

## BACKGROUND

- College students with learning disabilities (LD) and attention-deficit hyperactivity disorders (ADHD) face challenges to managing academics, social, and life demands<sup>1, 4</sup>.
- Students with LD/ADHD experience executive function difficulties that can impact their participation in daily life tasks that extend beyond academic tasks<sup>2</sup>.
- For successful management of LD/ADHD-related difficulties, students must have the essential skills needed to manage symptoms and access supports<sup>3</sup>.
- The purpose of this research is to identify the knowledge needs of undergraduates with LD/ADHD for supporting their occupational performance as emerging adults within a college pathway.

## METHODS

- Qualitative analysis was used to assess knowledge needs of undergraduates with LD/ADHD who were enrolled in a larger study that tested campus-based supports for students with LD/ADHD.
- Participants were 52 undergraduates with LD/ADHD that engaged in study activities up to four academic semesters. Participants met as a cohort to engage in disability-related psychoeducational group meetings.
- A continuous improvement approach was used to refine psychoeducational topical content.
- Data were transcripts and educational content delivered during undergraduate cohort meetings over four academic years (N=30).
- Structural coding was used to identify salient psychoeducational topics. Axial coding was used to examine the participants application of psychoeducational content.
- Rigor was enhanced by attendance of meetings and multiple coders of the data came to consensus of interpretation of the data.



## RESULTS

**Table 1. Instructive knowledge and refined topical areas from 30 undergraduate group meetings held over four academic years**

Topic	Description	Subtopics
<b>Campus resources</b>	Information about available university resources	<ul style="list-style-type: none"> <li>Classroom accommodations</li> <li>Support centers</li> <li>Assistive technology</li> </ul>
<b>Social supports</b>	Reflection/discussion about social support impacts on college experiences and how to find supports	<ul style="list-style-type: none"> <li>Anticipatory guidance from exemplars</li> <li>Supportive others</li> <li>Mentorship from graduate students</li> </ul>
<b>Mental health management</b>	Information and discussion centered around how stress presents and coping strategies for managing	<ul style="list-style-type: none"> <li>Stress management</li> <li><i>Anxiety and depression symptom management*</i></li> </ul>
<b>Stigma*</b>	Information and discussion about what they wish others understood and strategies for understanding and coping with stigma	<ul style="list-style-type: none"> <li>Others understanding LD/ADHD differences</li> <li>Misconceptions from others</li> <li>Dealing with acceptance</li> </ul>
<b>Executive function in real life</b>	Information about the cognitive process and strategies for situational appraisal, prioritization, and problem solving within everyday life	<ul style="list-style-type: none"> <li>Difficulties with task switching</li> <li><i>Time: planning, organizing, and managing*</i></li> <li>Decision making</li> <li>Learning styles that work best</li> </ul>
<b>Awareness of LD/ADHD impacts*</b>	Discussion about LD/ADHD symptoms, different cognitive styles, and personalized understandings of how symptoms may manifest in every day life	<ul style="list-style-type: none"> <li>Strengths and challenges of LD/ADHD</li> <li><i>Self-regulation strategies*</i></li> <li><i>Personalized definition of LD/ADHD*</i></li> </ul>
<b>Communication and self-advocacy</b>	Information and skills for communicating with people within their lives and how to promote a more disability friendly environment	<ul style="list-style-type: none"> <li>Explaining LD/ADHD to others</li> <li><i>Imparting wisdom for other students with LD/ADHD*</i></li> <li>Self-confidence</li> </ul>
<b>Health management</b>	Information and strategies for managing healthy behaviors and promoting healthy daily routines	<ul style="list-style-type: none"> <li>Health literacy</li> <li>Health behaviors</li> </ul>
<b>Balancing multiple roles*</b>	Strategies for anticipating future goals, managing increased roles within their everyday lives, and thinking ahead	<ul style="list-style-type: none"> <li><i>Strategies for managing work/school/daily/social*</i></li> <li><i>Disability in the workforce*</i></li> <li><i>Managing transitions with changing roles &amp; anticipated transition out of college*</i></li> </ul>

\* Unexpected areas of needed supports; evolved from continuous improvement methods

## DISCUSSION

- Study findings speak to the importance of helping young people create personalized understanding of their disability and related symptomatology needed to potentiate occupational performance and support participation.
- Results include information needs, types and examples from educational information that was presented to the undergraduates as well as feedback provided from the students which combine to explicate a framework for supporting students with disabilities who are enrolled in college.
- Findings can be used to develop and/or refine occupational therapy interventions for young adults transitioning through a college pathway, gearing information given to them to be useful and beneficial for success through this transitioning time.

## CONCLUSION

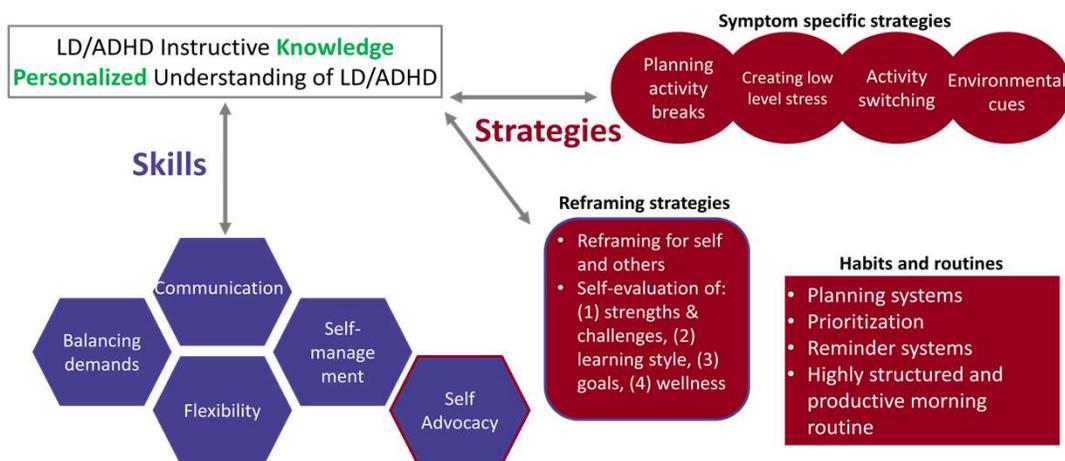
- The provision of instructive education in combination with strategy and skill development may be considered in occupational therapy interventions targeted at supporting students with LD/ADHD transitioning to adult roles.

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## REFERENCES

- Kreider, C.M., Bendixen, R.M., & Lutz, B.J. (2015). Holistic needs of university students with invisible disabilities: A qualitative study. *Physical and Occupational Therapy in Pediatrics*. doi:10.3109/01942638.2015.1020407
- Sharfi, K., Rosenblum, S. (2016) Executive functions, time organization and quality of life among adults with learning disabilities. *PLoS ONE* 11(12): e0166939. doi:10.1371/journal.pone.0166939
- Kreider, C. M., Medina, S., Lan, M. F., Wu, C. Y., Percival, S. S., Byrd, C. E., ... & Mann, W. C. (2018). Beyond academics: A model for simultaneously advancing campus-based supports for learning disabilities, STEM students' skills for self-regulation, and mentors' knowledge for co-regulating. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2018.01466
- McGregor, K. K., Langenfeld, N., Van Horne, S., Oleson, J., Anson, M., & Jacobson, W. (2016). The university experiences of students with learning disabilities. *The Division for Learning Disabilities of the Council for Exceptional Children*. doi:10.1111/dltp.12102



**Figure 1. Supporting strategy and skill development through instructive and personalized knowledge**