction measures. Ideally, future studies should have sufficient power to conduct these types of analyses, and better recruitment strategies should be in place for future research. Another limitation was that several participants did not respond to several questions, particularly the open-ended questions, which limited researchers' ability to generalize about the studies' findings. In particular, future studies should ensure participants do not accidentally skip questions, so that researchers can more fully test the study hypotheses. Additionally, these findings are limited due to to this study focusing solely on Winston alumni, making it difficult to generalize to successful SwLD in other education settings. Nevertheless, this study does indicate that ensuring students feel supported by their teachers and families, as well as students developing strong social and emotional skills, may be strong predictors for LD student success, which is consistent with previous research (e.g., Gatlin & Wilson, 2016; Wehmeyer, & Palmer, 2003).

An oversight from this study was that researchers did not include college GPA, a frequently used measure of student success. Are teacher and home life social support and social skills predictive of college GPA in an LD population? Research certainly exists that indicates that supporting SwLD in college via disability support services (e.g., Abreu et al., 2017; Canto et al., 2005) is predictive of higher GPAs, but is this relationship due to the social support or the academic skills they learn through these support services? The findings from this study suggests that the social support SwLD receive may be at least as important as the academic skills they learn. Clearly, more research is needed to determine exactly what aspects of disability support services precipitates this relationship.

Longitudinal research may provide greater insight into why some SwLD lead successful lives. A 20-year longitudinal study from the Frostig Center found that a composite score based on six "success attributes" (self-awareness, perseverance, proactivity, emotional stability, goal setting, and social support) predicted most of the variance in a success measure based on employment, education, and living arrangements (Raskind et al., 1999). The findings of these two studies align well with this research, but also suggests that these success attributes may extend beyond employment, education, and living arrangements to include satisfaction with these outcomes. Perhaps tracking these students over time may reveal important predictors of these multiple measures of LD student success.

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