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Balancing care and academic goals: how young adult carers navigate higher education

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Young adult carers (YAC) often face unique challenges in higher education, yet their experiences remain underexplored. The objective of this study was to describe their experiences by comparing YAC with young adults who had an ill relative but were not carers (YANC) and with young adults without a sick relative (YAWSR). Participants included 436 students in higher education aged 18–30 years (122 YAC, 105 YANC and 209 YAWSR). They were asked to complete an online questionnaire about their school experience, the health of their loved ones, and the types of support potentially available to them. The school experience was analyzed using both objective (e.g., number of grades repeated and dropouts) and subjective indicators (i.e., self-report of academic, social, and emotional adjustment in the higher education context). The results of the study indicated that, while YAC did not self-rate their academic and social adjustment more negatively, they reported experiencing more emotional difficulties and a less linear academic trajectory in comparison to their peers in the other two groups. These findings highlight the importance of providing more support for YAC to improve their school experience in higher education, mental health, and future adult life.

KEYWORDS

young adult carers, ill relative, higher education, school experience, study interruptions, psychosocial adjustment

Introduction

Caregiving refers to the ongoing provision of help to a person whose illness, disability, mental health condition, or age-related changes limit everyday functioning, with the aim of maintaining their health, safety, and quality of life (Hermanns and Mastel-Smith, 2012). Typical caregiving tasks range from assistance with daily living to health management, emotional and relational support, and decision-making. These tasks can be provided by formal care workers, such as health professionals, or by informal carers, including family members, partners, friends, and neighbors.

Informal caregiving is usually associated with adults. Nevertheless, children, adolescents, and young adults can also assume these responsibilities (Bigossi, 2020; Bjorgvinsdottir and Halldorsdottir, 2014; Côté and Éthier, 2020). The person receiving help is often a parent, but may also be a sibling, a grandparent, or other relative (Becker and Becker, 2008). While the literature on the experiences of young carers under 18 has considerably expanded over the past 25 years (Aldridge, 2018), research on young adult carers (YAC) remains limited (Becker and Becker, 2008; Day, 2015; Kent, 2020; Knopf et al., 2022; Levine et al., 2005). Yet, the developmental stage from late adolescence to around age

30 involves unique challenges, such as the gradual acquisition of financial, residential, and emotional autonomy, entry into higher education or the workforce, and key life decisions (Arnett, 2000, 2014; Becker and Becker, 2008; Kent, 2020; Syed, 2015; Xue et al., 2023). For YAC, these challenges must be balanced with the demands of their carer role (Haugland et al., 2022; Knopf et al., 2022).

Providing care during the young adult years can foster valuable skills such as managing complex situations, becoming more mature and autonomous, and developing sensitivity. It can also strengthen the bond with the person being cared for (Becker and Becker, 2008; Cass et al., 2011; Charles et al., 2012; McDougall et al., 2018; Stamatopoulos, 2018; Van der Werf et al., 2020). However, caregiving during this period has also been linked to an increased risk of mental and physical health problems (Becker and Becker, 2008; Chevrier et al., 2023a,b; Greene et al., 2017; Haugland et al., 2020).

From an academic perspective, most studies have focused on the consequences of caregiving for elementary and high school-aged carers. These studies have shown poorer attendance, lower achievement, and higher dropout risks (Aldridge and Becker, 1993; Kavanaugh et al., 2016; Lakman et al., 2017; Moore et al., 2022; Nagl-Cupal et al., 2014; Siskowski, 2006). However, fewer studies have examined the impact of caregiving on young adults in higher education (see [Supplementary file](#)) and the results found may vary (Walker et al., 2024a), mainly because of the discrepancy among studies regarding the variables used. Some evidence suggests that flexible schedules and supportive staff can help these students adapt to their situation and the needs of their loved ones (Becker and Becker, 2008; Cass et al., 2011; Kirton et al., 2012). Nevertheless, many report time scarcity, fatigue, irregular attendance, late submissions, and difficulty concentrating, as well as limited campus presence and participation in extracurricular activities (Andrewartha and Harvey, 2021; Aylward, 2009; Becker and Becker, 2008; Becker and Sempik, 2019; Day, 2021; Kettell, 2018; Kirton et al., 2012). Therefore, for most young adult carers, caregiving adds pressure and workload on top of the demands of higher education (Cass et al., 2011; Hamilton and Adamson, 2013; Knopf et al., 2022). Many YAC tend to prioritize their caregiving and academic obligations over their social and personal lives (Becker and Becker, 2008; Day, 2015; Runacres et al., 2024; Walker et al., 2024b) leading to restricted interactions with their peers and feelings of loneliness (Andrewartha and Harvey, 2021; Aylward, 2009; Haugland et al., 2022).

Moreover, comparative and longitudinal studies suggest that student carers face disadvantages relative to non-carers, including lower academic performance, increased anxiety and depression, slower academic progression, and a reduced likelihood of completing a degree or entering the workforce. These effects are exacerbated by intensive, long-term caregiving (Armstrong-Carter et al., 2022; Haugland et al., 2020, 2022; Chevrier et al., 2023a; Greene et al., 2017; King et al., 2023; Miller et al., 2024; Xue et al., 2023). Yet, these findings are difficult to interpret because most studies did not include a comparison group (e.g., young people with a sick relative who do not assume a caregiving role). However, students with a sick relative but without caregiving responsibilities may also experience hardship and underperform academically

(Crandall et al., 2014; Mitchell and Abraham, 2018; Sieh et al., 2013). To our knowledge, only one study (Chevrier et al., 2023a) has used a three-group design [YAC, young adult non-carers but with a sick relative (YANC), and young adults without a sick relative (YAWSR)]. This study showed that illness exposure alone worsens outcomes, while caregiving adds an extra burden. However, it only assessed emotional outcomes and not academic or social factors.

The present study aims to clarify how the carer role affects the educational experiences of young adults in higher education, above and beyond illness exposure, disability, and loss of autonomy. We hypothesize that YAWSR will report the most positive experiences in the areas of personal growth, academics, and social life. Second, due to their additional responsibilities, we hypothesize that YAC will be less satisfied with their higher education experience and report more academic, emotional, and social difficulties than YANC.

Method

Recruitment and participants

Participants were recruited between March and November 2023, from General and Professional Teaching Colleges (CEGEPs) and community colleges in the Montreal, Laurentian, and Bas-Saint-Laurent regions and from all universities in the province of Quebec (Canada)¹. Various methods were used to ensure that the data collection was as effective as possible: email invitations were sent to students via the institutions' mailing lists, the information was posted on the institutions' televisions and social networks, the study was promoted during lunch breaks, and so on. Social media (Facebook and Instagram) and the website of the [anonymized] laboratory were also used for recruitment. The project received ethical approval from the [anonymized university name] (2023-2256) and participants had to confirm their free and informed consent before being able to access the questionnaire.

The sample consisted of 436 young adults aged 18–30 (median age = 23.09; *SD* = 3.16) who were enrolled in higher education in Quebec and provided valid data. The lower age limit of 18 was set to avoid the need for parental consent and to ensure participants could provide informed consent on their own. The upper age limit of 30 was selected to reflect common definitions of young adult carers (e.g., Runacres et al., 2024) and to correspond with the widely recognized developmental stage of emerging adulthood (e.g., Arnett et al., 2014). The majority were females (72.4%), but there were also 22.8% males and 4.7% transgender, non-binary, or gender-fluid students. The proportion of young adults who reported being born in Quebec was 78.4% (*n* = 342), and all regions of the province were represented in the sample. Over 60% of the students (*n* = 281; 64.4%) still lived with at least one of their parents, and 23.2% lived with both parents. The majority

¹ In Quebec's postsecondary system, CEGEPs are public general and vocational colleges positioned between high school and university (short-cycle pre-university or technical programs), whereas community colleges deliver career-focused certificates or diplomas, and universities award undergraduate and graduate degrees.

of the sample reported having siblings (92.2%), and 45.7% of them were firstborns. Students enrolled in university programs were over-represented in the sample (compared to 17.3% enrolled in CEGEPs). Most participants reported being enrolled as full-time students (91.7%), a status defined in Quebec as four courses per semester at CEGEP/College or 9–12 credits per semester at university. All fields of study were represented (45.8% in humanities and social sciences—including 103 in social care or education; 46.5% in science, technology, and health; and 7.8% in arts, literature, and languages). Nearly sixty percent (60.8%) of the participants did not receive any student financial aid (AFE). Overall, 71.3% of the sample reported being employed alongside their studies ($n = 311$).

Measures

Data were collected through an online questionnaire on the secure Lime Survey platform. It included questions about participants' sociodemographic characteristics, the health of their relatives, the help they provided, and their educational experiences.

Sociodemographic characteristics

There were several questions about age, gender, place of residence, family composition, financial situation, and parents' employment status. Other questions covered the type of institution attended (trade school, community college or CEGEP, university, other), the level of study (undergraduate, graduate, or postgraduate), the type of program pursued, and the type of study (full-time or part-time).

Difficulties experienced by family and friends, and the assistance provided to them

Participants were asked to indicate whether one (or more) of their loved ones had difficulty functioning due to any of the following: a physical illness or disability, a mental disorder or mental health problems, an intellectual disability or other neurodevelopmental disorder (e.g., autism spectrum disorder), an age-related dependency, a substance abuse problem, or any other difficulty that could prevent them from caring for themselves and their loved ones (e.g., difficulties following a serious accident or hospitalization).

Participants who reported having at least one loved one with such difficulty were then asked about the age of the person, the identity of the person (multiple choice answers: parent, sibling, spouse, etc.), the chronic nature of the difficulty (number of years since the relative has been experiencing these difficulties), and if the person receives professional help ("yes," "no," "I don't know," "I prefer not to answer"). They could provide information about the characteristics of a maximum of two people.

The support provided to relatives experiencing difficulties was analyzed as follows. Participants were asked to indicate whether or not they felt they regularly helped or supported the person(s) in question. If so, they were asked to indicate the frequency with which they provided different types of support each week. To this end, they were asked to indicate, on a five-point Likert

scale ranging from I don't help at all (0) to I help a lot (4), the extent to which specific tasks corresponded to their reality. These tasks were divided into four categories: instrumental support (e.g., "To what extent do you help your loved one in making appointments?"), emotional support (e.g., "To what extent do you help your loved one by keeping them company?"), personal care (e.g., "To what extent do you help your loved one get dressed?"), and household tasks (e.g., "To what extent do you help your loved one by preparing meals?"). A total of 28 items on the task list were adapted from the *Youth Activities of Caregiving Scale* (YACS, Ireland and Pakenham, 2009). Four items were also adapted from the CAMPUS-CARE questionnaire used French study of the same name by the *Laboratoire psychopathologie et processus de santé* (JAID, 2020; e.g., "To what extent do you help your loved one by encouraging and supporting them?"). The YACS items were translated by the research team. A mean score greater than or equal to 2 on at least one of the four care categories was considered an indicator of regular care, in accordance with the recommendations of Wepf et al. (2021).

School experience

School adjustment was assessed from both an objective perspective (repeat and drop-out rates, etc.) and a subjective perspective based on self-report of various aspects of the school experience.

- *Objective indicators of school adjustment:* Respondents were asked whether they had ever interrupted or reduced their studies (e.g., switched from full-time to part-time) during their schooling, whether they had ever repeated a grade, and whether they had ever failed a course at the higher education level. For each of these items, respondents had the option of answering "yes" or "no." They could also choose the option "I prefer not to answer." The same response options were offered for the following question: "Do you think that one or more events in your life have affected your academic progress?"
- *Self-report measures of school adjustment* were based on academic, social, and emotional dimensions. These were assessed using 25 items taken from the three relevant subscales of the SACQ questionnaire (Baker and Siryk, 1989; French version validated by Carayon and Gilles, 2005). As in the original scale, participants were asked to respond to each item by positioning themselves on a nine-point Likert-type scale ranging from does not apply at all (1) to apply perfectly to me (9). The "Academic Adjustment" subscale originally consisted of 24 items and assessed four subdimensions of academic adjustment: "motivation" toward academic goals and graduation, "commitment" to one's work, academic "performance," and academic "environment" (Carayon and Gilles, 2005). In our study, four items were selected to assess motivation on the one hand (e.g., "I plan to continue my studies until I graduate"; Cronbach's alpha: 0.69) and commitment (e.g., "I keep up to date with my work"; Cronbach's alpha: 0.69; "I keep up with my schoolwork"; Cronbach's alpha: 0.58). Three items were also retained for self-report of academic performance

(e.g., “I am satisfied with my academic performance”; Cronbach’s alpha: 0.61). The “environment” subscale, which concerned satisfaction with one’s educational institution (e.g., “I am very satisfied with the choice of my educational institution”) was not retained because it was less relevant to the purpose of the study. The “Social Adjustment” subscale allows respondents to rate the quality of their relationships with peers, teachers, and academic staff. Six of the 20 items in the original version were retained for the present study (e.g., “I have good friends or acquaintances at school with whom I can talk about any problems I have”; alpha: 0.82). Finally, “personal-emotional” adjustment focuses on students’ psychological and physical states. Eight of the original 15 items were retained (e.g., “I often feel tired,” “I often feel depressed”; alpha: 0.71). For each dimension, higher scores are associated with better school adjustment.

Analysis

All statistical analyses were performed using SPSS version 29.0. Participants were divided into three subgroups according to their caregiving status: young adult carers (YAC), young adults with a sick relative but without regular caregiving responsibilities (YANC), and young adults without a sick relative (YAWSR).

Preliminary descriptive analyses (means, standard deviations, frequencies, and percentages) were conducted to characterize the sample and to examine missing data. Participants with incomplete responses on a given variable were excluded listwise from the corresponding analysis but retained for analyses in which they had valid data.

Comparisons between groups on categorical variables (e.g., gender, study interruptions, type of relative with health difficulties) were carried out using Pearson’s chi-square tests. Assumptions of expected cell frequencies (>5) were checked, and effect sizes were reported using Cramer’s V .

Comparisons on continuous variables (e.g., SACQ subscales of academic, social, and emotional adjustment) were examined using analyses of variance (ANOVA) and a multivariate analysis of variance (MANOVA) to account for the intercorrelations among the adjustment dimensions. When a significant main effect was observed, Tukey’s HSD *post-hoc* tests were conducted to identify pairwise group differences while controlling for Type I error.

Assumptions of normality and homogeneity of variance were verified through graphical inspection of residuals and Levene’s tests. Effect sizes were reported as η^2 for ANOVA/MANOVA analyses. The threshold for statistical significance was set at $p < 0.05$ for all tests.

Finally, given the overrepresentation of female participants in our sample compared to the general higher education population, we conducted a multivariate analysis of covariance (MANCOVA) including gender as a covariate to ensure that the observed group differences were not attributable to this imbalance.

Results

Sociodemographic and caregiving characteristics of the sample

Half of the participants ($n = 227$, 52.9%) reported having at least one relative whose daily life was affected by a health problem or a difficulty impacting their autonomy. Of these, 122 (i.e., 53.7% of participants who reported having a dependent relative and 27.9% of the total sample) indicated that they provided care on a regular basis or reported providing care relatively frequently and were therefore considered to be young adult carers (YAC). Young adult non-carers with a sick relative (YANC) numbered 105 (24.2%) and young adults with no sick relative (YAWSR) made up the other half of the sample ($n = 209$, 47.9%).

Table 1 shows the sociodemographic characteristics of the YAC, YANC, and YAWSR groups. There were no significant differences between the groups except for gender and field of study. Regarding gender, the YAC group had significantly more females than the YAWSR group χ^2 ($N = 436$, $ddl = 2$) = 22.047, $p < 0.001$, $V = 0.149$, and the YANC group was not significantly different from either the YAC or the YAWSR. In terms of field of study, YAC and YANC were significantly more likely than YAWSR to pursue careers in social care or education χ^2 ($N = 436$, $ddl = 2$) = 22.047, $p < 0.001$, $V = 0.153$.

There were significant differences between carers and non-carers among participants confronted with a loved one’s difficulties. YAC were significantly more likely to live with the relative in question χ^2 ($N = 227$, $ddl = 1$) = 7.083, $p = 0.008$, $V = 0.177$, and their close relative was more likely to be their mother χ^2 ($N = 227$, $ddl = 1$) = 15.015, $p < 0.001$, $V = 0.257$ or their spouse χ^2 ($N = 227$, $ddl = 1$) = 14.059, $p < 0.001$, $V = 0.249$ compared to YANC. YAC were more likely than YANC to report having more than one relative with difficulties, χ^2 ($N = 227$, $ddl = 1$) = 13.041, $p < 0.001$, $V = 0.240$, especially both parents, χ^2 ($N = 227$, $ddl = 1$) = 6.050, $p = 0.014$, $V = 0.163$. No differences were observed between YAC and YANC in terms of the type of difficulties experienced by the relative or the professional help they received or did not receive.

Comparisons of the school experience of YAC, YANC, and YAWSR

Table 2 presents all the results related to the target variables of the study, i.e., the higher education experiences of the YAC, YANC, and YAWSR. Figures 1, 2 highlight some of the results comparing the three groups.

Regarding the “objective” indicators of school experience, the results show significant differences between the groups in terms of dropout, χ^2 ($N = 436$, $ddl = 2$) = 13.21, $p < 0.001$, $V = 0.02$. Orthogonal decompositions indicate that YAC were more likely (62.3%) than YAWSR (41.6%) to report interrupting or reducing their studies (Figure 1). YANC did not differ from their counterparts in the other two groups on this variable. There

TABLE 1 The sociodemographic characteristics of YAC, YANC, and YAWSR.

Variables	YAC <i>n</i> = 122	YANC <i>n</i> = 105	YAWSR <i>n</i> = 209	χ^2/F	<i>p</i>	V/η^2
Age in years, <i>M</i> (<i>SD</i>)	23.4 (3.2)	22.7 (2.9)	23.1 (3.2)	1.581	0.207	–
Gender, <i>n</i> (%)				22.047	***	0.149
Female	96 (78.7) ^a	75 (71.4) ^{a,b}	144 (68.9) ^b			
Male	15 (12.3) ^a	22 (21.0) ^{a,b}	62 (29.7) ^b			
Other/DU	11 (9.0) ^a	8 (7.6) ^a	3 (1.4) ^b			
Sibling rank, <i>n</i> (%)				5.472	0.706	–
Eldest	53 (43.4)	44 (41.9)	80 (38.3)			
Youngest	41 (33.6)	41 (39.0)	73 (34.9)			
Middle	18 (14.8)	15 (14.3)	34 (16.3)			
Twin	0 (0.0)	1 (1.0)	2 (1.0)			
Occupational status—parent 1, <i>n</i> (%)				2.936	0.569	–
Professionally active	90 (73.8)	81 (77.1)	170 (81.3)			
Seeking employment/sick leave/retired	30 (24.6)	22 (21.0)	37 (17.7)			
Deceased or unknown/DU	2 (1.6)	2 (1.9)	2 (1.0)			
Occupational status—parent 2, <i>n</i> (%)				0.972	0.914	–
Professionally active	91 (74.6)	74 (70.5)	151 (72.2)			
Seeking employment/sick leave/retired	24 (19.7)	22 (21.0)	41 (19.6)			
Deceased or unknown/DU	7 (5.7)	9 (8.6)	17 (8.1)			
Living arrangements, <i>n</i> (%)				3.871	0.187	–
With both parents	26 (21.3)	15 (14.3)	60 (28.7)			
With one parent or with each parent alternately	19 (15.6)	13 (12.4)	23 (11.0)			
Away from the parents' home	77 (63.1)	77 (73.3)	126 (60.3)			
Student grant, <i>n</i> (%)	56 (45.9)	39 (37.5)	72 (35.0)	3.952	0.139	–
Student job, <i>n</i> (%)	92 (75.4)	78 (74.3)	141 (67.5)	2.969	0.226	–
Field of study, <i>n</i> (%)				13.821	0.008**	0.153
Humanities and social sciences	56 (45.9) ^a	58 (55.2) ^a	69 (34.5) ^b			0.153
Including social care or education	33 (27.0) ^a	33 (31.4) ^a	21 (10.5) ^b	23.279	0.002**	
Science, technology, and health	51 (41.8) ^a	39 (37.1) ^a	109 (54.5) ^b			
Arts, literature, and languages	15 (12.3) ^a	8 (7.6) ^a	22 (11.0) ^a			
Level of education, <i>n</i> (%)				9.097	0.059	–
Baccalaureate	44 (36.1)	53 (50.5)	71 (34.0)			
Master's, doctorate, or postgraduate diploma (DESS)	44 (36.1)	33 (31.4)	83 (39.7)			
Vocational school, community college, CEGEP, certificate, or other	34 (27.9)	19 (18.1)	55 (26.3)			
Part-time studies, <i>n</i> (%)	12 (9.8)	9 (8.6)	15 (7.2)	0.365	0.833	–
Relative with difficulties, <i>n</i> (%)						
Mother	54 (44.3)	21 (20.0)	–	15.015	***	0.257
Father	28 (23.0)	21 (20.0)	–	0.290	0.590	–
Siblings	27 (22.1)	23 (21.9)	–	0.002	0.967	–
Grandparents	17 (13.9)	17 (16.2)	–	0.226	0.635	–
Spouse	27 (22.1)	5 (4.8)	–	14.059	***	0.249

(Continued)

TABLE 1 (Continued)

Variables	YAC <i>n</i> = 122	YANC <i>n</i> = 105	YAWSR <i>n</i> = 209	χ^2/F	<i>p</i>	V/η^2
Friends	17 (13.9)	19 (18.1)	–	0.732	0.392	–
Other relatives	3 (2.5)	11 (10.5)	–	6.268	0.012*	0.166
Several relatives, <i>n</i> (%)	35 (28.7)	10 (9.5)	–	13.041	***	0.240
Including both parents	14 (11.5)	3 (2.9)	–	6.050	0.014*	0.163
Illness/disability of the relative, <i>n</i> (%)				4.685	0.456	–
Physical	24 (19.7)	20 (19.0)	–			
Mental	63 (51.6)	44 (41.9)	–			
Substance use disorder	9 (7.4)	10 (9.5)	–			
Age-related difficulties	11 (9.0)	14 (13.3)	–			
Intellectual disability and neurodevelopmental disorders	3 (2.5)	7 (6.7)	–			
Other difficulties or do not know	12 (9.8)	10 (9.5)	–			
Lives with the relative, <i>n</i> (%)	48 (39.3)	24 (22.9)	–	7.083	0.008**	0.177
Relative receives professional help, <i>n</i> (%)	78 (63.9)	62 (59.0)	–	0.570	0.450	–

For the sibling position, *n* = 402, with *n* = 112 for the YAC, *n* = 101 for the YANC, and *n* = 189 for the YAWSR. For the sick relative, a chi-squared test was performed separately for each relative, as participants had the option of giving multiple answers. DU, Declines to answer; **p* ≤ 0.05, ***p* < 0.01, ****p* < 0.001; ^{a,b,c}Each subscript indicates a subset whose column proportions are not significantly different at the 0.05 level. Bold values indicate variables for which there is a significant difference between groups.

TABLE 2 Comparison of YAC, YANC, and YAWSR on school adaptation variables.

Variables	YAC <i>n</i> = 122	YANC <i>n</i> = 105	YAWSR <i>n</i> = 209	F/χ^2	ddl	<i>p</i>	V/η^2
Interruption/reducing studies, <i>n</i> (%)	76 (62.3) ^a	53 (50.5) ^{a,b}	87 (41.6) ^b	13.212	2	***	0.174
Repeating a year, <i>n</i> (%)	6 (4.5)	4 (3.2)	16 (8.9)	2.357	2	0.309	–
Failed exams, <i>n</i> (%)	47 (38.5)	43 (41.0)	73 (35.1)	1.102	2	0.576	–
SACQ subscales, <i>M</i> (<i>SD</i>)				2.406	10,860	**	0.022
Personal-emotional	37.82 (14.4) ^a	41.93 (14.03) ^b	42.83 (13.14) ^c	5.976	2.433	**	0.027
Social adjustment	34.34 (10.99)	36.28 (10.84)	36.48 (11.22)	1.410	2.433	0.245	–
School motivation	30.74 (5.52)	30.85 (5.41)	30.87 (5.46)	0.613	2.433	0.982	–
School commitment	23.91 (6.16)	24.55 (6.06)	24.68 (5.91)	0.019	2.433	0.542	–
Satisfaction with school performance	17.38 (5.27)	17.54 (5.88)	17.95 (5.41)	0.464	2.433	0.629	–

M, mean; *SD*, standard deviation; SACQ, Student Adaptation to College Questionnaire; **p* ≤ 0.05, ***p* < 0.01, ****p* < 0.001; ^{a,b,c}Each subscript indicates a subset whose column proportions are not significantly different at the 0.05 level.

were no differences between the three groups on the variables “repeating” and “failing a higher education course.”

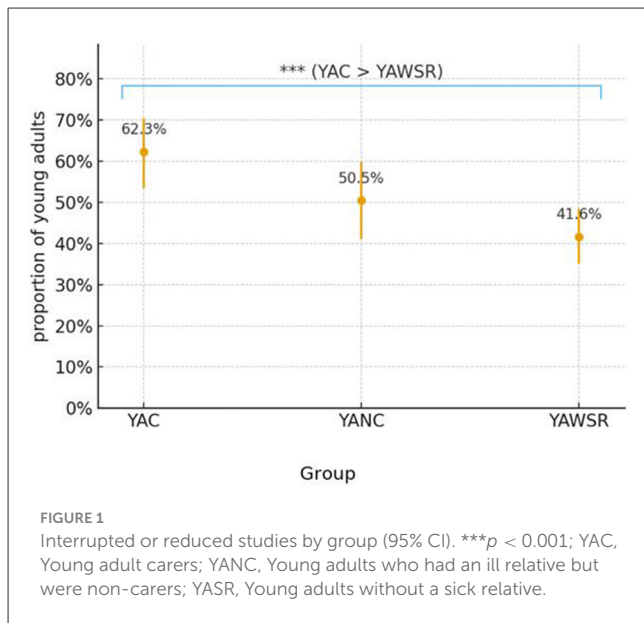
The MANOVA revealed significant differences between the groups $F_{(10,860)} = 2.406$, $p = 0.008$, $\eta^2 = 0.022$ on self-report measures of academic, social, and emotional adjustment (Figure 2). This difference was found on the personal-emotional adjustment dimension, $F_{(2,433)} = 5.976$, $p = 0.003$, $\eta^2 = 0.027$. On this dimension, YAC had significantly lower scores than the other two groups (-5.01 , $p = 0.005$). The YANC scored higher than the YAC, Tukey’s $t = 4.11$, $p = 0.038$, but lower than the non-carer group, Tukey’s $t = -3.65$, $p = 0.005$. There were no significant differences between the three groups on the other dimensions of self-report of school adjustment (academic and social dimensions). In other words, YAC did not report lower levels of school motivation, commitment and satisfaction with academic performance or more

social difficulties with their studies than their peers in the other two groups.

After controlling for gender, the differences in means between the groups persisted, according to the results of a MANCOVA. In fact, significant differences were found between groups with respect to gender, $F_{(5,406)} = 2.932$, $p = 0.013$, $\eta^2 = 0.035$. Again, only the emotional adjustment variable produced significant differences, $F_{(2,410)} = 4.256$, $p = 0.015$, $\eta^2 = 0.020$. *Post-hoc* analyses yielded the same results as above.

Discussion

This study investigates how a caregiving role shapes students’ higher-education experience, using a three-group



design (YAC—Young Adult Carers, YANC—Young Adult Non-Carers with a sick relative, YAWSR—Young Adults Without a Sick Relative). We extend evidence that YAC combine strengths with vulnerabilities and demonstrate that caregiving adds burden beyond illness exposure alone. YAC reported academic commitment and social adjustment comparable to peers among the other two groups but showed more disrupted academic trajectories and lower emotional adjustment.

Balancing study and care under strain

Consistent with international findings, YAC were found to be at a higher risk for psychological distress and emotional difficulties than their non-carer peers in higher education. This confirms the well-documented vulnerability of this population (Becker and Becker, 2008; Haugland et al., 2020). In line with the only study comparing YAC, YANC, and YAWSR (Chevrier et al., 2023a), our results show a graded pattern: YAC exhibit greater emotional vulnerability than students merely exposed to a relative's illness (YANC), who fare worse than peers without illness exposure (YAWSR). Caregiving responsibilities were also associated with more interrupted educational pathways, consistent with studies reporting delayed progression, interruptions, or constrained academic choices among student carers (Chevrier et al., 2023a,b; Day, 2021; Kettell, 2018; Haugland et al., 2020, 2022; Van der Werf et al., 2020). From a role-strain perspective (Goode, 1960), these patterns may reflect the cumulative burden of holding the resource-intensive roles of student and carer simultaneously: finite time, energy, and attention are repeatedly reallocated toward care tasks, leaving fewer reserves for studying. In addition to worrying about their loved one, juggling carer and student responsibilities can lead to frustration, guilt, fatigue and mental overload (Cass et al., 2011; Day, 2021; Kettell, 2018; Kirton et al., 2012).

High commitment, fragmented pathways: explaining the paradox

Our findings reveal an apparent paradox: YAC within higher education report educational pathways marked by greater interruptions, yet they self-rate their academic commitment as comparable to that of their non-carer peers. Several mechanisms may explain this discrepancy. First, YAC may demonstrate strong resilience and bounded agency. They perceive education as a crucial avenue for developing future autonomy and identity, as well as a means of continuing to care for their loved ones (Andrewartha and Harvey, 2021; Becker and Becker, 2008; Day, 2021; Hamilton and Adamson, 2013; Haugland et al., 2022). Second, drawing on Conservation of Resources theory (Hobfoll, 1989), students likely actively reallocate resources by reducing leisure time or sleep or by relying on institutional flexibility to sustain academic engagement. While these compensatory strategies help maintain subjective involvement, they also increase the likelihood of delayed or fragmented educational trajectories. Third, self-reported measures of academic adjustment may underestimate academic difficulties because students recalibrate standards (“doing fine given the circumstances”). Indeed, studies that use “objective” measures, such as GPA (e.g., Armstrong-Carter et al., 2022) or time spent studying (e.g., Miller et al., 2024) report more academic difficulties among YAC than among their non-carer peers. However, the most significant negative outcomes (such as repeating a year or dropping out) affect only a minority of YAC enrolled in higher education, as several studies have found (Becker and Becker, 2008; Becker and Sempik, 2019; Haugland et al., 2022).

Not a prevalence study—But a clear signal

This study highlights that having a sick relative is common among students and that young carers are far from a marginal presence in postsecondary institutions. Our findings echo Stamatiopoulos's (2015) description of a “hidden army of young carers in Canada.” At the same time, the proportion of young carers identified in our sample should not be considered representative of caregiving prevalence within Canadian postsecondary institutions, given the study's methodological limits. Specifically, our sample included a higher proportion of women than observed in the Quebec student population (72% vs. 55%; Linden and Jurdi-Hage, 2017) and voluntary recruitment may have attracted those more willing to disclose caregiving roles, particularly women, who are generally more likely to participate in surveys (Becker, 2022). Considering these factors, it is reasonable to assume that the prevalence of YAC in Canadian postsecondary institutions is likely to mirror recent international estimates, ranging between 12% and 18% (e.g., Chevrier et al., 2023b; Miller et al., 2024; US).

Although the recruitment design of this study does not allow for prevalence estimates, the sociodemographic characteristics of the YAC identified are similar to those reported in previous research. Consistent with prior findings, women were overrepresented among YAC (Andrewartha and Harvey, 2021; Becker and Sempik, 2019; Cass et al., 2011; Chevrier et al., 2023a; Haugland et al., 2020). A review conducted by Walker et al. (2024a)

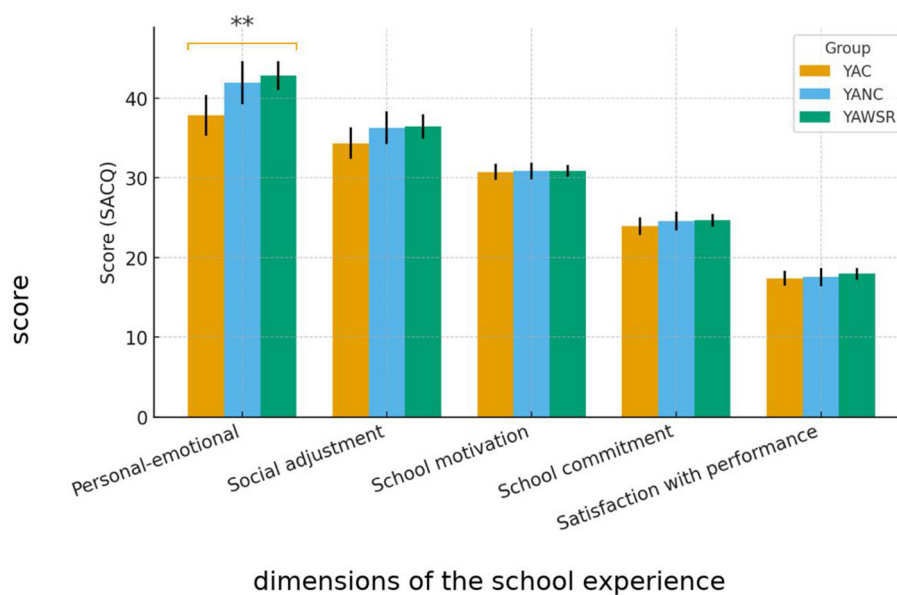


FIGURE 2

Emotional, social, and academic adjustment by group (Mean ± 95% CI). ** $p \leq 0.01$. YAC, Young adult carers; YANC, Young adults who had an ill relative but were non-carers; YAWSR, Young adults without a sick relative.

found that even in studies where men and women are equally represented within YACs, women are repeatedly overrepresented in high levels of caregiving. This result suggest both a greater involvement of women in caregiving and a greater likelihood of openly acknowledging such roles. In contrast, men may experience caregiving differently and be less inclined to disclose a relative's illness, as suggested by [Chevrier et al. \(2023a\)](#). Beyond gender, our data also showed that YAC were more likely to care for a mother or spouse, to have multiple relatives with health difficulties (often both parents), and to live with them. These patterns point to the influence of gender roles, physical and relational proximity, and the perceived responsibility to provide support, rather than the diagnosis itself, as key drivers of young people's caregiving roles. This interpretation is consistent with previous evidence that emotional involvement and co-residence intensify the feelings of obligation to provide care ([Charles et al., 2012](#)).

Clinical implications

Taken together, these findings highlight caregiving as a significant yet frequently overlooked factor in students' emotional wellbeing and educational continuity. The observed pattern, comparable self-rated academic engagement alongside greater emotional strain and more fragmented trajectories, suggests that support should not be limited to cases of overt academic failure. Rather, services should treat emotional adjustment as an early indicator of risk and recognize that pauses, reduced course loads, or shifts to part-time study may be adaptive strategies rather than signs of disengagement. Furthermore, the differences seen across the three groups indicates that even

students who are merely exposed to a relative's illness (YANC) also warrant light-touch preventive support, despite not meeting formal caregiving thresholds.

In practical terms, institutions can translate these principles into a few low-burden measures. First, they could embed brief, non-stigmatizing screenings for caregiving demands and recent emotional strain within routine health or advising encounters. These screenings would be paired with simple administrative indicators (e.g., credits per term, approved leaves) to detect emerging fragmentation, where consent is given. Second, create a formalized, stepped pathway coordinated by a designated contact person (e.g., a faculty YAC lead, as suggested by [Kettell, 2018](#), or [O'Keeffe, 2013](#)), who can provide time-limited academic accommodations during acute care episodes, such as temporary deadline flexibility, access to asynchronous materials, and short-term course load adjustments, without hindering progression. Third, offer brief, transdiagnostic interventions (e.g., stress regulation, sleep and guilt management, time/energy budgeting) complemented by targeted case management to address non-medical barriers. By aligning early identification, proportionate psychological support, and narrowly scoped academic flexibility, institutions can preserve the high academic commitment that many student carers display while mitigating the emotional costs that jeopardize their academic progress.

Limitations and future research

This study provides new insights into the higher education experiences of young adult carers, but several limitations should be acknowledged. In addition to the limitations mentioned in

the discussion, such as the sample not being fully representative of the Quebec student population and the use of self-reported measures only, the cross-sectional design does not allow for causal inference or examination of how caregiving responsibilities and their impact evolve over time. Longitudinal research would enable the assessment of trajectories of academic adjustment, emotional wellbeing, and persistence in higher education. This type of study is important because prior studies of postsecondary students have shown that poor mental health predicts academic difficulties, such as retakes, a decline in performance, and interruption or withdrawal (Trusty et al., 2025). This makes a “delayed” increase in school effects among YAC plausible.

This study also did not examine the variety of situations young cares may encounter. Our operationalization of caregiving was based on a threshold score of caregiving tasks, which does not fully capture the intensity, type, or duration of the support provided. Providing daily, intensive care is qualitatively different from assisting a relative occasionally, yet these variations could not be fully addressed in the present design. Additionally, this study did not allow for a systematic examination of contextual factors, such as socioeconomic status, cultural background, and the availability of institutional and community support. These factors may significantly moderate the impact of caregiving on educational outcomes. For instance, Runacres et al. (2024) demonstrate that living with a sick relative is more detrimental to the school adaptation of YAC. The possible differences in the academic experiences of YAC enrolled in distance learning vs. face-to-face courses are also worth exploring, given the controversies surrounding the benefits and challenges of distance learning for these students. Distance learning could allow YAC to more easily balance their responsibilities, but it could also deprive them of a potential personal space where they could find respite and social contact (Rawlinson, 2024). Incorporating these contextual variables in future analyses would provide a more nuanced understanding of the conditions under which YAC succeed or struggle in higher education.

Therefore, future research should build on these findings by adopting longitudinal and mixed methods designs, refining the measurement of caregiving intensity and its psychosocial correlates, and explicitly integrating contextual variables. These approaches would help identify protective factors and institutional practices that foster resilience among YAC, as well as inform policies and interventions that are tailored to their needs.

Conclusion

In conclusion, this study provides valuable insights into the educational experiences of YAC enrolled in higher education, while distinguishing them from YANC and YAWSR. Although YAC do not perceive their academic and social adjustment as significantly different from that of their peers, the data indicate significant difficulties in terms of disrupted academic progress and wellbeing. These findings underscore the importance of providing specific support to students who are coping with the

difficulties of a loved one. This support should consider their role as carers. Such an approach will enable these students to better balance their family responsibilities and their academic goals more effectively, facilitating their transition to adulthood and the workforce.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by the Université du Québec en Outaouais (2023-2256). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

AV: Writing – original draft. MB: Writing – original draft. GP: Writing – review & editing. RH: Writing – review & editing. KV: Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2025.1645073/full#supplementary-material>

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