University Students' Coping Behaviours and Perceived Parental Depression:
The Role of Hope and Implications for Counsellors
Les comportements d'adaptation des étudiants
universitaires et la dépression parentale perçue:
Le rôle de l'espoir et les implications pour les conseillers

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ABSTRACT

Research has shown links between perceived parental depressive symptomology and young adults' depressive symptoms (Rounding & Jacobson, 2013). Hope has been linked to fewer depressive symptoms and to greater adaptive coping behaviours (Chang & DeSimone, 2001). The relation between perceived parental depression, hope, and undergraduate university students' coping behaviours was examined. Participants were 223 undergraduates (51 males, 172 females) aged 17 to 24. Beyond perceived parental depression, hope predicted higher levels of religion/spirituality, active coping, and planning, and predicted lower levels of humour and behavioural disengagement. Implications for counselling clients at risk for intergenerational depression are discussed.

RÉSUMÉ

La recherche a démontré qu'il existe des liens entre la symptomatologie de la dépression parentale perçue et les symptômes dépressifs chez les jeunes adultes (Rounding & Jacobson, 2013). On a établi un lien entre l'espoir et une diminution des symptômes de dépression et une amélioration des comportements adaptatifs (Chang & DeSimone, 2001). On a examiné la relation entre la dépression parentale perçue, l'espoir, et les comportements d'adaptation chez les étudiants universitaires de premier cycle. Les participants comptent 223 universitaires de premier cycle (51 hommes, 172 femmes) de 17 à 24 ans. Au-delà de la dépression parentale perçue, le facteur espoir a permis de prédire des niveaux plus élevés de religion/spiritualité, d'adaptation active, et de planification, tout en permettant de prédire des niveaux plus faibles sur le plan de l'humeur et du désengagement comportemental. On y discute des implications pour les clients en counseling à risque de la dépression intergénérationnelle.

Results of a recent systematic review of the literature indicated that the prevalence of depression among undergraduate university students is approximately 30% (Ibrahim, Kelly, Adams, & Glazebrook, 2013). Research has indicated that adolescent and young-adult offspring of parents with depression are at greater risk

for developing internalizing problems, including depressive symptomology (e.g., Landman-Peeters et al., 2008). Studying the effects of parental depression on children is significant because the prevalence of depression is high within families. Further, this topic is important for university counsellors, given that the primary concerns for students seeking counselling are relationship concerns most often related to families, followed by depression or grief (Cairns, Massfeller, & Deeth, 2010). Given their increased risk of experiencing depression, it is also important to study the coping behaviours of students with a depressed parent. The ability to cope with adversity and the struggles of daily life may help in managing the impact of repeated stressful events and internalizing symptoms (Adler, Conklin & Strunk, 2013; Garber, 2010). This may be particularly important for students, as they face the difficult transition to university and the many stressors that may accompany this stage in life. Undergraduate students' use of maladaptive coping behaviours (e.g., denial, self-blaming, and substance abuse) has, in fact, been found to predict higher levels of depressive symptoms, anxiety, and stress (Mahmoud, Staten, Hall, & Lennie, 2012). Although it is useful to compare adaptive coping and maladaptive coping composites, little research has focused on factors leading students to engage in specific coping behaviours. Feelings of hope may play a significant role in opposing the tendency to give in to despair (Lazarus, 1999). The purpose of this study was to investigate the relations between undergraduate university students' coping behaviours, feelings of hope (i.e., agency and pathways thinking; Snyder et al., 1991), and perceived parental depressive symptomology.

Perceptions of Parental Depression

Maternal and paternal depression, both independently and combined, have been shown to be related to adolescent depressive symptoms (Brennan, Hammen, Katz, & LeBrocque, 2002). Further, the severity of maternal depression has been shown to better predict adolescents' depression risk than has duration of maternal depression (Hammen & Brennan, 2003). Therefore, when considering parents' depressive symptoms, it is important to determine the severity of both maternal and paternal symptoms to which the child has been exposed, regardless of formal diagnosis. Although information about parents' depression may be obtained from clinical diagnosis or parent self-report, students' perceptions of parental depression symptomology may also be informative and reflect what they have processed and perceived from their interactions with their parents. According to the American Psychiatric Association (APA, 2013), symptoms of major depression, such as a persistent depressed mood and reduced pleasure or interest in activities, can be indicated by both the subjective account of the afflicted individual and by the observations of others. Despite this, scant research has been done on students' lived realities surrounding their parents' symptoms of depression. Based on the research available, perceived parental depression has been identified as an important predictor of depressive symptoms in young adults. Rounding and Jacobson (2013) found that perceived parental depressive symptomology was related to young adult children's self-reported depressive symptoms.

Hope in the Face of Depression

Theoretical perspectives on risk and protective factors have prompted researchers to examine why some children of depressed parents are more resilient than others. Given that hopefulness is viewed as an antidote to many of the symptoms of depression (Lazarus, 1999), measuring hope may be useful in examining why some individuals are more resilient despite being at risk due to their parents' depressive symptomatology. Hope has been shown to be negatively correlated with depression, generally consistent over time, and steady across situations (Arnau, Rosen, Finch, Rhudy, & Fortunado, 2007; Snyder et al., 1991; Thimm, Holte, Brennen, & Wang, 2013). In fact, higher levels of hope have been found to predict lower levels of depressive symptoms among undergraduate students (Arnau et al., 2007).

Hope has been described in terms of two types of thinking, which are thought to be necessary but distinct components (Snyder et al., 1991). Agency thinking reflects one's sense of successful determination in meeting goals, whereas pathways thinking reflects one's sense of being able to generate successful plans to meet goals (Snyder et al., 1991). Arnau and colleagues (2007) conducted a study with more than 500 undergraduate students to model the individual effects of the agency and pathways subscales on anxiety and depression over a period of several months. They found that higher scores on agency thinking, but not pathways thinking, had a significant negative effect on later depression and anxiety. Neither depression nor anxiety influenced agency or pathways thinking (Arnau et al., 2007). Thimm and colleagues (2013) examined agency and pathways thinking among a sample of clinically depressed, previously depressed, and never depressed undergraduate students and patients. Agency and pathways scores were highest among the never depressed sample, followed by the previously depressed sample and the clinically depressed sample (Thimm et al., 2013). Chang and DeSimone (2001) found that hope was positively related to engaged coping, negatively related to depression scores, and negatively related to disengaged coping among a sample of undergraduate students. The relation of hope to depression scores was significant even after controlling for coping and appraisals, indicating that hope is in itself an important predictor of depressive symptomology (Chang & DeSimone, 2001). These results indicate that it may be important to give further consideration to the relation between hope and coping behaviours.

Coping

Adaptive coping has been described as behaviours that contribute to one's well-being. For example, seeking emotional support, using religion/spirituality, using problem solving, and cognitive restructuring have been identified as adaptive coping techniques, whereas activities such as substance use have been considered maladaptive. Research has highlighted the importance of considering specific and diverse coping behaviours, rather than considering coping broadly. Mahmoud et al. (2012) found that undergraduate students' maladaptive coping strategies (e.g., denial, self-blaming, and substance abuse) were associated with depressive

symptoms, suggesting a link between coping strategies and depression. Conversely, researchers have found the use of adaptive coping techniques to be related to lower levels of depressive symptoms in vulnerable individuals. In a study by Jaser and colleagues (2007), adolescents with a depressed parent who used adaptive coping techniques (i.e., cognitive restructuring, positive thinking, and acceptance) in response to family stressors endorsed less depression, anxiety, and aggression. It is not sufficient to broadly consider coping in attempts to explain its relation to depression because coping styles may differentially predict depressive symptoms.

Present Study

The present study assessed undergraduate university students' perceived parental depressive symptomology, hope, and coping behaviours. The purposes of this study were to examine how perceived parental depression and hope relate to specific coping behaviours and to examine whether levels of pathways thinking and agency thinking predict students' likelihood of engaging in specific coping behaviours. Students were asked to report on their subjective interpretations of their parents' level of depressive symptoms, and their own levels of hope and coping behaviours. It was hypothesized that (a) perceived parental depression would be related to coping behaviours; (b) level of hope would predict coping behaviours beyond perceptions of parental depression, with higher levels of hope predicting the use of adaptive coping strategies, and lower levels of hope predicting the use of maladaptive coping strategies; and (c) the different components of hope (i.e., agency and pathways thinking) would have unique relations to the coping behaviours.

METHOD

Participants

The sample comprised 223 undergraduate students (51 male and 172 female) from a mid-sized university. The mean age of the participants was 20.51 years (SD = 1.59). Though the majority of the sample (61.4%) identified as Caucasian/European Canadian, the sample was quite ethnically diverse: 10.3% Asian/Asian Canadian, 9.9% African/African Canadian, 9.0% Middle Eastern/Middle Eastern Canadian, 8.1% Other, 0.9% Native Canadian, and 0.4% Hispanic/Hispanic Canadian. The median annual family income was between \$70,000 and \$80,000. More than 95% of the participants reported being single and never married, whereas 3.1% were in a common-law relationship, and 1.3% were married. More than half (57.8%) of the participants reported living with a biological parent at the time of the study, 17.5% within that same year, and 9.9% the previous year. Twelve male participants and 53 female participants had at least one parent whom they perceived to have depressive symptoms. Participants were also asked whether, to their knowledge, their mother or father had been diagnosed with any form of depression by a mental health professional, and if the same parent was ever

treated for depression. Based on participants' recall, 16 mothers and 14 fathers were reported to have a diagnosis of depression, with four participants recalling a diagnosis for both parents. Participants reported that 15 mothers and 12 fathers received some form of treatment for their depression.

Procedure

Undergraduate students volunteered for the study through a Psychology Department participant pool (i.e., a list of research studies approved by a Research Ethics Board). The study was restricted to students aged 17 to 24 to increase the likelihood that participants had more recently resided with their parents. Students who met inclusion criteria signed up for the study; recruitment was closed after the target sample size was met. After completing a consent form, participants completed the following paper-and-pencil measures: a demographics questionnaire, measures of hope and coping, and additional measures of parent—child relationship quality that were not analyzed for the present study. Participants independently completed the counterbalanced questionnaires in small groups for approximately one hour and received one bonus point for an eligible course of their choosing.

Measures

Demographics questionnaire. This questionnaire was used to assess participant gender, ethnicity, parental occupation and annual family income, parental depressive characteristics, diagnostic history, and treatment history. Ten questions addressed the types of depressive symptoms displayed by parents within a two-week period, based on the diagnostic criteria found in the DSM-IV-TR (APA, 2000). The major symptoms of depression included depressed mood more often than not and low interest or pleasure in all, or almost all, activities. The minor symptoms of depression included the remaining diagnostic criteria for depression.

Recoding of perceived parental depression scores. To determine perceived parental depression scores, the number and type of depressive symptoms observed by participants and the presence of diagnosed depression for parents were considered. A depression score (maximum 15) was assigned to each parent, with a higher score indicating more severe depressive symptomology. A score of 1 was given to parents with no symptoms and no diagnosis. Scores of 2 to 5 were given to parents with symptoms and no diagnosis, in increasing severity and number of symptoms: a score of 2 was given to parents with no diagnosis, no major symptoms, and one to four minor symptoms; score of 3 to parents with no diagnosis, no major symptoms, and five to eight minor symptoms; score of 4 to parents with no diagnosis, one major symptom, as well as any minor symptoms; score of 5 to parents with no diagnosis, two major symptoms, and any minor symptoms. Scores of 6 to 15 were given to parents who had a diagnosis, as follows: score 6 for any one symptom and diagnosis, score 7 for any two symptoms and diagnosis, score 8 for any three symptoms and diagnosis, and so on.

Adult Hope Scale (Snyder et al., 1991). This scale includes 12 statements rated on an 8-point Likert-type scale with responses ranging from 1 (definitely false) to

8 (*definitely true*). It includes agency thinking and pathways thinking subscales. Agency thinking reflects one's sense of having a will to meet goals, and pathways thinking reflects one's sense of having ways to meet goals (Snyder et al., 1991). Snyder and colleagues (1991) found that the Adult Hope Scale has acceptable internal consistency reliability (.74 to .84) and good test-retest reliability over an interval of three weeks (.85, *p* < .001). Based on a review of 16 studies, Hellman, Pittman, and Munoz (2013) found the Adult Hope Scale to have acceptable internal consistency (.82) and high test-retest reliability (.80). Research (e.g., Carretta, Ridner & Dietrich, 2014) has also supported the convergent and discriminant validity of the Adult Hope Scale. In the present study, the Cronbach's alpha for the Adult Hope Scale was .86, 95% CI [.83, .88]. For the agency thinking and pathways thinking subscales, Cronbach's alphas were .83, 95% CI [.79, .86] and .74, 95% CI [.68, .79], respectively.

Brief COPE (Carver, 1997). This scale is a self-report measure comprising 28 items rated on a 4-point Likert-type scale from 1 (I haven't been doing this at all) to 4 (*I've been doing this a lot*). There are 14 subscales of theoretically dissimilar coping reactions with two items each. The Brief COPE was not designed to produce an overall coping score, and it does not directly produce adaptive and maladaptive composites; instead, scores are computed for each subscale (Carver, 2007). The subscales were active coping (i.e., effort to make the situation better), planning (i.e., anticipating strategies), positive reframing (i.e., seeing the situation positively), humour (i.e., joking about the situation), religion/spirituality (i.e., seeking comfort in using prayer, meditation, or spiritual beliefs), emotional support (i.e., seeking comfort, understanding, and support from others), instrumental support (i.e., seeking advice and help from others), self-distraction (i.e., doing or thinking about unrelated things), denial (i.e., refusing to believe that something happened), substance use (i.e., using alcohol or other drugs to feel better), behavioural disengagement (i.e., giving up the attempt to cope), venting (i.e., verbally expressing unpleasant feelings), self-blame (i.e., self-criticism for what happened), and acceptance (i.e., learning to live with what happened). Participants were instructed to think of a recent stressful situation and to answer the questions based on the coping behaviours they used during or as a response to this event. Carver (1997) found internal consistencies using Cronbach's alpha to range from .57 (acceptance subscale) to .82 (religion/spirituality subscale). In the present study, internal consistencies for the subscales were as follows: active coping = .74, planning = .76, positive reframing = .74, acceptance = .57, humour = .80, religion/spirituality = .89, using emotional support = .84, using instrumental support = .86, using self-distraction = .58, substance use = .93, behavioural disengagement = .72, venting = .51, and self-blame = .74. Because the scales contain few items, alpha values were considered before proceeding with analyses. The alpha values of the acceptance, self-distraction, and venting subscales were below suggested cutoffs for good internal consistency (Field, 2013), and as such were not further examined.

RESULTS

Prior to analyses, the data were checked for consistency. Of the initial 255 participants, 31 were removed because two different questions that assessed parental symptoms of depression were answered inconsistently, and one case was removed because information on biological parents was not reported, resulting in a final sample size of 223. Z scores were examined to screen for irregular and extreme scores, and no scores were removed. Assumptions were met for the normality, linearity, homoscedasticity, and multicollinearity of the data.

Zero-Order Bivariate Correlations

Zero-order bivariate correlations were conducted between participants' demographic information (i.e., age and annual family income), parental depression scores, agency thinking and pathways thinking scores, and coping scores. Participants' age was positively correlated to active coping (r = .16, p < .05), positive reframing (r = .16, p < .05), and denial (r = .16, p < .05). Annual family income was negatively related to paternal depression scores (r = -.18, p < .05) and was positively related to three coping behaviours: planning (r = .15, p < .05), use of humour (r = .17, p < .01), and emotional support (r = .20, p < .01). As shown in Table 1, significant positive correlations were found between perceived maternal depression scores and coping through substance use and self-blame, and between perceived paternal depression scores and coping through religion/spirituality. Table 1 also displays correlations between students' hope and their coping behaviours. Agency thinking was positively related to active coping, planning, positive reframing, religion/spirituality, emotional support, and instrumental support. There was a negative relation between agency thinking and denial, substance use, behavioural disengagement, and self-blame. Pathways thinking was positively related to active coping, planning, positive reframing, emotional support, and instrumental support. Pathways thinking was negatively related to denial, substance use, behavioural disengagement, and self-blame. No relation was found between hope and humour.

Gender Differences in Coping

Past research has implied that men and women may use different coping behaviours (e.g., Lengua & Stormshak, 2000; Nolen-Hoeksema & Aldao, 2011). To examine gender differences in specific coping behaviours in the present sample, two-tailed *t*-tests were conducted. Males reported higher scores on the hope pathways subscale (M = 26.10, SD = 3.76) as compared to females (M = 24.56, SD = 4.12). This difference was statistically significant, t(221) = 2.38, p = .018, d = .39, 95% CI [.27, 2.80]. The use of agency thinking did not differ by gender (p > .05). With regards to coping behaviours, males were more likely to use humour (M = 4.90, SD = 1.89) than were females (M = 3.74, SD = 1.67). This difference was statistically significant, t(221) = 4.24, p < .001, d = .70, 95% CI [.62, 1.70]. Females (M = 4.97, SD = 1.80) were significantly more likely than males (M = 4.20, SD = 1.83) to cope by using emotional support, t(221) = -2.68,

p = .008, d = .43, 95% CI [-1.34, -.21]. Females (M = 2.85, SD = 1.48) were also significantly more likely than males (M = 2.37, SD = .87) to use denial as a coping technique, t(220) = -2.19, p = .030, d = .39, 95% CI [-.90, -.05]. No other gender differences emerged.

Hierarchical Multiple Regression Analyses

Eleven separate hierarchical multiple regression analyses (MRAs) were conducted to determine whether Adult Hope Scale scores predicted coping behaviours, beyond perceptions of parental depressive symptomology. In a hierarchical MRA, it is recommended that variables be entered by causal priority, and that exploratory variables be added last into the model (Cohen, Cohen, West, & Aiken, 2003). Demographic variables found to be related to coping behaviours in the present study (participant age, gender, and annual family income) were entered in Step 1, followed by perceived paternal and maternal depression scores in Step 2, and pathway thinking and agency thinking hope scores in Step 3. Separate MRAs were conducted for each of the 11 subscales of the Brief COPE (Carver, 1997).

Table 1 Correlations Between Parental Depression Symptomology and Hope with Coping Behaviours

		lepression mology	A	adult Hope Scal	e
Scale/ subscale	Maternal depression	Paternal depression	Agency	Pathways	Total
Brief COPE					
Active coping	.02	01	.25***	.27***	.29***
Planning	.01	.06	.31***	.40***	.39***
Positive reframing	.03	.12	.26***	.25***	.28***
Humour	.09	.01	05	.06	.01
Religion/ spirituality	.08	.17*	.16*	.12	.16*
Emotional support	.01	.01	.20**	.13*	.18**
Instrumental support	01	.4	.22***	.18**	.22***
Denial	.03	.02	27***	21**	26***
Substance use	.26***	.09	17*	13*	17*
Behavioural disengagement	.11	.05	36***	32***	37***
Self-blame	.22***	.03	23***	21**	25***

^{*} $p \le .05$, ** $p \le .01$, *** $p \le .001$.

Because of the large number of analyses, a more stringent *p*-value criterion of .001 was selected in order to reduce the risk of Type 1 error. Table 2 indicates which analyses were significant at this level, as well as at the .01 and .05 levels. Findings at the .001 level can be interpreted with more confidence than findings at the .01 and .05 levels.

PREDICTING COPING BEHAVIOURS

Six models were significant at the .01 and .05 levels: positive reframing, F(7, 183) = 3.40, p = .002; emotional support, F(7, 183) = 2.86, p = .007; instrumental support, F(7, 183) = 2.39, p = .023; denial, F(7, 182) = 2.11, p = .044; substance use, F(7, 183) = 3.02, p = .005; and self-blame, F(7, 183) = 2.92, p = .006. These findings are not discussed further due to potential Type 1 error. Table 2 shows beta weights for each model that was significant at the .001 level in predicting coping behaviours. As discussed below, five models were significant at the .001 level at Step 3: active coping, F(7, 183) = 3.98, p < .001; planning, F(7, 183) = 6.83, p < .001; humour, F(7, 183) = 4.94, p < .001; religion/spirituality, F(7, 183) = 3.82, p = .001; and behavioural disengagement, F(7, 183) = 3.95, p < .001.

Active coping. In the model predicting active coping, Step 3 accounted for an additional 9.1% of the variance accounted for beyond Step 2, with a significant change, $\Delta F(2, 183) = 10.36$, p < .001. As shown in Table 2, not all variables contributed significantly to the model; only pathways thinking contributed significantly at Step 3.

Planning. In the model predicting planning, Step 3 accounted for an additional 17.1% of the variance accounted for beyond Step 2, with a significant change, $\Delta F(2, 183) = 20.21$, p < .001. Only pathways thinking contributed significantly to the model at Step 3.

Humour. In the model predicting humour, Step 3 accounted for an additional 2.5% of the variance accounted for beyond Step 2, with a significant change, Δ F(2, 183) = 3.69, p = .027. Both agency and pathways contributed significantly at Step 3, though agency was negatively related to humour while pathways was positively related.

Religion/spirituality. In the model predicting religion/spirituality, Step 3 accounted for an additional 6.1% of the variance accounted for beyond Step 2, with a significant change, $\Delta F(2, 183) = 7.28$, p = .001. Agency thinking contributed significantly to the model at Step 3, as did paternal depression.

Behavioural disengagement. In the model predicting behavioural disengagement, Step 3 accounted for an additional 11.4% of the variance accounted for beyond Step 2, with a significant change, $\Delta F(2, 183) = 12.70$, p < .001. Only agency thinking contributed significantly to the model at Step 3.

DISCUSSION

The purpose of the present study was to examine whether hope predicted specific coping behaviours beyond perceived parental depressive symptomology

Change Statistics for Hierarchical Multiple Regression Analyses Predicting Coping Behaviours

							Coping I	Coping Behaviours						
	Act	Active			Positive	tive			Religion/	ion/	Emotional	onal	Instrumental	nental
	cop	coping	Plan	Planning	reframing	ning	Humour	iour	spirituality	ıality	support	ort	support	ort
Predictor	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.03		.03		.04		.12		.03		80.		.04	
Control variables ^a														
Step 2	.01		.01		.02		.01		.03		.01		.01	
Control variables														
Maternal dep.		.05		01		02		80.		.04		01		02
Paternal dep.		01		80.		.16*		.03		.15*		.05		80.
Step 3	.10	.10	.18		.05		.03		.07		.02		.04	
Control variables														
Maternal dep.		.11		.07		.03		70.		60.		.03		.01
Paternal dep.		01		60.		.16*		.04		.15*		.05		80.
Agency (hope)		.15		11.		.16		23**		.21*		.14		.13
Pathways (hope)		.21*		.36***		.10		.18*		60.		.01		60.

Note. Maternal Dep. = perceived maternal depression. Paternal Dep. = perceived paternal depression. Agency thinking and Pathways thinking are the two components of hope.

^aControl variables included gender, age, and income. $^*p < .05, ^{**}p < .01, ^{***}p < .001.$

Table 2 (continued)

				Coping Behaviours	aviours			
					Behavioural	oural		
	Denial	ial	Substance use	ice use	disengagement	;ement	Self-blame	ame
Predictor	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.03		.01		.01		.02	
Control variables ^a								
Step 2	.01		90.		.01		.05	
Control variables								
Maternal dep.		.04		.25***		80.		.23**
Paternal dep.		05		.02		02		05
Step 3	.04		.04		.12		.03	
Control variables								
Maternal dep.		01		.21**		.01		.19*
Paternal dep.		05		.02		01		04
Agency (hope)		18*		14		29***		14
Pathways (hope)		04		60		10		05

Note. Maternal Dep. = perceived maternal depression. Paternal Dep. = perceived paternal depression. Agency thinking and Pathways thinking are the two

components of hope.

**Control variables included gender, age, and income.

p < .05, **p < .01, *p < .001.

among a sample of undergraduate students. Perceived maternal depression was significantly related to coping through substance use and self-blame. Perceived paternal depression was significantly related to coping through religion/spirituality. Higher levels of agency thinking, a component of hope, were significantly related to higher levels of active coping, planning, positive reframing, religion/spirituality, emotional support, and instrumental support. Agency thinking was negatively related to denial, substance use, behavioural disengagement, and self-blame. Higher levels of pathways thinking were related to higher levels of active coping, planning, positive reframing, emotional support, and instrumental support. Consistent with the expectation that hope would be negatively related to the use of maladaptive coping strategies, pathways thinking was negatively related to denial, substance use, behavioural disengagement, and self-blame.

After controlling for annual family income, participants' gender, and participants' age in hierarchical multiple regression analyses, hope significantly predicted some coping behaviours beyond the influence of perceived maternal and paternal depression. Specifically, higher levels of agency thinking predicted higher levels of religion/spirituality but lower levels of humour and behavioural disengagement. Higher levels of the pathways thinking component of hope significantly predicted higher levels of active coping and planning. Overall, levels of hope were positively associated with more adaptive coping behaviours (e.g., religion/spirituality, active coping, planning), and negatively associated with more maladaptive coping behaviours (e.g., denial, behavioural disengagement). Perceived paternal depression, in addition to agency, was a significant predictor in religion/spirituality. Neither hope nor perceived parental depression predicted the use of coping through emotional support or instrumental support. In these cases, specific control variables had the most influence in predicting coping behaviours. Gender differences were also observed. In the present study, female students were more likely than males to use emotional support and denial to cope. As described by Lengua and Stormshak (2000), past research has suggested that women have a tendency to engage in more emotion-focused, avoidant, or social support-seeking coping behaviours compared to men. The present findings are in line with other studies. For example, Hammermeister and Burton (2004) found that coping with denial was reported to be used more among female endurance athletes than among males. Lengua and Stormshak (2000) found that femininity was associated with higher endorsement of support seeking on the COPE scale. Even after controlling for self-reported depressive symptoms, Nolen-Hoeksema and Aldao (2011) found that women, especially older women, were more likely than males to report coping with positive reframing, active coping, and seeking emotional support.

Conversely, males reported greater use of coping with humour (e.g., joking about the situation) than females. Although research addressing sex differences in use of humour is limited, it has been suggested that those who use humour socially may use this as a tool to gain social support (Moran & Hughes, 2006).

Male students in the present study may have used humour to indirectly achieve the goal of seeking support, while females endorsed using emotional support directly.

Study Limitations

Results may have been influenced by procedural limitations. In participants' reports of parental depression, some students expressed uncertainty about their parents' symptoms by selecting the "not sure" option. Because this study focused on undergraduate students' perceptions of their parents' depressive symptoms, the results may not be comparable to research using diagnoses and parent self-report to identify parental depressive symptomology. Further, although participants were asked to report on how recently they last lived with a biological parent for a period of two weeks or more, it is unknown exactly when in their lives they perceived depressive symptomology in their parents. Due to the large number of regressions conducted, there is a greater risk of Type 1 error. However, a sufficiently stringent criterion was selected to account for this, and the discussion of significant results reflected the more conservative findings. Generalizability is also limited due to several characteristics of the sample. In the present study, 6.85% of parents were reported to have a diagnosis of depression, while the national prevalence of depression was 8.2% (Vasiliadis, Lesage, Adair, Wang, & Kessler, 2007). This discrepancy may be explained by the fact that many of the students responded "not sure" on questions about parental depressive symptomology. While the sample was relatively diverse in terms of participants' ethnicity, it was disproportionately represented by female students taking psychology courses. Furthermore, the participants' median annual family income was relatively high (between \$70,000 and \$80,000) and may not be representative of families in the general population.

Implications for Counsellors and Directions for Future Research

The present study was unique in that it used undergraduate students' subjective interpretations of their parents' affect and depressive symptomology as a measure of parental depression. This is important given that these perceptions show students' interpretations of their interactions with their parents. Results suggest that perceived parental depression is related to coping behaviours in undergraduate students. It may be as important to consider students' perceptions of parental depressive symptoms as it is to consider parents' clinical diagnosis or parent self-report.

The present research has some direct implications for counsellors treating students at risk for depression, and suggests proactive measures for promoting healthy coping. Even after controlling for demographic variables (i.e., age, gender, annual family income) and perceived parental depressive symptomology, it was found that greater agency (i.e., the sense that one has the will to meet goals) predicted greater use of adaptive coping. Greater pathways thinking (i.e., the sense that one has the ways to reach goals) predicted greater use of active coping and planning. In the present study, it is not possible to determine whether maladaptive coping

is a consequence of having low levels of hope or if, conversely, maladaptive coping leads to lower levels of hope. Counsellors who help students develop a sense of a plan to reach their goals (i.e., increase pathways thinking) may encourage the use of active coping behaviours; likewise, students who engage in adaptive coping strategies may develop a sense of agency when faced with stressors. Greater hope may also bolster counsellors' success in teaching adaptive coping to clients. University counsellors may find it useful to employ Snyder's hope theory (Snyder et al., 1991) as a therapeutic framework. Through this approach, students develop thoughts about the agency and pathways components of hope as they reach their desired outcomes in multiple domains (Pedrotti, Edwards, & Lopez, 2008). According to Snyder, Lopez, and Pedrotti (2011), hope therapy is useful in bolstering hopeful thoughts and decreasing distress. In hope therapy, counsellors support students as they describe and rank their goals, break down each goal into steps, and identify strategies to attain these goals. Counsellors then assist students as they recognize barriers in attaining their goals, and develop alternative plans (Pedrotti et al., 2008). A solution-focused approach to student counselling offers a strengthbased way to address elements of the pathways component of hope. Similar to hope therapy, solution-focused self-reflection invites clients to describe the changes they wish to make, examine their resources, describe the steps to reach their goals, and track their progress (Pakrosnis & Cepukiene, 2014). Solution-focused self-help tools can be taught by counsellors when the opportunity for in-person contact is limited. Pakrosnis and Cepukiene (2014) found that solution-focused self-reflection increased hope, positive affect, and self-efficacy among their sample of nonclinical undergraduate students.

Regardless of one's therapeutic orientation, counsellors may promote hope in clients through the use of several strategies. For example, implicit approaches such as highlighting the client's resources, positively reframing situations, and using metaphors to gain new perspectives can foster hope indirectly (Larsen & Stege, 2010a). Counsellors may also opt to bolster hope through use of explicit approaches, such as providing psychoeducation about hope, identifying the existence of multiple hopes, and conceptualizing hope as a behaviour to encourage more hopeful actions (Larsen & Stege, 2010b). Larsen, Stege, Edey, and Ewasiw (2014) highlighted the importance of considering the possibility that a client's hope may be unshared with the therapist and/or unrealistic and detrimental to treatment. The authors recommended that counsellors engage in the process of "informed hope" with clients. Informed hope involves respectfully exploring evidence for hope and explicitly discussing and adjusting hope accordingly (Larsen et al., 2014).

In addition, the gender differences observed in the present study also suggest that counsellors should consider how young adults' experiences can differ based on their own gender and that of their parents. It may also be helpful to examine the extent to which the university environment influences students' coping behaviours, and thereby their mental health and well-being. For example, counsellors may consider how the university campus environment promotes "partying," a popular form of recreation, which may be akin to substance abuse in some cases. Substance

abuse may be favoured by some students or encouraged by peers as a means to alleviate depressive symptoms, while more adaptive coping strategies, such as religion/spirituality, may be discouraged at the expense of students' mental health.

Longitudinal research of specific coping behaviours and family-level factors is needed to determine potential developmental trajectories of the relation between parental depression, hope, and coping behaviours. Further, it may be helpful to investigate the combined effects of perceived maternal and perceived paternal depression. Finally, future research should examine the relation between perceived parental depression and depression in students. Although the present study examined behaviours that may be helpful to those at risk for depression according to their perceptions, it did not examine whether these perceptions are in fact linked to intergenerational depression. Such research would be useful to counsellors, as it may imply that perceptions of parental depression, regardless of parents' actual depressive symptoms, place youth at risk for depression.

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