
The Transition From University to Work: The Positive Influence of Purpose in Life and Social Support La transition de l'université au marché du travail : L'influence positive de la raison de vivre et du soutien social

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ABSTRACT

In the transition to adulthood, the common developmental task of progressing into the workforce is potentially challenging for many. This study aimed to investigate whether the presence of particular promotive factors would benefit emerging adults who are engaged in this task. Specifically, the authors used longitudinal multi-level modelling to test how purpose in life and perceived social support co-varied with satisfaction when it came to the pursuit of employment. University students in their last semester of undergraduate study ($n = 103$) were recruited to complete four surveys across a year following graduation. The results indicated that on occasions when participants had greater purpose in life and perceived social support, they experienced greater satisfaction with their employment situation. In addition, greater purpose in life—but not perceived social support—before graduation predicted greater average employment satisfaction across the year. These resilience factors may ease some of the strain related to this often difficult transition, by bolstering young people's employment appraisal.

RÉSUMÉ

Lors du passage à la vie adulte, la tâche développementale commune qui consiste à faire son entrée sur le marché du travail peut présenter un défi pour beaucoup de gens. Cette étude visait à examiner si la présence de facteurs de promotion particuliers pouvait être utile à de jeunes adultes engagés dans cette tâche. Plus précisément, les auteurs ont utilisé un modèle longitudinal multicritères pour évaluer la corrélation de la raison de vivre et du soutien social perçu avec la satisfaction engendrée par la recherche d'emploi. Des étudiants universitaires dans leur dernier semestre au premier cycle ($n = 103$) ont été recrutés pour remplir quatre sondages sur une année après l'obtention du diplôme. Les résultats ont indiqué que dans les cas où les participants avaient une raison de vivre et un soutien social perçu supérieurs, ils avaient une plus

grande satisfaction à l'égard de leur situation d'emploi. De plus, une raison de vivre accrue—mais sans soutien social perçu—avant l'obtention du diplôme favorisait en moyenne une plus grande satisfaction par rapport à l'emploi sur l'année. Ces facteurs de résilience peuvent atténuer le stress associé à cette transition souvent difficile, en stimulant l'appréciation de l'emploi.

The lifespan theory of development posits that each period of our lives has specific developmental tasks associated with them, including challenges to overcome and opportunities to grasp (Salmela-Aro et al., 2007; Super, 1990). One such period is emerging adulthood, the part of the life course that ranges from ages 18 to 29 (Arnett, 2008). Two related, central tasks associated with this transitional stage of the life course are 1) establishing financial independence and 2) securing full-time employment (Shulman & Nurmi, 2010). These tasks also contribute to developing an independent sense of self. Challenges or failures faced during the search for employment can have a negative impact on young people's self-perception and professional future as well as on other adult endeavours such as leaving the parental home and establishing a committed romantic partnership (Schoon & Silbereisen, 2009). In addition to providing financial independence, the experiences that emerging adults have within the field of employment help shape their world view, which also plays a part in helping them assume these adult roles (Domene et al., 2015). Unfortunately, securing employment is not always easy, and we see a great amount of heterogeneity in the experiences that emerging adults have when making the transition to adulthood (Shanahan, 2000). Employees who are in their 20s often have a different pattern of employment than older workers and can find themselves working low-wage positions, changing jobs repeatedly, and experiencing frequent periods of unemployment between work episodes (Hamilton & Hamilton, 2008; Ontario Ministry of Colleges and Universities, 2020). Given these common challenges, the current study seeks to identify factors that may promote resilience across this transition. We examined whether purpose in life and perceived social support were related to greater employment satisfaction in the face of the developmental task of finding work after university graduation.

Current Employment Landscape for Emerging Adults

The rate of enrolment in post-secondary programs has been on a steady rise over the past few decades, with an increase of 17.4% in Canada (Statistics Canada, 2021) and of 26% in the U.S. (National Center for Education Statistics, 2020) between 2000 to 2018. As such, this route from high school to post-secondary studies and then to employment has been—and likely will continue to be—a common path for emerging adults. However, variability is present in the ease and the timing with which emerging adults achieve developmental milestones

such as securing work (Shanahan, 2000), with some recent graduates facing a variety of challenges after completing post-secondary education, one of which is unemployment. According to previous literature, unemployment is more likely to be experienced by individuals between the ages of 15 and 24 than at any other age period (Galambos et al., 2006). The rate of unemployment in this age group, which in 2019 was 11% in Canada (Statistics Canada, 2019) and 8.4% in the U.S. (U.S. Bureau of Labor Statistics, n.d.), can be traced back to the financial crisis of 2008. More than 10 years later, youth unemployment has not decreased back to pre-recession levels in several countries, including Canada, Italy, and Australia (Chiacchia et al., 2018). This group of unemployed youth is composed predominantly of individuals who are transitioning into the labour market for the first time, in most cases following academic studies (Bernard, 2013). Notably, unemployment statistics for older emerging adults aged 25 to 29 (8%) remain high in comparison to older adults (5.8% among ages 30 to 54; Statistics Canada, 2022a).

Past literature indicates that many emerging adults struggle to make the transition from a scaffolded educational arena to that of the less structured workplace, with one survey reporting that 41% of graduates take as long as 12 months to find work (Chiacchia et al., 2018). This can be particularly detrimental to the mental health of emerging adults, given that previous studies (e.g., Fergusson et al., 1997) found that individuals who had finished school and reported 6 or more months of unemployment were at a significantly higher risk of experiencing psychological difficulties (e.g., anxiety, depression, substance abuse) than those who had found employment more quickly. Furthermore, several studies in Europe have found that unemployment early in one's vocational trajectory has been linked to higher rates of unemployment and lower earnings later in life (e.g., Krahn et al., 2015). This is also the case in Canada, where a national governmental department declared that the longer it takes to achieve employment security, the greater the risk to long-term financial success (Employment and Social Development Canada [ESDC], 2022).

Unfortunately, beyond unemployment, emerging adults may face additional employment challenges, including finding long-term, full-time work that pays good wages and offers benefits and security via union protection and pensions (Domene et al., 2017). A large-scale study that followed students who had graduated in 2016 showed that employment instability extends beyond 12 months (Ontario Ministry of Colleges and Universities, 2020). Specifically, 2 years after graduation, 15% of the participants in that study were working less than full-time, 21% were working more than one job to achieve full-time hours, 23% were working in a position that required less than a bachelor's degree, 30% held temporary positions, and 31% reported to be looking for work. Moreover, 21% of recent university graduates earned less than half of the Market Basket Measure of low income, a basic standard of living indicator for families (Djidel

et al., 2020). This means that for at least 2 years the ability of emerging adults to achieve other adult milestones that depend on financial security such as moving out of the parental home and establishing and supporting a family of their own was compromised for over 20% of recent graduates. Add to this the fact that half of graduates accrue student debt (median = \$20,000; Galarneau & Gibson, 2020) and we see that a substantial percentage of recent graduates faces major financial hurdles upon entry into adult society.

Long-term work seems to be difficult to obtain, given that, even if they manage to secure a job, emerging adults are two to three times more likely than their older counterparts to be unemployed a year later (Rosenbaum et al., 1990). This work challenge could be linked to the increase in casual and fixed-term employment contracts, which have been shown to lead to more insecurity in the labour market (Flint et al., 2013). Indeed, employers looking for candidates to fill entry-level jobs—those typically available to recent graduates—tend to offer positions that are temporary and part-time (Drolet, 2017). While this tendency may benefit employers—given that, compared to new hires, long-term workers are more expensive for companies to sustain over time in regards to both salary and benefits—it may exacerbate further the employment problem for recent graduates (DeBell, 2006). These factors can result in frequent oscillations in and out of unemployment and to and from varying jobs, which can create a “yo-yo effect” where emerging adults move out and return to the parental home due to financial and employment struggles (Domene et al., 2015). As mentioned previously, this phenomenon has widespread consequences on other developmental tasks, leading to the postponement of financial autonomy, marriage, and home ownership (Mortimer et al., 2002).

Another potential employment barrier that emerging adults face today involves skill mismatch: There are too many highly educated individuals for too few skilled job positions (Uppal & LaRochelle-Côté, 2014). For instance, data from Statistics Canada showed that, in 2016, only one in five entry-level jobs required applicants to have a college diploma or a bachelor’s degree (Drolet, 2017). Similar trends have been noted in the United Kingdom, where there is a disproportionate ratio of university graduates to jobs that necessitate a post-secondary education (Chartered Institute of Personnel and Development, 2017). There are numerous negative consequences that result from a skill mismatch. First, emerging adults end up with lower earnings. For instance, one cohort of recent graduates who obtained employment stated that they earned 40% less than they had anticipated (Chiacchia et al., 2018). A policy report in the United Kingdom found that gender impacts these lower wages further, with the annual salary of female graduates being 10.4% less than that of their male counterparts, even when accounting for degree and discipline (Chartered Institute of Personnel and Development, 2017). Second, skill mismatch often results in a decreased likelihood of being able to gain the experience necessary to find better employment in the future (Uppal &

LaRochelle-Côté, 2014), creating a feedback loop of similarly skill-mismatched job opportunities. Third, skill mismatch may lead to lower productivity (Uppal & LaRochelle-Côté, 2014), which can have unfavourable effects for the employing organization and for the emerging adult's standing in their place of work. Given that attendance at post-secondary institutions of learning is increasing (Statistics Canada, 2019), problems arising from mismatches in education, skills, and employment opportunity will continue (Drolet, 2017).

Thus, today's youth employment landscape may be experienced by a portion of graduates as challenging due to the rise in temporary contracts, part-time positions, and a generally volatile employment market (Morissette, 2021). These circumstances may have an adverse impact on emerging adults' psychological well-being because individuals may connect to the social and economic facets of life through their work (Blustein, 2008). Critically, the return to work in the COVID era has been slower for youth, meaning that many emerging adults will *not* "catch back up" when the economy rebounds; more will experience long-term labour scarring, whereby delayed entry into the full-time workforce, even by one year, has negative cumulative effects on financial success across the lifespan (ESDC, 2022; Stanford, 2021).

Employment is also related to psychological well-being and life satisfaction (Blustein, 2008). Individuals often hope for and search for work that they perceive to be meaningful, interesting, and rewarding. Depending on whether their job fits these criteria, work can be a source of great satisfaction or of great disappointment (Blustein, 2008). It has been suggested that employment satisfaction may be as important for emerging adults' mental health as employment status (i.e., being employed or unemployed) or wages (Winefield et al., 1991). For instance, a study found that participants with lower job satisfaction reported more depressive symptoms, while income had no effects on depression (Domene et al., 2017). Another study that investigated youth unemployment reported that participants who had higher job satisfaction showed lower levels of depressive symptoms compared to individuals who were employed but who were dissatisfied with their work (Winefield et al., 1991). A third study also supported these findings, with job satisfaction being a significant predictor of depressive symptoms, which inspired the authors to urge future researchers to investigate job satisfaction rather than to focus solely on objective measures of employment (Domene & Arim, 2016). Indeed, some researchers argue that job satisfaction is particularly important precisely because of skill mismatch, with emerging adults working in jobs for which they are overqualified, earning lower wages than should be expected based on their training, and without access to benefits and pension plans (Domene et al., 2017). For example, many graduates experience anxiety associated with feeling locked into a limited range of less desirable employment opportunities and locked out of more desirable employment opportunities because of training deficits (Robinson, 2018).

The link between job satisfaction, well-being, and depressive symptoms is concerning. Generally, the transition to adulthood is a peak period of onset for mental health problems relative to earlier in adolescence and later in adulthood (Pearson et al., 2013; Rohde et al., 2013), and overall rates of youth depression are increasing (Weinberger et al., 2018). Moreover, youth well-being has been impacted disproportionately by the COVID-19 pandemic (Findlay & Arim, 2020), including among university students (Backhaus et al., 2020; Lessard, 2016; Odriozola-González et al., 2020; Twenge et al., 2010). Thus, given the association between employment satisfaction and well-being more generally, investigating who is at risk of experiencing lower employment satisfaction during the transition to employment is an important empirical endeavour that can aid in the development of programming to protect the mental health of emerging adults who struggle following university graduation (Hamilton & Hamilton, 2008).

Promotive Factors

Promotive factors are variables that directly predict desirable focal outcomes, in contrast to protective factors, which are variables that moderate (i.e., reduce) the risk of a negative effect on the individual exposed to risk factors and that are usually detected via statistical tests of interaction effects (Mondi et al., 2017). Among promotive factors, assets refer more specifically to promotive aspects of the self, while resources refer to promotive factors that come from the environment (Fergus & Zimmerman, 2005). Assets and resources are best understood when they are observed together over time in response to challenges (Zimmerman et al., 2013).

Sense of Purpose as an Asset

An integral part of the concept of psychological well-being, developed by Ryff and Keyes (1995), is a sense of purpose, which is a person's belief that their life is personally meaningful and has direction (Ryff, 2014). Having a sense of purpose has been associated with greater career commitment (Ryff, 2014) and with a stronger sense of agency, positive affect, and the consideration of future consequences (Hill et al., 2016). These desirable outcomes of having a sense of purpose are known to play an important part in identity formation during emerging adulthood (Domene et al., 2015; Hill et al., 2016). Indeed, Burrow and Hill (2011) stated that having a sense of purpose in life functions as a form of "identity capital" that a person fosters during the emerging adulthood years and that is vital for career development, given that having a clear sense of identity aids in work-related decision-making and planning (Domene et al., 2015). A review conducted by Pfund et al. (2020) investigated further the link between having a sense of purpose and the university experience, noting how university is a time of inherent purpose exploration. Emerging adults pursuing post-secondary education often spend this period figuring out which major goals resonate with them

and deciding upon a path that they may then pursue. As such, having a sense of purpose serves as a “self-organizing life aim” (Pfund et al., 2020, p. 99) that functions as a guide by directing the ways through which emerging adults may chase their goals (including their career goals) by helping them organize steps to be taken after graduation. Others have underscored the usefulness of having a sense of purpose during this period, stating that being purposeful helps to facilitate an adaptive transition into the workforce (Blustein et al., 1997).

A study investigating the interplay of these variables in an elderly working population found that greater self-reported ratings of purpose and meaning in life predicted a greater sense of current job satisfaction (Lee et al., 2017). Another researcher found a statistically significant indirect relation between job satisfaction and life satisfaction that was mediated by a person’s perception of time being spent in a purposeful manner (George, 1991). While this finding differs from the concept of a more global sense of purpose that is the variable of interest in our study, it does indicate that having meaning and purpose in everyday life plays an important part in the way employees experience job satisfaction. To our knowledge, the relation between having a strong sense of purpose and employment satisfaction has not yet been explored with a focus on this critical developmental transition among emerging adults. Given the importance of purpose to people in the emerging adulthood period more generally and to older workers with respect to employment satisfaction, a study with such a focus may be an important asset that promotes successful navigation of employment challenges following university graduation.

Social Support as a Resource

There is ample substantiation for the positive impact that social support has on psychological well-being and across challenging life circumstances (Yu & Zhanjun, 2007), one that is emphasized further within the realm of work. For instance, studies have shown that social support works as a protective factor with respect to mental health for individuals who are unemployed (Axelsson & Ejlertsson, 2002), given that they are able to seek comfort within their social circles. Social support has also been determined to be a predictor of how well a person manages an employment transition (Fouad & Bynner, 2008), with its absence making the transition more difficult and having an adverse effect on psychological well-being (Murphy et al., 2010).

Social support is also important when a job is secured. A mixed-methods study found that individuals who experienced greater job satisfaction were more likely to obtain support from their significant others (Blustein et al., 1997). Several other studies have explored the positive link between social support and work satisfaction among nurses, whether it pertained to supportive employers (Cortese et al., 2010) or supportive family members (Öksüz et al., 2019). While some studies stress that it is parental support in particular that has a positive impact

on employment-related factors in emerging adulthood (e.g., Masten et al., 2004; Shulman, 2017), others mention various social ties such as work colleagues as being particularly helpful when people are entering the workforce (Murphy et al., 2010).

Current Study

This study sought to heighten our understanding of how having a sense of purpose and social support may be related to greater job satisfaction during the initial transition from university to the workforce. Using longitudinal multi-level modelling, we hypothesize that, on occasions when they report being employed and having greater purpose in life and perceived social support, participants will also experience greater satisfaction with their employment situation (Hypothesis 1). We hypothesize that higher levels of purpose in life and perceived social support before graduation will predict higher average levels of employment satisfaction once participants are in the workforce (Hypothesis 2). Finally, we hypothesize that higher average levels of employment will predict higher average levels of satisfaction with employment (Hypothesis 3). Furthermore, the longitudinal design of this study allows us to investigate any time-structured effects that the variables of interest may have. We examined these predictions with a sample of emerging adults who were undergoing the transition from university to work across four time points, measured over a period of 1 year.

Method

Participants

Participants were part of an initial sample of 177 students who were all in their last semester of undergraduate studies (T1) at a large urban Canadian university and who were all pursuing their first undergraduate degree. All participants who had responded to the questionnaires at T1 were invited to take part in subsequent data collections, which were performed in October 2017 (T2), January 2018 (T3), and July 2018 (T4). Of this sample, 10 participants were excluded because they were 30 years of age or older and thus were no longer “emerging adults” (Arnett, 2008). Examining the demographic characteristics related to the achievement of adult developmental milestones showed that, compared to participants in their 20s, more of the participants who were 30 years of age or older had children (30% vs. 0.6%), were married or in a common-law partnership (70% vs. 5.4%), and lived with that romantic partner (70% vs. 9.6%). An additional four participants were excluded because they did not graduate over the course of the study. Finally, 60 participants who went on to pursue another educational experience after graduation were also excluded from the present study. The analytic sample included 103 participants at T1, of which 89 (86.41%) completed the measures at T2, 78 (75.73%) at T3, and 67 (65.05%) at T4.

The sample identified predominantly as female (70.9%) and as white (59.2%; 10.7% South Asian, 7.8% Chinese, 5.8% Latin American, 5.8% Arab), and on average participants were in their 20s ($M = 23.19$, $SD = 1.76$, range 21 to 29 years). Subjective rating of family socio-economic status (SES) was rated from 1 (*Worst off*) to 11 (*Best off*), with most participants (65.10%) falling within the 7–8 bracket, thus indicating that the majority of the sample stated that they were slightly better off than most people ($M = 7.61$, $SD = 1.59$). The median reported parental income over the preceding 12 months was within the \$50,000 to \$99,999 bracket in Canadian dollars (range = *Less than \$5,000 to \$200,000 or greater*). Most participants reported that their mother's highest completed level of education was either a college diploma or a bachelor's degree (66%), while a slightly lower percentage of the sample reported the same regarding their father's highest completed level of education being either a college diploma or a bachelor's degree (55.4%). Most of the students were pursuing degrees in arts and science (48.5%; 35% in business, 8.7% in the engineering and computer science, and 5.8% in fine arts).

Measures

Purpose in Life

The Purpose in Life (PIL) subscale from Ryff's (2014) Scales of Psychological Well-Being was used to measure participants' sense of purpose in life at all four time points. The PIL subscale consists of 14 items, half of which are reverse scored. The scale includes items such as "I enjoy making plans for the future and working to make them a reality" as well as reverse scored items like "I don't have a good sense of what it is I'm trying to accomplish in life." All items are measured on a Likert-type scale that ranges from 1 (*Strongly disagree*) to 6 (*Strongly agree*). Higher scores indicate a greater sense of purpose in life. The PIL subscale was found to be highly reliable for the current sample ($\alpha = .92$ at T1).

Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988; see also Dambi et al., 2018) assessed perceived social support. This scale includes 12 items that are rated on a Likert scale ranging from 1 (*Very strongly disagree*) to 7 (*Very strongly agree*), with higher scores indicating greater perceived social support. The MSPSS contains items such as "I can talk about my problems with my friends" and "My family really tries to help me." The items provide a global score of perceived social support and can specify scores for three subscales: family, friend, and special person. The MSPSS was found to be highly reliable in this sample ($\alpha = .88$ at T1) and was used across all waves of assessment.

Post-Graduation Employment Status and Satisfaction

Employment status was assessed at T2, T3, and T4, following the completion of the participants' university degree. Participants were asked the following

question: “After graduating university, people pursue various different paths, such as employment, education, figuring out next steps, travelling, leisure activities, etc. At this current point, which of the following situations apply to you?” A list of 13 possibilities was provided, including options related to work (e.g., “I am looking for employment”), education (e.g., “I am a graduate or professional schools student”), and other pursuits that did not fall into the aforementioned categories (e.g., “I am travelling or taking vacation”). Only participants who selected one of the employment-related options were included in the study. If a participant selected an education-related option at any wave, they were excluded from the study, since the population of interest consisted of those individuals who were transitioning from university to the workforce. Employment status was coded dichotomously, with participants scoring a 0 if they were unemployed and/or looking for employment and a 1 if they were employed full-time or part-time. Results showed that 82% of the sample ($n = 89$) was employed at T2, 88.46% ($n = 78$) was employed at T3, and 87.88% ($n = 66$) was employed at T4.

After indicating their employment status, participants were then asked, “How satisfied are you with your current situation, as indicated by the answer you provided?” Satisfaction was measured on a Likert scale, ranging from 1 (*Very unsatisfied*) to 7 (*Very satisfied*), as with other single-item satisfaction ratings (e.g., Ghetta et al., 2020). One meta-analytic study (Wanous et al., 1997) concluded that single-item measures of job satisfaction were acceptable for research purposes.

Procedure

Participants were recruited for this four-part longitudinal study as a result of flyers posted on campus, advertisements placed in student-run news bulletins, class visits conducted to upper-year courses, and members of student groups having been invited to like the study’s page on Facebook. All advertisements, whether online or in print, listed a web address that provided further information about the study as well as instructions on how to register for it. Those participants who registered were then invited to take part in small organized in-person briefing sessions, during which time they learned more about the study, provided their informed consent, and completed the demographics portion of the study. Following this, participants were given a unique ID and a web link that would lead them to the remaining T1 questionnaires, which they had 2 weeks to complete online. These recruitment strategies and briefing sessions were conducted between January and April of the participants’ last semester prior to their expected graduation. The recruitment process was boosted further toward the end of the semester, through the invitation of students to take part in the study via the website for the psychology department’s participant pool and via additional class visits. These students completed an online version of the whole set of questionnaires, including the demographic section. The participants who took part in the study

Table 1
Means and Standard Deviations of Study Variables

	<i>M</i>	<i>SD</i>
Purpose in life at T1	4.41	0.68
Purpose in life at T2	4.50	0.86
Purpose in life at T3	4.39	0.87
Purpose in life at T4	4.38	0.85
Perceived social support at T1	5.36	1.12
Perceived social support at T2	5.43	1.12
Perceived social support at T3	5.27	1.20
Perceived social support at T4	5.36	1.01
Employment status at T2	0.82	0.39
Employment status at T3	0.88	0.32
Employment status at T4	0.88	0.33
Employment satisfaction at T2	4.82	1.77
Employment satisfaction at T3	4.82	1.63
Employment satisfaction at T4	4.78	1.76

Note. T1–T4: Time 1 to Time 4; the employment predictor variable (employment status) and the outcome variable (employment satisfaction) were measured as of Time 2. Ranges for the measures were as follows: Purpose in life 1 to 6, perceived social support 1 to 7, employment status 0 to 1, employment satisfaction 1 to 7.

through the student participant pool received either course credit or a monetary compensation at each measurement time.

To encourage participation during the first three waves, participants received \$20 in compensation, via online transfer or a cheque sent through the mail, except for those students (5%) who, at T1, had expressed their preference for receiving course credit for the psychology research pool instead. Additionally, those participants who took part in the T1 in-person briefing session were given a \$5 Starbucks gift card for attending the meeting. Lastly, at T4, participants were given \$25, a \$5 increase over the previous waves, to increase retention. This study was approved by the university's ethics review board, and participants provided their informed consent at each testing wave.

Results

Descriptive statistics can be found in Table 1, while cross-wave correlations for the study variables are reported in Table 2. The main analyses were performed

Table 2
Intercorrelations Among Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. PIL at T1		.74**	.68**	.67**	.38**	.39**	.33**	.50**	.01	.13	.10	.43**	.30**	.24
2. PIL at T2			.78**	.74**	.48**	.55**	.42**	.43**	.08	.14	.02	.55**	.49**	.29*
3. PIL at T3				.79**	.40**	.43**	.40**	.43**	.04	.10	-.02	.51**	.50**	.26*
4. PIL at T4					.43**	.45**	.40**	.51**	.11	.01	.15	.52**	.54**	.43**
5. PSS at T1						.63**	.70**	.73**	-.03	.18	.13	.18	.28*	.24
6. PSS at T2							.63**	.66**	-.07	.12	.13	.34**	.24*	.12
7. PSS at T3								.77**	.00	.13	.07	.25**	.40**	.32*
8. PSS at T4									-.07	.09	.11	.23	.27*	.40**
9. ES at T2										.37**	.19	.30**	.13	.06
10. ES at T3											.32**	.15	.25*	.00
11. ES at T4												.08	.00	.29*
12. ESA at T2													.61**	.32*
13. ESA at T3														.44**
14. ESA at T4														

*p < .05; **p < .01.

Note. PIL = Purpose in life; PSS = Perceived social support; ES = Employment status; ESA = Employment satisfaction; T1–T4: Time 1 to Time 4. Pearson Correlation data presented for all variables, except employment status, for which Spearman Correlations were used.

using Mplus 7.3 (Muthén & Muthén, 2010) multi-level analysis capabilities and the Maximum Likelihood Robust estimator, which is robust to non-normality and to the multi-level nature of the data. Missing data were handled using full information maximum likelihood (FIML) procedures (Enders, 2010).

Multi-level modelling was used to assess the associations between employment status, purpose in life, and perceived social support as well as participants' within-person (Level 1) and between-person (Level 2) ratings of satisfaction with current employment situations. Analyses were performed in a stepwise manner through the building of increasingly complex models, following Singer and Willett's (2003) recommendations. As per Howard (2015), all predictors were person-mean centred at Level 1 to model time-specific intra-individual variability over time. This allowed us to investigate how an individual's deviations from their average level of employment status (i.e., whether they were employed or unemployed), purpose in life, and perceived social support were associated with fluctuations in satisfaction with current employment situations. At the between-person level (Level 2), pre-transition (T1) grand mean-centred levels of purpose in life and perceived social support were incorporated, as well as a grand mean-centred averaged employment status score obtained across T2, T3, and T4. This method made it possible to parse the effects of Level 1 predictors into their within-person (time-specific fluctuations) and between-person variance components and in turn to test the effect of intra-individual variability separately from between-participant differences in relation to the pre-transition levels of asset (purpose in life) and resource (social support) and to their post-transition employment history.

The following model-building steps were taken to obtain the final results of the study. First, an unconditional model (Model 1) that omits any Level 1 or Level 2 predictors is utilized to parse the total outcome variance into within-person ($\sigma^2 = 1.61$) and between-person sources ($\sigma^2 = 1.29$) of variation. The observed intra-class correlation coefficient ($ICC = .45$) showed that a significant proportion (45%) of the total variability in employment satisfaction was located at the participant level, whereas 55% of the variability reflected time-specific fluctuations. Second, Model 2 included the Level 1 predictors of employment status, purpose in life, and perceived social support. Goodness of fit indicated that the best model included a random intercept, a fixed effect of perceived social support, and random slopes for the effects of employment status and purpose in life. We determined model fit by observing the Akaike Information Criterion (AIC), with the best model being the one with the lowest criterion (Finch & Bolin, 2017). For Model 3, we added the Level 2 predictors, which were T1 perceived social support and purpose in life, and average employment status across Waves 2, 3, and 4. For Model 4, we included all demographic covariates: sex, age, ethnic identity, and subjective SES. Results and goodness of fit indices for all models are described in Table 3.

Table 3
Models Assessing the Effect of Employment Status, Purpose in Life, and Perceived Social Support on Employment Satisfaction

	Model 1 (Unconditional)	Model 2 (Level 1)	Model 3 (Level 2)	Model 4 (Final)
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Model fit				
AIC	874.51	1333.09	1806.89	2755.53
CAIC	887.85	1395.40	1909.26	2911.31
BIC	884.85	1381.40	1886.26	2876.31
ABIC	875.34	1337.03	1813.36	2765.38
Fixed effects				
Intercept	4.81 (0.15)**	4.81 (0.15)**	4.81 (0.13)**	3.70 (0.61)**
Perceived social support (Level 1)		0.57 (0.12)**	0.55 (0.12)**	0.54 (0.12)**
Purpose in life at T1 (Level 2)			0.66 (0.22)**	0.72 (0.21)**
Employment status at T2–T4 (Level 2)			1.43 (0.42)**	1.44 (0.39)**
Perceived social support at T1 (Level 2)			0.17 (0.15)	0.03 (0.14)
Sex (Level 2)				0.75 (0.34)*
Ethnic identity (Level 2)				-0.57 (0.26)*
Random slopes				
Purpose in life (Level 1): Slope mean		0.59 (0.29)*	0.59 (0.30)*	0.66 (0.31)*
Purpose in life (Level 1): Slope variance		0.62 (0.61)	0.64 (0.64)	0.91 (0.69)
Employment (Level 1): Slope mean		1.30 (0.34)**	1.18 (0.39)**	1.22 (0.37)**
Employment (Level 1): Slope variance		0.32 (0.94)	0.48 (1.00)	0.19 (0.79)
Random effects				
Variance (between)	1.29 (0.27)**	1.47 (0.26)**	1.01 (0.18)**	0.88 (0.17)**
Variance (within)	1.61 (0.24)**	1.15 (0.22)**	1.12 (0.21)**	1.11 (0.21)**

* $p < .05$; ** $p < .01$.

Note. SE = standard error of the estimate; T1–T4: Time 1 to Time 4; AIC = Akaike Information Criterion; CAIC = Consistent AIC; BIC = Bayesian Information Criterion; ABIC = Adjusted BIC.

Consistent with Hypothesis 1, participants at the intra-individual level (Level 1) tended to be more satisfied with their current employment situation on occasions when they were employed (i.e., had a greater level of employment than their average; $\beta = 1.22, p = .001$), when they reported greater purpose in life ($\beta = 0.66, p = .029$), and when they reported receiving higher levels of social support ($\beta = 0.54, p < .001$). With respect to pre-graduation effects, we found support for Hypothesis 2 for purpose in life but not for social support. Supporting Hypothesis 2, having greater purpose in life prior to the transition (T1) predicted greater employment satisfaction on average ($\beta = 0.72, p = .001$), but contrary to Hypothesis 2, perceived social support before graduation (T1) did not predict greater average satisfaction with employment ($\beta = 0.03, p = .832$). Support was found for Hypothesis 3. At Level 2, with respect to interindividual differences, average levels of employment following graduation predicted greater employment satisfaction on average ($\beta = 1.44, p < .001$). In addition, statistically significant between-person differences were found for two demographic covariates, namely sex ($\beta = 0.75, p = .027$) and ethnic identity ($\beta = -0.57, p = .029$). This indicates that female participants experienced greater satisfaction with employment on average compared to male emerging adults, as was the case with participants who identified as white compared to participants who identified as racialized individuals. The other demographic variables—age, subjective SES—were not statistically significant and did not contribute to prediction, and as such they were not retained in the final model.

Discussion

This study investigated the relation of purpose in life and social support with emerging adults' employment satisfaction while pursuing the developmental task of finding work following university graduation. A unique feature of the current study was the use of longitudinal multi-level modelling, which allowed us not only to observe global between-person promotive associations but also to consider within-person associations between time-related fluctuations in the variables of interest. We showed that employment status, consistent with Hypothesis 1 (intra-individual) and Hypothesis 3 (interindividual), was associated with satisfaction. Participants had greater satisfaction with their employment situation at times when they were employed than when they were unemployed, and higher average levels of employment predicted greater average levels of satisfaction with one's employment situation. These results were expected, given that previous research had demonstrated that unemployment tended to be associated with lower levels of satisfaction with one's professional career, employment situation, and even life in general (e.g., Krahn et al., 2015; Selenko et al., 2011).

Next, we examined within-person variations of purpose in life and social support with employment satisfaction. In Hypothesis 1, in addition to predicting

that being employed would be associated with satisfaction, we predicted that on occasions when emerging adults reported having greater purpose in life and receiving higher levels of social support, they would experience greater satisfaction with their employment situation. The analyses supported this hypothesis. As such, whether an individual is looking for work, is employed full-time, or is employed part-time, and whatever that job may entail, having a sense of purpose in life and feeling well-supported may help emerging adults appraise their work situation more positively, leading to individuals experiencing greater satisfaction with their work or with their job search.

We also hypothesized that having a greater sense of purpose and feeling more supported socially *prior* to one's university graduation would promote higher average levels of employment satisfaction once emerging adults entered the workforce (Hypothesis 2). This hypothesis was partially supported, given that participants who had a greater sense of purpose before graduation experienced greater average levels of satisfaction with their employment situation across the following year. However, reporting higher levels of social support before graduation did not result in higher average levels of work satisfaction, contrary to our hypothesis. If we bear in mind the previously described within-person associations, our results thus suggest that social support may be more important for employment satisfaction when emerging adults are establishing employment than before they begin this transition. This finding is consistent with the stress buffering hypothesis described by Cohen and McKay (1984), who proposed that social support is psychologically protective only when a challenge is present. The results of our study indicate that, while having a strong sense of purpose helps emerging adults during this transition via lasting as well as immediate effects, social support matters more in the moment of challenge itself. An alternative explanation could be that the social networks established before people transition into the labour market may be supportive in the ways needed during the transition to employment. Future research should unpack and expand the ways in which social support is examined in relation to employment satisfaction.

Two other intriguing results emerged from the current research. First, female participants reported greater satisfaction with their employment situation on average when compared to their male counterparts. Second, in our ethnically diverse sample, participants who identified as white reported greater satisfaction with their employment situation than participants who identified as members of another ethnic group. Other researchers have also noted that female workers report having employment satisfaction that is either equal to or greater than that reported by male workers, even though they often find themselves in jobs that are perceived as poorer in quality and salary (Hodson, 1989). Our results demonstrate that these differences might already be present early in the career trajectory, starting in emerging adulthood. The present study also bolstered past findings regarding the impact of ethnic identity on job satisfaction, showing once

again that these differences generalize to the early career transition in emerging adulthood. For instance, one study found that newly graduated Asian American and African American workers reported significantly lower job satisfaction in comparison to white workers (Mau & Kopischke, 2001). Various factors such as systemic discrimination are important (Beck et al., 2002), and as such they need to be investigated further in order to make positive changes in the workplace. Likewise, the career expectations that recent graduates and their parents may have, which differ across cultures (Ott-Holland et al., 2013), could have an impact on employment appraisal.

Results in Light of Previous Literature

Comparing our findings to those of previous literature is in some ways difficult, given that, to our knowledge, this is the first study that investigated the positive influence of the promotive asset of purpose in life and the promotive resource of social support on employment satisfaction during the transition from university to work. It is well-established that the development of a sense of purpose is closely tied to identity development, which is at its zenith during the emerging adulthood years, and that being steadfast in one's commitment to a sense of purpose is correlated with subjective well-being, which is comprised, in part, of life satisfaction (Pfund et al., 2020). In addition, as previously discussed, George (1991) found that the perception of spending time in a purposeful way mediated the relation between job satisfaction and life satisfaction, thus giving some support to our findings. However, George's sample varied significantly from ours, consisting of a group of participants who were older ($M_{\text{age}} = 47.44$, $SD = 9.82$), who had an average work experience of 26.66 years, and who consisted almost entirely of men (96% vs. 29.1% in the current study). Still, because the differences in psychological well-being, including purpose in life, are greater within age groups than between (Springer et al., 2011), one can infer that the two studies point in a similar direction to there being a statistically significant link between purpose and job satisfaction.

There also appears to be a paucity of research on the relation between social support and job satisfaction in emerging adulthood. Of the few studies that have investigated this association, most have studied social support that people receive either from colleagues or from supervisors (e.g., Cortese et al., 2010) rather than from parents, friends, and/or significant others, which was the focus of the current study. One study included a regression model that indicated a statistically significant association between perceived social support and job satisfaction (Wu et al., 2020), but while that study concentrated on individuals already in the workforce, our interest concerned the transitional period of exiting university and entering the labour market. Additionally, we were able to discern that the positive effect of social support on job satisfaction was time-structured, in that it was more important to experience support during this transition rather than prior

to experiencing it. All in all, a perusal of the literature relating to both sense of purpose and social support and their impact on employment satisfaction indicated that we still have much to learn regarding how these variables function.

Limitations, Future Directions, and Implications

The current research is marked by strengths with respect to the longitudinal design and to the use of multi-level modelling to parse within-person from between-person effects of both assets and resources that support employment transitions, but the results should be interpreted in light of certain limitations. First, while we sought specifically to investigate how recent emerging adult graduates experienced the transition to work, the results may not be generalizable to the subset of the population that did not attend university but rather transitioned into work following other educational pathways (e.g., from high school or from vocational school). However, in Canada, where this research was conducted, rates of post-secondary enrolment have been steadily increasing (Statistics Canada, 2021), indicating that this population will likely continue to grow.

Another potential limitation is the dichotomization of the employment status variable. The use of dichotomized measures of employment is typically discouraged but is sometimes used when there is not enough variability to create measures that reflect the full range of employment situations (e.g., Domene et al., 2017; Flint et al., 2013). It is possible that, by dichotomizing employment status in the current study, we lost some of the richer distinction of how the promotive factors impacted employment satisfaction when one is working full-time versus part-time. Furthermore, additional work-related characteristics and more specifically worded employment questions would have potentially benefited the analyses, such as information about salary, job position, and so forth. Such nuanced employment questions are frequently used in organizational psychology (e.g., Eisenberger et al., 2020) and deserve equal consideration when applied in developmental and personality research.

Finally, while the authors of the current article took the position that the challenges faced by a portion of emerging adults during the transition into the workforce can be detrimental in both the short term and the long term, there are those who argue otherwise. Specifically, it has been suggested that experiencing employment instability during this developmental period serves a particular function (Shulman et al., 2005). One may argue that frequently switching jobs is a way to ensure optimal person–environment fit, which allows the individual to find a job that corresponds to their goals and values (Lofquist & Dawis, 1991; Shulman et al., 2005). If this hypothesis is indeed correct, having a strong sense of purpose and support from one's social circle could potentially play a part in facilitating the selection of a good person–environment fit. As such, assessing fit may be a meaningful addition to this line of inquiry in the future.

Another developmentally informed direction for future research would be to assess the pursuit of other developmental tasks alongside employment seeking during this transition. Experiencing unemployment and working in low-skill jobs that do not require a university education may affect how effectively emerging adults navigate the transition from adolescence to adulthood more broadly. Specifically, emerging adults may not be able to adapt to the myriad of adult roles that they are traditionally meant to accomplish as swiftly as they could otherwise (e.g., Domene & Arim, 2016; Young et al., 2011). This has long-lasting effects at the individual level, in terms of developing characteristics such as emotional stability, self-confidence, and responsibility, which are often gained during work-related endeavours (Roberts et al., 2006). It also has consequences on a societal level, with respect to productivity linked to unemployment (Heckhausen, 2002), poverty, and declines in quality of life (Blustein, 2008). It is therefore crucial that this period of the lifespan be observed holistically to see the bigger picture, given that emerging adults face several developmental tasks at this time (e.g., work, romantic partnerships; Salmela-Aro, 2009).

These findings have significant implications in terms of intervention programs and university- and college-based counselling. Resilience researchers have stated that assets such as purpose in life are often easier and more beneficial to target in such programs because they are experienced at the individual level, compared to resource factors such as social support (O'Sullivan et al., 2019). This indicates that they may be easier to modify, which could be achieved earlier on in development, such as in high school, college, or university. This would be especially beneficial for upcoming graduates, given the data indicating that, although 83% of surveyed representatives from higher education settings indicated that their institutions prepare students adequately for the workforce, only 44% of students believed they were prepared and only 34% of employers reported that applicants were prepared (McKinsey and Company, 2015). While this finding would need to be tested empirically, focusing on more mutable characteristics such as purpose in life would allow counsellors to be better equipped when preparing students for the transition into the labour force and potentially to set them up for greater work satisfaction.

An intriguing avenue of research would be a program evaluation of an intervention that aims to find and develop a sense of purpose, across the transition out of university and into employment seeking. One review (Pfund et al., 2020) suggested two possible paths to that effect, both of which are supported by our current findings: the proactive route (i.e., finding purpose via the exploration of options), which was supported by our finding that purpose in life was higher when satisfaction with employment situation was higher, and via social learning (i.e., finding purpose by learning about it from a role model or through observation of purposeful individuals), which was supported by the finding that higher purpose in life before this transition was associated with overall higher levels of

satisfaction with employment situation across the year following graduation. Investigating such programs aimed at developing a sense of purpose, akin to the intervention described by Feldman and Dreher (2012), would thus be a worthy endeavour, especially considering this asset's lasting effects. Feldman and Dreher's intervention had the benefit of being formatted as a single session targeting post-secondary students in particular, with results showing an increase in life purpose at a 1-month follow-up. It may therefore be feasible to implement such an intervention in tandem with programs already present at universities, such as ones aimed at curriculum vitae writing, job searching, and so forth. Furthermore, this research may also inform programs aimed at developing social skills, which could benefit individuals who are graduating from university and who need those skills to maintain their support network during the difficult period of transition into the workforce.

Work is often seen as one of the main sources of self-expression and life satisfaction (Schneider, 2009). However, many emerging adults experience their first steps into this sphere as challenging and overwhelming, given the societal shift from long-term, full-time employment to work that is more vulnerable (DeBell, 2006). Moreover, many workers experience a mismatch between their educational qualifications and the skills required by available jobs (Drolet, 2017). Our results showed that resilience factors such as a sense that one's life is meaningful and has purpose and a supportive social circle can help emerging adults during this challenging time, by having a positive impact on their appraisal of their employment situation, and that these factors should be promoted in employment-seeking support programs.

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