

Implementation and Evaluation of Online Life Skills Training Modules for Therapy Assistant Students at a Canadian College

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ABSTRACT

Like all college students, therapy assistant students may face challenges in daily living skills, such as money management, time management, and healthy meal preparation, which may negatively impact their academic and practicum success. Therapy assistant students face the added challenge of working on life skills with clients, and, as a result, students' own life skills may affect their success in clinical encounters. Few life skills training programs exist for post-secondary students, and we were unable to find any for therapy assistant students.

This study is the third phase of a larger research project that developed, implemented, and evaluated life skills training modules for therapy assistant students. Life skills training modules were offered online to therapy assistant students at a Canadian college to explore whether life skills training increased students' knowledge, self-rated competence in occupations, and self-efficacy related to personal life skills. Findings revealed that students' knowledge quiz scores significantly improved, and students rated the modules positively in respect to learning and satisfaction. No significant change was detected in students' Occupational Self Assessment (OSA) scores. Online life skills training modules may be beneficial for therapy assistant students to increase their knowledge about life skills and meet identified needs.

Keywords: college student life skills, life skills training, therapy assistant education, independent living skills, online learning modules

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The transition to college can be challenging, and students may struggle with life skills as they begin their post-secondary education (Hunter, 2006; Richardson et al., 2012). For therapy assistant students, life skills are relevant both personally and professionally, and these students may face challenges with life skills such as meal planning and preparation, managing finances, study skills, and stress management. Difficulty with life skills can adversely impact student success (Currie et al., 2012; El Ansari & Stock, 2010; Gutman & Schoon, 2013), causing challenges personally, academically, and in practicum settings.

Although we expected life skills training to be beneficial for therapy assistant students, we found few life skills training programs for this population and none specifically targeting therapy assistant students (Raudebaugh et. al, 2022). This study is the third and final phase of a larger research project that aimed to address this gap by developing, implementing, and evaluating life skills training for therapy assistant students.

BACKGROUND

Therapy assistants are healthcare workers who implement rehabilitation interventions under the direction of a therapist such as an occupational therapist, physiotherapist, or speech-language pathologist. Therapy assistants are not regulated health professionals in Canada, so job expectations and training are variable. Canadian therapy assistant diploma programs focus on occupational therapy assistant (OTA) and physiotherapy assistant (PTA) training and may also include skills related to other disciplines such as recreation therapy, speech language pathology, and/or audiology. Occupational therapy assistants often work with clients to enhance or maintain their daily living skills, such as preparing meals after an injury or prioritizing and coping with stress when managing chronic illness. Therefore, life skills are particularly relevant to the OTA component of therapy assistant education.

Life skills are the abilities required to function in daily life (Rubin et al., 2003) and encompass a variety of abilities ranging from self-care to problem solving and emotional skills (Abaoğlu et al., 2017). College students often struggle with life skills (Brooks, 1984; Currie et al., 2012; Gibbons et al., 2019), and it is not uncommon for first-year students to have difficulty adjusting to college and other demands of adult life (Fricker, 2015; Hunter, 2006; Krampe, 2017; Parker et al., 2004; Stupnisky et al., 2008). Like college students in other programs, therapy assistant students may also experience challenges with life skills.

The literature suggests that life skills are important components of student success (Currie et al., 2012; El Ansari & Stock, 2010; Gutman & Schoon, 2013). Life skills can be taught (Brooks, 1984; Chakra, 2016; Pellegrino, 2012; Picklesimer et al., 1998), and college students are expected to benefit from skills training (Picklesimer & Miller, 1998). Life skills training can help to prepare college students for the workforce and adult life (Avci & Kamer, 2018). Because

of the life-skills-oriented nature of therapy assistant students' work with clients, we expected life skills training to be especially beneficial for them. No life skills training programs specifically for therapy assistant students were identified (Raudebaugh et. al, 2022); therefore, we initiated the creation of customized life skills training materials to fill this gap.

Phase 1 Research

The first phase of research (Raudebaugh et. al, 2022) explored student-life-skill needs using a pragmatic qualitative design. The results suggested that skills such as stress management, time management, cooking, and managing money are often challenging for therapy assistant students and that life skills training in performance management, money management, and manual skills categories may facilitate the development of foundational skills to support therapy assistant students' performance as well as to support their confidence and skills for clinical encounters in their training (Raudebaugh et. al, 2022).

Phase 2 Research

The purpose of the second phase of research was to create life skills training modules that meet therapy assistant students' needs. Adult education principles based on Universal Design for Learning (UDL) guidelines (CAST, 2024d) and Outcomes-Based Education (Anderson et al., 2001; Red Deer Polytechnic Centre of Teaching, Learning, and Scholarship, n.d.) guided the application of Phase 1 research results to curriculum development of life skills training modules.

Themes identified in the Phase 1 study (Raudebaugh et. al, 2022) were organized into three module subjects including performance management, money management, and manual skills. Based on Phase 1 study results, life skills training literature, and the lead author's personal experience teaching therapy assistant students, the lead author generated a list of life skills topics for each module. Broader topic areas were divided into smaller subtopics to ensure that content was distributed into manageable chunks to enhance learning (CAST, 2024b). For example, the "time management" topic included subtopics such as prioritizing, scheduling, and eliminating distractions.

Learners benefit from multiple modes of representation, a variety of strategies for engagement, and different forms of action and expression (CAST, 2024a, 2024c). Therefore, a variety of modalities were used to convey information, including handouts, diagrams, descriptive videos, video demonstrations, slideshows, and practical application activities. Digital technology allows for different ways of interacting with users, enabling them to access information when they want or need it instead of having to attend scheduled sessions (Michie et al., 2017). The modules were designed for online delivery to allow the flexibility for students to access the content from various geographic locations on their own time

and at their own pace. In addition, the modules incorporated multiple senses and learning modalities through practical application such as goal-setting activities and putting life skills training into action, consistent with UDL guidelines (CAST, 2024d).

Throughout the module development process, the lead author applied theories to optimize module effectiveness and promote engagement. The modules are structured based on the determinants to promote changes in health behaviour as described by Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1985), and the Behaviour Change Wheel (Michie et al., 2011). For example, all three theories emphasize the importance of increasing knowledge and creating the desired preconditions for change (Ajzen, 1985; Bandura, 2004; Bandura, 1986; Michie et al., 2011; Steinmetz et al., 2016), so the life skills training modules include a combination of information and practical activities. The modules were designed to link life skills with therapy assistant students' future careers; for example, the money management module included a section on teaching money skills (such as counting money) to clients. Self-efficacy and a sense of personal control are particularly important for behaviour change (Ajzen, 1985; Bandura, 1986; Bandura, 2004; Steinmetz et al., 2016). In creating the life skills training modules, optional practical application challenges were added to encourage participants to apply their learning and make changes while maintaining personal control. The practical application activities in the life skills training modules also included strategies to reduce barriers to change as this can optimize the success of interventions (Ajzen, 1985; Bandura, 1986; Bandura, 2004; Steinmetz et al., 2016). For example, in the sewing segment of the Manual Skills module, participants are encouraged to consider a sewing project they might want to complete, identify barriers to completing the project, and set a goal to overcome barriers and complete the task successfully. Although the modules include the application of life skills specific to therapy assistant work, they could be used by any student as the content is also intended be applicable to post-secondary students in any program. Additionally, the learning strategies, such as identifying and overcoming barriers to change, could apply to all students.

Phase 3 Research

The current project is the third phase of research and includes making the life skills training modules available to a cohort of therapy assistant students at a Canadian post-secondary institution and evaluating module effectiveness. The objective of the third phase is to examine whether life skills training modules increased students' knowledge of life skills, self-ratings of their competence in performing occupations, and confidence in their ability to perform relevant life skills.

METHODS

This study was approved for ethical compliance by the General Research Ethics Board at Queen's University and the Red Deer College Research Ethics Board. All participants provided informed consent to participate in this research, and details have been anonymized to protect participant identity.

A mixed-methods approach was selected to capture the multifaceted nature of students' life skills before and after accessing life skills training modules. Quantitative measures provide data on the extent and direction of changes in students' knowledge and occupational performance to ensure objectivity in evaluating module effectiveness. Qualitative methods allow a more nuanced exploration of students' perceptions of and experiences with the modules. We chose to combine qualitative and quantitative approaches to develop a comprehensive understanding of the impact of the life skills training modules.

Recruitment

A relationship was established with a partner Canadian institution with a cohort of therapy assistant students, all of whom obtained dual training for both OTA and PTA roles. The primary investigator and a representative from the partner institution collaborated to ensure the relevance of module content and determine when and how to deploy the modules.

In September 2020, the representative from the partner institution emailed a letter of information to all students in the program. This letter included a link to the Beginning of Term Survey. After providing consent, students were able to progress to the survey where they provided an email address, indicated their year of study, and completed the Occupational Self Assessment (Baron et al., 2006). An invitation to access the life skills training modules in the Canvas learning management system was sent to each email address submitted with the Beginning of Term Survey.

Intervention

Life skills training modules were hosted in the Canvas learning management system (Instructure, n.d.). Participants could accept the course invitation and create a user account in Canvas. Participants used this secure account to log in to the learning management system and access the module content. The modules are available at https://openeducationalberta.ca/life-skills/.

Participation in the life skills training modules was voluntary. Students had the option to receive course credit for the time they spent working on the life skills training modules, but students had other options within their program to earn hours for course credit and therefore were not penalized if they chose not to participate. The life skills training modules were available from September 15 to December 15, 2020.

Modules included the following topics:

- Performance management: stress management, time management, study skills, sleep, and problem solving.
- Money management: financial literacy, budgeting, money-saving tips for college students, basic money skills for helping clients, preventing fraud, and retirement planning.
- Manual skills: food and kitchen safety, kitchen tools, cooking and baking techniques, sewing, and use of tools.

Approximately 13–23 hours of content were available in the life skills training modules, which was calculated by estimating the time required to read all written resources, such as slides and handouts, and watch all videos (lower time estimate) and to access optional external resources such as links and videos outside of the life skills training modules (higher time estimate).

Data Collection and Management

Data were collected through online quizzes and surveys to evaluate changes in students' knowledge, changes in students' perceptions of their competence, and overall satisfaction with the life skills training modules. Changes in students' knowledge were measured with quizzes within the modules. Changes in students' perception of their competence were measured with the OSA. Student satisfaction was examined through an end-of-term survey and individual module satisfaction surveys. The OSA and surveys were distributed using Qualtrics survey software (Qualtrics, n.d.). The total amount of time each user was active in the life skills training modules was tracked through the Canvas learning management system (Instructure, n.d.).

Occupational Self Assessment (OSA)

Changes in self-rated occupational competence were measured through the OSA, which was administered online prior to the start of the modules and again after the modules were complete. The OSA is a quick, client-centered assessment tool designed to measure self-reported occupational competence and values related to participation in life skill occupations (Kielhofner et al., 2009; Kielhofner & Forsyth, 2001). The OSA can be administered before and after an intervention to gauge treatment effectiveness and is a valid and reliable measure of changes in occupational competence over time (Kielhofner et al., 2009, 2010). Possible Competence Key Factor scores range from 0 to 100. Lower scores indicate that a respondent perceives much difficulty in many occupations, while higher scores show that the respondent perceives that they perform many occupations very well.

Quizzes

A ten-question multiple choice quiz was created for each of the three modules to test participant knowledge before and after module completion. Participants were required to complete the knowledge quiz at the start of each module to unlock the module. No minimum required score was set, and participants did not need to answer the questions correctly for the module content to be unlocked. Upon completing the quiz, participants would see a score out of 10, but would not receive specific feedback on which questions were answered incorrectly. Participants could then complete the same quiz at the end of the module to allow them to test their learning by comparing their pre- and post-quiz scores.

End-of-Term Survey

The end-of-term survey was available from December 1 to 15, 2020. The survey had multiple choice and open-ended questions about whether participants completed the modules and their reasons for accessing and/or not accessing the modules. It also included the following open-ended questions and requests for comments:

- 1. Please comment on the life skills training modules overall. For example, were the modules relevant to you as a therapy assistant student? Was the content useful? Would you recommend the modules to future students?
- 2. Please describe any other content areas or topics you would recommend for additional life skills training modules for therapy assistant students.
- 3. Do you have any other comments or thoughts you would like to share?

Module Satisfaction Surveys

Three anonymous module satisfaction surveys, one for each module, were administered. The surveys explored module completion, relevance of the content, participant satisfaction, how much the participant learned, and whether the participant would recommend the module to other therapy assistant students.

The module satisfaction surveys included five closed-ended questions. The first question, about whether participants completed the module, included three options (no, yes—some of the module, yes—most or all of the module). The remaining questions were rated on a 5-point Likert scale, with the exception of the question about how satisfied participants were with the module, which was rated on a 7-point Likert scale.

The individual module satisfaction surveys included the following open-ended questions and requests for comments:

- 1. Which content did you find most interesting/helpful?
- 2. What topics should be added to this module?
- 3. Other comments, thoughts, or suggestions about this module.

Data Analysis

Data were downloaded from both Qualtrics and the Canvas course and reviewed for missing values. OSA responses with up to three missing values were imputed using the OSA Key Forms by following steps outlined in the OSA Manual (Baron et al., 2006). OSA responses missing more than three values were considered incomplete and excluded from analysis.

Statistical analyses including descriptive statistics were used to analyze data. SPSS Statistics software, version 27 (IBM SPSS, 2020) was used for statistical analysis. Data were pooled to consider all participants together rather than distinguishing by year of study. Dates of OSA completion were examined and classified as to whether the pre- and post-tests were more than two days apart. OSA scores for participants whose OSA tests were two or more days apart were compared; however, given the small sample size, parametric tests were not pursued. Pre- and post-knowledge quiz scores for each module were also compared using paired samples *t*-tests. Results were considered statistically significant at p <.05 for all statistical tests. Comments from the end-of-term survey and individual module satisfaction surveys were analyzed qualitatively using applied thematic analysis (Guest et al., 2012).

RESULTS

In the program at the partner institution, 20.5% (n=8) of students were in their first year of studies, and 79.5% (n=31) were in second year (the second-year cohort included one part-time student). The program typically has a first-year cohort of 34 students but had reduced enrolment due to the COVID-19 pandemic. Study participants included 4 students who identified as being in their first year, 35 in their second year or part time, and 2 unspecified, for a total of 41. Some participants evidently used more than one email address to complete assessments, resulting in some users who were active in Canvas but did not have corresponding OSAs from the beginning and end of the semester. Because of this duplication, the total number of participants in their second year of studies exceeds the number of second-year students in the program. As email addresses were the only identifier collected, it was not possible to match the pre- or post-survey and module participation data for participants who made submissions using more than one email address. Complete data, including the OSA, quizzes, module satisfaction survey, and end-of-term survey, were obtained for 12 participants. An additional two students completed the

OSA, module satisfaction survey, and end-of-term survey, but indicated on the survey that they did not do the modules. Data were pooled for the analysis of the data from each outcome measure to consider all students together rather than distinguishing by their year of study.

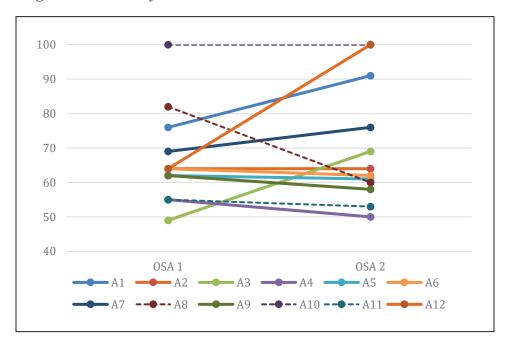
Activity in the Life Skills Training Modules Course

There were 30 participants in the life skills training modules who logged at least 15 minutes of activity in the Canvas course. Of the 30 users who were active in Canvas, the total duration of activity in all three modules combined ranged from 16:17 (minutes:seconds) to 8:02:06 (hours:minutes:seconds) with a mean of 2:23:50 and median of 1:15:30.

Occupational Self Assessment Scores

Among all participants who did the modules (n=12), 3 completed the pre- and post-tests within less than two days. Of those whose OSA tests were two or more days apart, there were 7 whose scores essentially did not change (a change of 7 or less) and 2 whose scores markedly improved, showing an increase of 20 points for one participant and 36 points for another. The results are depicted in Figure 1, which shows the change in OSA scores for each individual.

Figure 1
Change in OSA Scores for Each Individual



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Note: This graph shows a line for each participant who completed the modules, comparing each individual's first Occupational Self Assessment (OSA) score with their second OSA score. Solid lines link the scores from the nine participants who completed the first and second OSA more than two days apart. Dashed lines link the scores from the other three participants who completed the OSA twice in a period of less than two days.

Knowledge Quiz Scores

Each module had a 10-question knowledge test to measure participant learning. The average scores were higher on post-quizzes than pre-quizzes for all three modules, and paired *t*-test results for changes in knowledge quiz scores were significant in all three modules (Table 1).

Table 1Statistics for Knowledge Quiz Scores

			Result of paired <i>t</i> -test
		Mean (standard deviation) *	t (p)
Performance Management Module (n=26)	pre-quiz	3.96 (1.84)	5.46 (<0.001)
	post-quiz	6.77 (2.30)	
Money Management Module (n=26)	pre-quiz	4.19 (2.14)	5.96 (<0.001)
	post-quiz	7.23 (2.82)	
Manual Skills Module (n=26)	pre-quiz	4.62 (2.33)	5.07 (<0.001)
	post-quiz	7.62 (2.30)	

^{*} All scores out of 10

End-of-Term Survey Results

There were 24 responses on the end-of-term survey. The majority of respondents (87.5%) indicated that they had completed most or all of the module content for each of the three modules.

Participants identified reasons to access and reasons not to access life skills training modules by selecting all reasons that applied. The most common reason identified to access modules was to get course credit for practicum hours (63% of responses). The most common reason not to access modules was perceived relevance of the content to the individual (33% of responses). Participants had the option to select "other" and provide additional comments as to the reason modules

were or were not accessed. Most of those who selected "other" did not add any text to explain their response; however, one additional reason to access modules was described as follows: "I wanted to learn more about everyday skills."

Although relevance of module content was the most common reason selected not to do modules, this was only true for those who said that they completed some or all of the module content. Participants who indicated that they did not do the modules identified "a lack of time" and/or "other" as reasons not to do the modules.

Module Satisfaction Survey Results

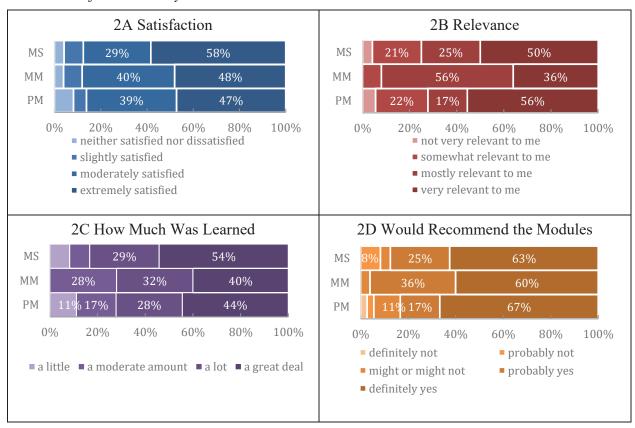
The module satisfaction surveys were anonymous and collected data about module completion and satisfaction. All respondents indicated that they completed at least some of the module content, and the majority of respondents said that they completed all or most of the module content, as shown in Table 2.

Table 2Self-Reported Module Completion

Did you complete this module?	Performance Management n=36	Money Management n=25	Manual Skills n=24
Yes - some of it	11.1%	8.0%	4.2%
Yes - all or most of it	88.9%	92.0%	95.8%

Figure 2

Module Satisfaction Survey Results



Note: Student ratings of Manual Skills (MS), Money Management (MM), and Performance Management (PM) modules are depicted in the graphs above. Panel 2A shows participants' module satisfaction ratings for the three modules; only the neutral and three positive response options of the 7-point scale received any responses. Panel 2B shows participants' ratings of the relevance of module topics; the lowermost rating on the 5-point scale, "not at all relevant to me," received no responses. Panel 2C shows how much participants reported learning; on the 5-point scale, the lowest rating, "none at all," received no responses. Panel 2D shows whether participants would recommend the module to therapy assistant students on a 5-point scale.

Qualitative Results

Qualitative feedback suggested that students found the modules relevant and helpful, and that many students felt grateful for the opportunity to receive life skills training. The comments on the end-of-term survey suggested that participants found the modules beneficial, as demonstrated in the following examples:

The modules were really useful and informative. I learned a lot and I would definitely recommend the therapy students to take these modules. I think [it's] really relevant to me as a therapy assistant student because I need to be more familiar with the concepts of [these] modules. In my opinion, all parts of [the

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modules] were relevant to me as a therapy assistant and are very useful and I absolutely recommended it to future student[s].

Comments also indicated that participants found doing the modules to be "an enjoyable experience" and that the modules were "informative and helpful." Participants seemed to find the topics related to personal wellness—such as stress management, time management, and money management—particularly beneficial. The experience of engaging with life skills training modules appeared to be perceived positively.

DISCUSSION

In the short time that life skills training modules were made available to the therapy assistant students, significant change in occupational performance was not detected on the OSA. It appears that students learned life skills by completing the modules. Knowledge quiz scores improved, and the majority of participants reported that they learned from the modules. However, none of the comments clearly indicated that students felt more confident, so it is not possible to be certain that students felt more capable in performing life skills.

Impact of Life Skills Training on Student Success

The results of the Phase 1 study (Raudebaugh et. al, 2022) suggested that OTA students with greater competence in life skills would feel more confident in performing their duties. Students who are more confident in life skills are expected to experience more success in the workplace (Avci & Kamer, 2018) and be better prepared to work with clients. The literature suggests that young adults may lack certain life skills essential to succeed in the workplace, such as communication and professionalism (Trilling & Fadel, 2009) and that supports for students in postsecondary education are not adequate to develop sufficient coping skills to handle stressful situations that will invariably occur (Aykut Ceyhan & Ceyhan, 2011). Moreover, student supports and healthy living strategies are recommended to build environments that foster student well-being (Stanton, 2019). Exploration of the potential impacts of life skills training in the workplace was beyond the scope of the current study. Further research is needed to determine if participants' initial perceptions that life skills training is helpful are associated with improved occupational performance and to investigate whether such training helps OTA students in their work with clients. Further research could explore whether life skills training impacts students' performance in practicum placements as measured by preceptor or client ratings and/or student self-ratings.

Engagement

The fact that participants spent, on average, less than two hours active in the modules (out of at least 13 hours of content available) suggests that further engagement strategies are needed. With low engagement time, it is unlikely that students learned all they could from the modules. For all three modules, those who indicated that they did not do the module had selected "a lack of time" and/or "other" as reasons not to do modules but none of these users selected "relevance of the module content." This suggests that students chose to engage in the content that they found relevant, and, if they did not do a module at all, it was likely due to a lack of time or other factors.

Engagement strategies such as reminders, incentives, and social support can increase uptake of online interventions (Morrison et al., 2012; Perski et al., 2017; Webb et al., 2010), and these strategies are also linked to the topics in the Performance Management module. We infer that participants with poor performance management skills are likely to need incentives to be led to do what high-performing people would do without external incentives. The practical application activities within each module encourage the use of self-management techniques, such as time management and scheduling, stress management, and coping skills, but those with lower life skill abilities are less likely to apply self-management strategies. It is hoped that engaging with the life skills training modules will help students to build self-management skills as well as other life skills, so external incentives could help encourage those with lower self-management abilities to engage and to build the necessary skills.

Implications for Education

The literature endorses the value of life skills for post-secondary students. Adjusting to post-secondary education can be challenging (Hunter, 2006; Richardson et al., 2012). New college students face greater responsibilities and can feel overwhelmed, leading to a decreased sense of control, which negatively impacts academic performance (Stupnisky et al., 2008). Supporting college students can help facilitate the transition to the post-secondary setting (Hunter, 2006). Life skills are learned implicitly through daily experience and can also be taught explicitly (Brooks, 1984; Pellegrino, 2012), and supporting positive life skill development creates a smoother transition to adulthood (Chakra, 2016). Online, self-paced life skills training modules are an innovative approach to address these common life skill challenges. Life skills training may be a helpful way to support students as they transition to post-secondary education and into the workforce.

Not all module topics will be relevant for all students. Some students already have experience in certain life skill areas and may not need life skills training to gain competence in these areas. Personal choice and autonomy can enhance engagement and increase the likelihood of behaviour change (CAST, 2024a; Perski

et al., 2017). Allowing students to choose which module topics to complete may help maximize autonomy and engagement.

Topics chosen for these life skills training modules were based on priority areas identified in a prior qualitative study, but there are additional topics that could be relevant for therapy assistant students. In the future, it may be helpful to expand module content with the addition of further life skills training modules, extending the depth of topics through additional subtopics within the modules and offering different levels of content ranging from introductory to advanced.

The modules offered for the purposes of this study were limited to three broad topic areas with five or six topics per module. On module satisfaction surveys, participants recommended additional topics for each of the module areas. Expanding the modules by adding topics may result in increased relevance and helpfulness for students.

Based on the results of this research study, the life skills training modules were adapted and made available as an Open Educational Resource (OER). The modules are freely available at https://openeducationalberta.ca/life-skills/ and can be accessed by college students, faculty, or anyone who may be interested.

Limitations

During the module development process, it was not feasible to conduct psychometric evaluation of the module quizzes. Surveys included positively worded questions, such as which content participants found most helpful and what content should be added to the module. The addition of negatively worded questions, such as which content was least helpful and which topics should be removed, would have provided more balanced feedback.

Confidence in performing life skills was not directly measured. No self-efficacy measures specific to functional life skills were found, and the development of a new measure was not feasible in the context of this study.

Many factors could impact students' OSA scores. For example, students may have fundamentally different life skills at baseline and differing levels of experience with life skills. Students' cultural backgrounds, experiences, and age can also impact life skill abilities, and such demographic details were not measured in this study. The self-selected nature of the participants in the study can result in bias and could also affect OSA scores.

The short time between pre- and post-assessment limited the amount of change that was likely to occur. The dates of the pre- and post-assessments for some participants were less than a week apart, and it is unlikely that meaningful change would occur in such a short time. In addition, the small sample size of only 12 participants who completed both pre- and post- surveys interferes with drawing meaningful conclusions.

CONCLUSION

This study explored an innovative way of addressing therapy assistant student life skill needs through the delivery of online life skills training modules specifically targeting therapy assistant students. The modules were unique in their practical focus for this student population. Life skills training modules were rated positively by participants in terms of module relevance, student satisfaction, and self-rated learning. Participants who completed life skills training modules demonstrated improved scores on knowledge quizzes. Changes in occupational performance were not detected.

In the future, it is recommended that module content is expanded to incorporate additional topics of relevance for therapy assistant students or for students in other college programs. It may also be helpful to include reminders sent by text message and incentives, such as course credit, to increase participant engagement with module content. Including social support may be beneficial to help participants engage with content and change their life skill behaviours in positive ways. Support could be in the form of participant interaction, mentorship, and/or support from an instructor who provides feedback on students' work in the life skills training modules.

The results of this study suggest that therapy assistant students who participated in online life skills training modules demonstrated improved knowledge in life skills, including performance management, money management, and manual skills. Although the life skills training modules did not impact self-assessed occupational competence to a measurable degree, the satisfaction survey results suggest that the content was helpful to participants. Increased knowledge might translate into greater competence in life skills, which could result in improved performance during practicum placements. Further research is recommended to explore whether offering life skills training modules to therapy assistant students results in changes in life skill behaviours and whether such changes are evident in practicum placements and the workplace.

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REFERENCES

- Abaoğlu, H., Cesim, Ö. B., Kars, S., & Çelik, Z. (2017). Life skills in occupational therapy. In M. Huri (Ed.), *Occupational therapy: Occupation focused holistic practice in rehabilitation* (pp. 49–65). Intech. https://doi.org/10.5772/intechopen.68462
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11–39). Springer. https://doi.org/10.1007/978-3-642-69746-3_2
- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives (Complete ed.). Longman.
- Avci, D. E., & Kamer, D. (2018). Views of teachers regarding the life skills provided in science curriculum. *Eurasian Journal of Educational Research*, 18(77), 1–18. https://doi.org/10.14689/ejer.2018.77.1
- Aykut Ceyhan, A., & Ceyhan, E. (2011). Investigation of university students' self-acceptance and learned resourcefulness: A longitudinal study. *Higher Education*, 61(6), 649–661. https://doi.org/10.1007/s10734-010-9354-2
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice Hall.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31(2), 143–164. https://doi.org/10.1177/1090198104263660
- Baron, K., Kielhofner, G., Lyenger, A., Goldhammer, V., & Wolenski, J. (2006). Occupational Self Assessment (OSA): Assessment manual. Department of Occupational Therapy, University of Illinois at Chicago.
- Brooks, D. K. Jr. (1984). A life-skills taxonomy: Defining elements of effective functioning through the use of the Delphi technique. [Doctoral dissertation, University of Georgia]. APA PsycInfo.
- CAST. (2024a). *Principle: Design multiple means of engagement*. https://udlguidelines.cast.org/engagement
- CAST. (2024b). *Principle: Cultivate multiple ways of knowing and making meaning*. https://udlguidelines.cast.org/representation/building-knowledge/making-meaning/

- CAST. (2024c). *Principle: Design multiple means of representation*.

 https://udlguidelines.cast.org/representation/?utm_source=castsite&utm_medium=web&utm_campaign=none&utm_content=aboutudl
- CAST. (2024d). The UDL Guidelines. http://udlguidelines.cast.org
- Chakra, A. (2016). A life skills approach to adolescent development. *International Journal of Home Science*, *2*(1), 234–238.
- Currie, L. K., Pisarik, C. T., Ginter, E. J., Glauser, A. S., Hayes, C., & Smit, J. C. (2012). Life-skills as a predictor of academic success: An exploratory study. *Psychological Reports*, *111*(1), 157–164. https://doi.org/10.2466/11.04.17.PR0.111.4.157-164
- El Ansari, W., & Stock, C. (2010). Is the health and wellbeing of university students associated with their academic performance? Cross sectional findings from the United Kingdom. *International Journal of Environmental Research and Public Health*, 7(2), 509–527. https://doi.org/10.3390/ijerph7020509
- Fricker, T. (2015). The relationship between academic advising and student success in Canadian colleges: A review of the literature. *College Quarterly*, 18(4).
- Gibbons, M. M., Rhinehart, A., & Hardin, E. (2019). How first-generation college students adjust to college. *Journal of College Student Retention: Research, Theory & Practice*, 20(4), 488–510. https://doi.org/10.1177/1521025116682035
- Guest, G., MacQueen, K., & Namey, E. (2012). *Applied thematic analysis*. SAGE Publications. https://doi.org/10.4135/9781483384436
- Gutman, L.M., & Schoon, I. (2013). *The impact of non-cognitive skills on outcomes for young people*. Institute of Education, University of London.
- Hunter, M. S. (2006). Fostering student learning and success through first-year programs. *Peer Review*, 8(3), 4–7.
- IBM SPSS [Computer software]. (2020). *IBM SPSS Statistics*, Version 27. https://www.ibm.com/products/spss-statistics
- Instructure [Computer software]. (n.d.). Canvas. https://www.instructure.com/
- Kielhofner, G., Dobria, L., Forsyth, K., & Kramer, J. (2010). The Occupational Self Assessment: Stability and the ability to detect change over time.
- Raudebaugh, C., Finlayson, M., Norman, K., and Stewart, S. (2024). Implementation and evaluation of online life skills training modules for therapy assistant students at a Canadian college. *Imagining SoTL*, 4(2), 39-60. https://doi.org/10.29173/isotl791

- *OTJR: Occupational Therapy Journal of Research*, *30*(1), 11–19. https://doi.org/10.3928/15394492-20091214-03
- Kielhofner, G., & Forsyth, K. (2001). Measurement properties of a client self-report for treatment planning and documenting therapy outcomes. Scandinavian Journal of Occupational Therapy, 8(3), 131–139. https://doi.org/10.1080/110381201750464485
- Kielhofner, G., Forsyth, K., Kramer, J., & Iyenger, A. (2009). Developing the Occupational Self Assessment: The use of Rasch analysis to assure internal validity, sensitivity and reliability. *British Journal of Occupational Therapy*, 72(3), 94–104. https://doi.org/10.1177/030802260907200302
- Krampe, J. (2017, August 4). Why is adulting so hard? *Success*. https://www.success.com/why-is-adulting-so-hard/
- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, *6*(42), 1–11. https://doi.org/10.1186/1748-5908-6-42
- Michie, S., Yardley, L., West, R., Patrick, K., & Greaves, F. (2017). Developing and evaluating digital interventions to promote behavior change in health and health care: Recommendations resulting from an international workshop. *Journal of Medical Internet Research*, 19(6), 1–13. https://doi.org/10.2196/jmir.7126
- Morrison, L. G., Yardley, L., Powell, J., & Michie, S. (2012). What design features are used in effective e-health interventions? A review using techniques from critical interpretive synthesis. *Telemedicine and E-Health*, *18*(2), 137–144. https://doi.org/10.1089/tmj.2011.0062
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, 36(1), 163–172. https://doi.org/10.1016/S0191-8869(03)00076-X
- Pellegrino, J. W. (2012). Education for life and work: Developing transferable knowledge and skills in the 21st century. National Academies Press. https://doi.org/10.17226/13398
- Perski, O., Blandford, A., West, R., & Michie, S. (2017). Conceptualising engagement with digital behaviour change interventions: A systematic review using principles from critical interpretive synthesis. *Translational*
- Raudebaugh, C., Finlayson, M., Norman, K., and Stewart, S. (2024). Implementation and evaluation of online life skills training modules for therapy assistant students at a Canadian college. *Imagining SoTL*, 4(2), 39-60. https://doi.org/10.29173/isotl791

- Behavioral Medicine, 7(2), 254–267. https://doi.org/10.1007/s13142-016-0453-1
- Picklesimer, B. K., Hooper, D. R., & Ginter, E. J. (1998). Life skills, adolescents, and career choices. *Journal of Mental Health Counseling*, 20(3), 272–282.
- Picklesimer, B. K., & Miller, T. K. (1998). Life-skills development inventory—College form: An assessment measure. *Journal of College Student Development*, *39*(1), 100–110.
- Qualtrics [Computer software]. (2020). https://www.qualtrics.com
- Raudebaugh, C. L., Norman, K., & Finlayson, M. L. (2022). Life skill needs of occupational therapy assistants: perceptions of instructors, preceptors, graduates and current students. *Journal of Occupational Therapy Education*, 6(3), 1-21. https://encompass.eku.edu/jote/vol6/iss3/3/
- Red Deer Polytechnic Centre of Teaching, Learning, and Scholarship. (n.d.). Alignment between assessments and outcomes. https://rdpolytech.ca/media/5121/download?inline
- Richardson, A., King, S., Garrett, R., & Wrench, A. (2012). Thriving or just surviving? Exploring student strategies for a smoother transition to university. A practice report. *The International Journal of the First Year in Higher Education*, *3*(2), 87–93. https://doi.org/10.5204/intjfyhe.v3i2.132
- Rubin, S. E., Thomas, D. L., & Chan, F. (2003). Assessing changes in life skills and quality of life resulting from rehabilitation services. *The Journal of Rehabilitation*, 69(3), 4–9.
- Stanton, A. (2019). *Rationale for well-being in learning environments*. http://www.sfu.ca/healthycampuscommunity/learningenvironments/rationale.html
- Steinmetz, H., Knappstein, M., Ajzen, I., Schmidt, P., & Kabst, R. (2016). How effective are behavior change interventions based on the Theory of Planned Behavior? A three-level meta-analysis. *Zeitschrift für Psychologie*, 224(3), 216–233. https://doi.org/10.1027/2151-2604/a000255
- Stupnisky, R. H., Renaud, R. D., Daniels, L. M., Haynes, T. L., & Perry, R. P. (2008). The interrelation of first-year college students' critical thinking disposition, perceived academic control, and academic achievement. *Research in Higher Education*, 49(6), 513–530.
- Raudebaugh, C., Finlayson, M., Norman, K., and Stewart, S. (2024). Implementation and evaluation of online life skills training modules for therapy assistant students at a Canadian college. *Imagining SoTL*, 4(2), 39-60. https://doi.org/10.29173/isotl791

https://doi.org/10.1007/s11162-008-9093-8

- Trilling, B., & Fadel, C. (2009). 21st century skills: Learning for life in our times. John Wiley & Sons.
- Webb, T. L., Joseph, J., Yardley, L., & Michie, S. (2010). Using the internet to promote health behavior change: A systematic review and meta-analysis of the impact of theoretical basis, use of behavior change techniques, and mode of delivery on efficacy. *Journal of Medical Internet Research*, 12(1), 1–18. https://doi.org/10.2196/jmir.1376