

# **Procrastination in Job-Seeking: An Analysis of Motivational Processes and Feelings of Hopelessness**

Caroline Sénécal  
Frédéric Guay  
*Université Laval*

The purpose of this study was to propose and test a model of procrastination in job-seeking activities. This model posits that non self-determined job-seeking motivation (i.e., performing job-seeking activities because of controls and pressure) is positively related to procrastination in job-seeking activities. In addition, decisional procrastination is expected to be positively related to procrastination in job-seeking activities. In turn, procrastination in job-seeking is hypothesized to positively predict change in hopelessness toward job-seeking. Participants were 345 university students who were about to graduate. Results from regression analyses revealed that all hypothesized links were supported. Discussion centers on the role of motivation in procrastination toward job-seeking.

Procrastination is typically defined as an irrational tendency to delay in the beginning and/or completion of a task. It involves knowing that one is supposed to perform an activity, and perhaps even wanting to do so, yet failing to motivate oneself to perform the activity within the desired or expected time frame (Ferrari, 1998; Lay, 1986). Given the fact that numerous people admit to procrastinating at least sometimes and the pervasive effect of this self-regulatory deficit, researchers have tried to understand why people procrastinate (Ferrari, Johnson, & McCown, 1995).

Solomon and Rothblum (1984) showed that most reasons that students gave to explain their tendency to delay were related to fear of failure (i.e., performance anxiety, perfectionism, and lack of self-confidence; Beswick, Rothblum, & Mann, 1988; Ferrari, Parker, & Ware,

---

*Author Info:* Caroline Sénécal, School of Psychology, Félix-Antoine-Savard Building, Université Laval, Sainte-Foy, PQ, Canada, G1K 7P4; e-mail Caroline.Senecal@psy.ulaval.ca.

*Authors' Notes:* This article was prepared while the first author was supported by grants from le Fonds pour la formation des Chercheurs et l' Aide à la Recherche (FCAR-Québec). The second author was supported by a postdoctoral fellowship from the Social Sciences Humanities Research Council of Canada (SSHRC). We would like to thank Richard Koestner, Claudine Barrette and Éric Tremblay for their contribution to this project.

Ferrari, J.R., & Pychyl, T.A. (Eds.). Procrastination: Current Issues and New Directions. [Special Issue]. *Journal of Social Behavior and Personality*, 2000, Vol. 15, No. 5, 267–282.

1992; Lay, 1990, 1992; Rothblum, Solomon, & Murakami, 1986; Schouwenburg, 1992; Solomon & Rothblum, 1984). However, Senécal, Koestner and Vallerand (1995) provided evidence that, in addition to fear of failure, non self-determined school motivation was positively associated to academic procrastination. Students motivated in a non self-determined way (i.e., doing academic activities for internal and/or external pressures) were likely to procrastinate more whereas those who were motivated in self-determined way (i.e., doing their school work out of choice and pleasure) were likely to procrastinate less. These results thus attest to the usefulness of looking beyond the fear of failure construct when considering motivational explanation of procrastination. That is, accomplishing tasks on time depends not only on how afraid of failure one is but also on self-determined motivational processes.

To date, most procrastination studies have been done in the academic context (see Ferrari et al., 1995). The degree of importance that students attach to this domain is typically high. Nonetheless, after they graduate, work becomes the most important life domain for individuals (Sharf, 1997). Most people spend considerably more time in their job than in any other single activity (Hackett, 1997). Although working is becoming crucial for students who hold a first university degree (BA or BS) and do not want to pursue graduate studies, some statistics have suggested that only 60% of them get a job within three months after they graduate. The other 40% take usually more than 12 weeks to get their first job, and it is commonplace to see students who take more than two years after graduation (Audet, 1995). Even though the delay in finding a job could be attributed to the job market and the economic situation, students' levels of procrastination in job-seeking activities may also play a role (Lay & Brokenshire, 1997).

On the basis of previous findings and Self-determination Theory (Deci & Ryan, 1985, 1991), we propose and test a model of procrastination toward job-seeking. Such a model, if proven valid, should provide a better understanding of why students postpone their job-seeking activities and what they experience in turn, if they perform this dilatory behavior. Below, we provide a brief presentation of Self-determination Theory (Deci & Ryan, 1985) and then, we present our model.

### **Self-Determination Theory**

According to Self-determination Theory (Deci & Ryan, 1985), different types of motivation underlie human behavior. Self-determination involves a true sense of choice, a sense of feeling free in doing what one has chosen to do (Deci & Ryan, 1991). Listed on a continuum from high to low levels of self-determination, these motivations are intrinsic motivation, extrinsic motivation, and amotivation. *Intrinsically moti-*

*vated* behaviors are those that are engaged in for their own sake, in other words, for the pleasure and satisfaction derived from performing them (Deci, 1971).

On the other hand, extrinsic motivation pertains to a wide variety of behaviors where the goals of action extend beyond those inherent in the activity itself. Different types of extrinsic motivations have been proposed by Self-determination Theory which can also be ordered along the self-determination continuum. From lower to higher levels of self-determination, these are external, introjected, and identified regulations. *External regulation* occurs when behavior is externally regulated by rewards or in order to avoid negative consequences. That is, regardless of whether the goal of behavior is to obtain rewards or to avoid sanctions, the individual experiences an obligation to behave in a specific way. *Introjected regulation* occurs when one performs the activity by internal pressure such as guilt and self-approval. In contrast, *identified regulation* occurs when a behavior is valued and perceived as being chosen by oneself. Yet, the motivation is still extrinsic because the activity is not performed for itself but as a means to an end.

Besides intrinsic and extrinsic motivation, Deci and Ryan (1985) have proposed a third motivational concept namely, *amotivation*, to fully understand human behavior. When amotivated, individuals experience a lack of contingency between their behaviors and outcomes. Their behaviors are neither intrinsically nor extrinsically motivated. Amotivated behaviors are the least self-determined because there is no sense of purpose and no expectations of reward or possibility of changing the course of events. Amotivation can thus be seen as similar to learned helplessness (Abramson, Seligman, & Teasdale, 1978) where the individual experiences feelings of incompetence and expectancies of uncontrollability.

According to Self-Determination Theory, these five types of motivation are differentially related to various types of outcomes. These motivations differ in their inherent levels of self-determination and self-determination has been hypothesized to be associated with enhanced psychological functioning (Deci, 1980; Deci & Ryan, 1985; Ryan, Deci & Grolnick, 1995). One would expect intrinsic motivation to be mostly associated with positive outcomes (e.g., satisfaction) followed by identified regulation. In contrast, the most negative outcomes (e.g., depressive states) will stem from amotivation followed by introjected and external regulations.

These findings have been obtained with several outcomes in various life contexts (see Deci & Ryan, 1985; Vallerand, 1997 for a review). For instance, research has shown that self-determined types of motivation

(i.e., intrinsic motivation and identified regulation) were positively associated with school achievement (Guay & Vallerand, 1997) and cognitive strategies (Pintrich & DeGroot, 1990). On the other hand, some studies have revealed that introjected regulation, external regulation, and amotivation were positively associated with cognitive anxiety (Ryan & Connell, 1989), school dropout (Vallerand, Fortier, & Guay, 1997) and academic procrastination (Senécal et al., 1995).

In the present study we used the five motivational variables to form a composite score of self-determined job-seeking motivation. This was done to reduce the number of variables involved in the analyses. Consequently, high levels of self-determined job-seeking motivation included intrinsic and identified reasons for performing job search activities whereas low levels of self-determined job-seeking motivation involved external, introjected, and amotivation reasons for job search activities.

### **A Model of Procrastination in Job-Seeking**

On the basis of Self-determination Theory and previous findings (Senécal et al., 1995), we propose that procrastination in job-seeking is a key mediator between self-determined job-seeking motivation and hopelessness in job-seeking. Specifically, the more graduating students have a self-determined motivation toward job-seeking, the less they procrastinate in their job-seeking activities. Indeed, graduating students who have a self-determined job-seeking motivation are more likely to show greater initiative and persistence in their job-seeking activities. On the other hand, lower levels of self-determined job-seeking motivation are expected to be associated with higher levels of procrastination in job-seeking activities.

Procrastination has been shown to lead to negative consequences (see Ferrari et al., 1995). Thus, individuals' high level of procrastination can lead them to experience negative outcomes related to job-seeking. We thus propose that the more that graduating students procrastinate toward job-seeking activities, the more they develop feelings of hopelessness in job-seeking. Hopelessness implies (a) a negative expectation about the occurrence of highly valuable outcomes, and (b) expectations of helplessness about changing the likelihood of occurrence of these outcomes (Abramson, Metalsky, & Alloy, 1989). Because most graduating students expect that their desired outcome (i.e., having a career) will occur, it is not a surprise that when they postpone, they would become anxious and, over time, depressed.

Because they attach real importance to it, those who procrastinate toward job-seeking might eventually feel unemployment stress, financial pressure, and negative emotions such as higher level of anxiety which could lead to negative views of the self (Blankstein & Flett, 1990;

Blankstein, Flett, Watson, & Koledin, 1990; Ferrari, 1991, 1992). Negative self-concept plays an important role in the development or maintenance of depression (Beck, 1967). The negative generalized expectancies about self and controllability of future events (Hull & Mendolia, 1991) is in accord with the definition of hopelessness. Thus, it seems relevant that students who hold a first university degree (BA or BS) and procrastinate toward job-seeking might, over time, develop feelings of hopelessness in job-seeking.

Given that personality traits influence how individuals react in particular situations (McCrae & Costa, 1994), we postulate that the more students have dispositional tendencies to decisional procrastination, the more they would procrastinate in job-seeking activities. Ferrari (1998, p. 5-1) defined decisional procrastination as "a cognitive form of delay in which a person fails to make decision in a timely manner." For instance, students who delayed in making decisions because it was the only way for them to cope with stressful events, suffered from decisional procrastination. Thus, it seems relevant to propose that graduating students who already have this dispositional tendency to delay in making decisions would be more likely to procrastinate in job-seeking activities.

In sum, we hypothesized that non self-determined job-seeking motivation is positively related to procrastination in job-seeking activities. In turn, the more graduating students procrastinate in job-seeking, the more they develop over time, feelings of hopelessness in job-seeking. Finally, the higher is students' level of decisional procrastination, the higher their levels of procrastination in job-seeking.

## METHOD

### Participants

University students were recruited on the basis of three characteristics. First, they had to be involved in searching for a job. Second, they had to be in their last semester before obtaining their bachelor degree. Finally, they should not have the intention to pursue graduate studies immediately after their bachelor degree. Participants were thus 345 university students (63% females; 37% males) and their mean age was 23 years. Among students who participated at Time-1, 112 participated in the second phase of the study that was conducted 6 months later. The mean age of this subsample was 23 years (24% males; 76% females). Although the size of this sample was smaller than the original one, no significant differences exist on initial measures (i.e., decisional procrastination, self-determined job-seeking motivation, hopelessness in job-seeking) between students who did participate to the second phase of the study versus those who did not participate.

## Measures

*Self-determined job-seeking motivation.* Students completed the Job-Seeking Motivation Inventory (JSMI; Senécal, 1998a) which assesses students' motivation toward job-seeking. The JSMI is composed of 19 items that are divided into five subscales assessing the motivational constructs of Self-determination Theory (Deci & Ryan, 1985, 1991). One 4-item subscale assesses intrinsic motivation (e.g., "Because this activity is full of interesting challenges"). Three subscales assess types of extrinsic motivation: identified regulation (5 items; e.g., "Because I choose this activity in order to attain my career goals"), introjected regulation (4 items; e.g., "Because I feel obliged to find a job"), and external regulation (3 items; e.g., "Because I want to have some money rapidly"). One subscale assesses amotivation (3 items; e.g., "I don't know, I don't see the relevance for myself"). Each item on the inventory represents a possible reason for being involved in job-seeking. Items are scored on a 7-point Likert scale (1 = *not at all in agreement* to 7 = *completely in agreement*). Previous research has provided support for the construct validity and the reliability of the scale (Senécal, 1998a). In the present study, Cronbach alphas for the four subscales ranged from .65 to .78.

The self-determined job-seeking motivation variable (i.e., performing job-seeking activities out of choice and pleasure) was computed to reduce the number of variables involved in the regression analyses. This variable was thus obtained by integrating the information from the different motivational subscales. This was done by ascribing each subscale a different weight and then summing the products. Consequently, intrinsic motivation and identified regulation subscales were assigned respectively the score of +2 and +1. Amotivation and the two other types of extrinsic motivation (introjected and external regulation) were attributed respectively the weights of -2 and -1. The self-determined job-seeking motivation score was thus computed using the following formula:  $((2 \times \text{intrinsic motivation} + \text{identified regulation}) - ((\text{introjected regulation} + \text{external regulation})/2) + 2 \times \text{amotivation})$ . Possible range for this composite measure was from -18 to +18. Numerous studies have shown the usefulness of this composite index (e.g., Vallerand, Fortier, & Guay, 1997; Guay & Vallerand, 1997).

*Decisional procrastination.* Students completed the French translation of the Mann's Decisional Procrastination Scale (Mann, 1982). This scale consists of 5 items rated on a 5-point Likert-type scale (e.g., "I delay making decisions until it's too late"). In the present study, Cronbach alpha for this scale was .86.

*Procrastination in job-seeking.* Students completed the Job-Seeking Procrastination Scale (Senécal, 1998b). This 10-item scale assess procrastination toward job-seeking activities (e.g., 'When my CV and my cover letter are ready I can wait several days before sending them'; 'I lost time in doing several less important things before planing things that I have to do for my job-seeking activities'). Each item was rated on 5-point Likert-type scale. Previous research conducted with the scale has provided support for the construct validity and the reliability of the scale (Senécal, 1998b). In the present study, this scale had a .84 Cronbach alpha.

*Hopelessness in job-seeking.* Students completed an adapted version of the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974) applied to job-seeking. The Beck Hopelessness Scale is made of 20 items that are not specific to a particular domain. In the present study, we selected five items of this original scale that were easy to adapt to job-seeking. This abridged version of the scale is thus made of 5 items rated on 7-point Likert-type scale (e.g., 'Things will never be better in my job-seeking'; 'I see only negative things in my job-seeking process'; 'I will not be able to attain my goals in my job-seeking process'). In the present study, Cronbach alpha for this scale was .86.

## **Procedure**

We performed the first wave of data collection during the winter semester. A research assistant recruited students in their classrooms. He explained how to fill out the questionnaire and assured participants that their responses would remain anonymous. Following these instructions, students completed self-report measures of job-seeking motivation, feelings of hopelessness in job-seeking, and finally a trait measure of decisional procrastination.

We conducted the second wave of data collection six months later. Because students had complete their university degree (BA or BS) and were thus no longer at the university, we sent a questionnaire by mail to those (i.e., 312) who had agreed to participate in the second phase of the study. To enhance recruitment, we offered a participation in a \$100 lottery to students who completed and sent back the questionnaire. We asked them to complete the questionnaire with respect to their job-seeking process. This questionnaire included scales of procrastination toward job-seeking and the Time-1 measure assessing their feelings of hopelessness in their job-seeking process. In all, 112 completed questionnaires were returned for a response rate of 36%. This response rate was similar to those of previous studies using such a procedure (e.g., Guay & Vallerand, 1998; Senécal & Vallerand, 1998).

TABLE 1 Correlations Among Variables

<i>Variables</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
(1) Time-1 Self-determined job-seeking motivation	—				
(2) Time-1 Hopelessness	-.43***	—			
(3) Time-1 decisional procrastination	-.19*	.29**	—		
(4) Time-2 Procrastination in job-seeking	-.25**	.14	.30**	—	
(5) Time-2 Hopelessness	-.38***	.58***	.18*	.29**	—

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## RESULTS

### Preliminary Analyses

Table 1 presents correlations between the model variables. As expected, a negative relation ( $r = -.25$ ,  $p < .01$ ) was found between Time-1 self-determined job-seeking motivation and Time-2 procrastination in job-seeking. Furthermore, procrastination in job-seeking (Time 2) was positively related ( $r = .29$ ,  $p < .01$ ) to feelings of hopelessness in job-seeking (Time 2). In addition, decisional procrastination at Time 1 was positively associated ( $r = .30$ ,  $p < .01$ ) to Time-2 procrastination in job-seeking. Finally, Time-1 hopelessness was strongly and positively related ( $r = .58$ ,  $p < .001$ ) to Time-2 hopelessness.

### A Test of the Model

Baron's and Kenny's (1986) procedure was used to verify the proposed model. According to this procedure, mediation is established only if four conditions can be met. The first two conditions require a demonstration in two separate regression equations that the independent variables are related to both the dependent variable (first condition) and the mediator (second condition). The third condition requires that the mediator has an effect on the dependent variable after the effects of predictors on the dependent variables are taken into account. The fourth condition involves a comparison between results obtained under condition 1 and 3. In this case, empirical support for mediation is provided if the effect of the independent variable on the dependent variable is reduced when the effect of the mediator on the dependent variable is accounted for. In the present study, the key mediator was Time-2 procrastination in job-seeking whereas the dependent variable was Time-2 hopelessness in job-seeking. Finally, the independent variables were:



TABLE 2 Regression Analyses Testing the Model

Measure	Step 1		Step 2	
	$\beta$	<i>t</i>	$\beta$	<i>t</i>
<b>Equation 1</b>				
Hopelessness (Time 2)				
SEX	-.02	-.03	-.06	-.77
HOP1	.57	6.91***	.49	5.45***
DPRO	.01	.15	-.01	.00
MOT1			-.18	-2.00*
R <sup>2</sup>		.34		.36
R <sup>2</sup> change		.34		.02
F change		18.34***		4.01*
<b>Equation 2</b>				
Procrastination (Time 2)				
SEX	.03	.37	-.01	-.14
HOP1	.06	.64	-.04	-.34
DPRO	.28	2.96**	.26	2.83**
MOT1			-.21	-2.13*
R <sup>2</sup>		.09		.13
R <sup>2</sup> change		.09		.04
F change		3.70*		4.52*
<b>Equation 3</b>				
Hopelessness (Time2)				
SEX	-.02	-.03	-.05	-0.76
HOP1	.57	6.91***	.50	5.67***
DPRO	.01	.15	-.05	.50
MOT1			-.13	-1.50
DPR2			.21	2.54*
R <sup>2</sup>		.338		.40
R <sup>2</sup> change		.34		.06
F change		18.34***		5.33**

Note: HOP1 = Time-1 hopelessness, DPRO = Time-1 decisional procrastination, MOT = Time-1 self-determined job-seeking motivation, DPR2 = Time-2 job-seeking procrastination.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

sex, decisional procrastination, self-determined job-seeking motivation, and Time-1 hopelessness. We included sex in the analyses to control for its potential effects on the mediator and the dependent variable.

The model was tested in a series of three separate regression analyses. Results are presented in Table 2 and in Figure 1. The first regression equation evaluated if sex, decisional procrastination, Time-1 hopelessness, and self-determined job-seeking motivation were related to the dependent variable of Time-2 hopelessness. In a first step, Time-2 hopelessness was regressed onto sex ( $\beta = -.02$ , ns), decisional procrasti-

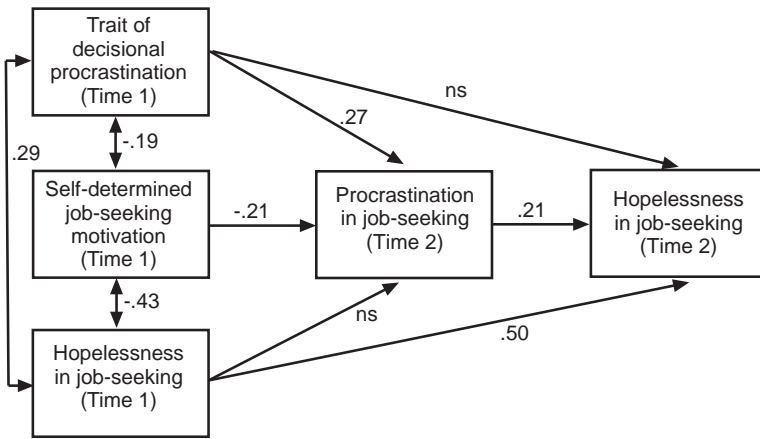


FIGURE 1 Results of the Mediation Model of Job-Seeking Procrastination (All correlations and beta coefficients are significant at  $p < .05$ . Betas were obtained from step 2 regression analyses.)

nation ( $\beta = .01$ , *ns*), and Time-1 hopelessness ( $b = .57$ ,  $p < .001$ ). The inclusion of Time-1 hopelessness in this equation enabled us to create the change residual score in hopelessness (see Williams, & Deci, 1996 for a similar procedure). In a second step, Time-2 hopelessness was regressed onto Time-1 self-determined job-seeking motivation ( $\beta = -.18$ ,  $p < .05$ ). Results revealed that self-determined job-seeking motivation had an unique contribution in predicting change in hopelessness toward job-seeking (first condition).

The second equation assessed if sex, decisional procrastination, Time-1 hopelessness, and self-determined job-seeking motivation are related to Time-2 procrastination in job-seeking (i.e., the mediator). In a first step, Time-2 procrastination in job-seeking was regressed onto sex ( $\beta = .03$ , *ns*), decisional procrastination ( $\beta = .28$ ,  $p < .01$ ), and Time-1 hopelessness ( $\beta = .06$ , *ns*). Results thus revealed that decisional procrastination is positively related to procrastination in job-seeking. In a second step, procrastination in job-seeking was regressed onto self-determined job-seeking motivation ( $\beta = -.21$ ,  $p < .05$ ). Thus, self-determined job-seeking motivation had unique negative contribution in predicting Time-2 procrastination in job-seeking (second condition).

The third equation was then used to test whether Time-2 procrastination in job-seeking mediated the relationship between self-determined

job-seeking motivation and change in hopelessness. In a first step, Time-2 hopelessness was regressed onto sex ( $\beta = -.02$ , ns), decisional procrastination ( $\beta = .01$ , ns), and Time-1 hopelessness ( $\beta = .57$ ,  $p < .001$ ). In a second step, then Time-2 self-determined job-seeking motivation and procrastination in job-seeking were entered. Procrastination in job-seeking ( $\beta = .21$ ,  $p < .05$ ) was positively related to change in hopelessness and rendered self-determined job-seeking motivation nonsignificant ( $\beta = -.13$ , ns). Thus, it appears procrastination in job-seeking mediated the relationship between self-determined job-seeking motivation and change in hopelessness.

## DISCUSSION

The purpose of this study was to propose and test a model that integrates antecedents and consequence of procrastination toward job-seeking. We proposed that non self-determined job-seeking motivation and decisional procrastination are positively related to the mediator of procrastination in job-seeking. In turn, high levels of procrastination toward job-seeking are expected to lead individuals to experience hopelessness toward job-seeking activities.

Results from regression analyses provide support for the mediational model. First, motivation had a unique positive contribution in predicting procrastination toward job-seeking that was over and beyond decisional procrastination. Second, high levels of procrastination were associated with an increase in hopelessness toward job-seeking over a six-month period. That is, the more individuals procrastinated in the job-seeking process the greater their increase in hopelessness. Implications of these results are discussed below.

As mentioned at the outset, most of the research on procrastination has been conducted in the academic domain. Unfortunately, less research has examined procrastination in the work area (Ferrari, 1992) and more specifically related to job-seeking. Nevertheless, for students who have received their diploma (BA or BS), having a job is an important step to their social and professional integration. Therefore, it is important to understand why some people delay their search for a job. The present findings indicate that the more students have self-determined reasons to search for a job, the less they procrastinate in job-seeking. Thus, the more they have pleasure and satisfaction when they are engaged in job-seeking and/or the more they perceive this activity as a personal choice, the less they postpone job-seeking activities. On the contrary, the more they feel external or internal pressure to perform this activity and/or the more they perceive no relationship between their job-seeking activities and the consequences of it, the more students delay job-seeking.

More important, the motivation-procrastination relationship was significant after controlling for the observed significant positive relation between decisional procrastination and job-seeking procrastination. Thus, procrastination in job-seeking is not only a matter of personality dispositions, but also a problem that implies specific motivational deficits, namely low levels of self-determined motivation. This pointed out the importance of looking to social-contextual influences for understanding procrastination. In addition, the present findings replicate previous ones (Senécal et al., 1995) and are in agreement with recent motivation research, which has shown that self-determined motivation has a host of cognitive, affective, and behavioral consequences (see Deci & Ryan, 1985, 1987, 1991; Vallerand, 1997). However, in further test of the model, it could be interesting to assess other dispositional tendency such as conscientiousness and the lower-order trait procrastination in relation to procrastination in job-seeking (see Lay & Brokenshire, 1997 on this issue).

Another implication of interest deals with the consequences of procrastination toward job-seeking. Results from the present study provide additional support for the negative influence of procrastination on individuals' affect (e.g., depression, low self-esteem), cognition (e.g., less concentration), and behaviors (e.g., work discipline; Ferrari et al., 1995). That is, results showed that high levels of procrastination toward job-seeking lead to an increase in hopelessness over time. Thus, procrastination may put students at risk to develop an inaccurate view of their own ability and their potential to find a good job.

A further test of the present model should examine the role of the social context. That is, it is important to ask about how contextual elements are related to students job-seeking motivation and procrastination. For example, recent studies have shown that autonomy support from significant others (i.e., taking the other's perspective, acknowledging the other's feelings and perceptions, providing the other with information and choice, and minimizing the use of pressure and control) are related to self-determined motivation (see Deci & Ryan, 1991; Vallerand, 1997 for reviews). Consequently, it is possible that an autonomous supportive family environment will produce low levels of job-seeking procrastination by fostering higher levels of job-seeking motivation, especially when students face some difficulties such as a hard job interview or a rejection letter. On the other hand, the influence of peers on self-determined job-seeking motivation should be investigated because numerous investigators posit friendship as an important factor for psychological adaptation (Hartup & Stevens, 1997). For example, students having friends with negative attitudes toward the job market may

experience a lack of self-determined motivation and thus higher levels of procrastination toward job-seeking. Alternatively, it is likely that students having friends with positive attitudes toward the job market may have higher levels of self-determined job-seeking motivation and thus low levels of procrastination. Clearly, future research is needed to understand contextual factors that could influence job-seeking motivation and procrastination in job-seeking.

Results of this research suggest that procrastination leads to an increase in hopelessness toward job-seeking. However, what are the consequences of this state of hopelessness? It is possible that students who experience this state in their job-seeking process develop feelings of anxiety and depression (Abramson, Metalsky, & Alloy, 1989; Swendsen, 1998); feelings which prevent them to persist in their job-seeking process. Alternatively, it is possible that factors other than procrastination lead to hopelessness. For example, numerous investigations have shown that both attributional style and specific causal attributions of negative events are antecedents of a hopelessness state (e.g., Alloy & Clements, 1992; Metalsky, Halberstadt, & Abramson, 1987; Metalsky & Joiner, 1992; Metalsky, Joiner, Hardin, & Abramson, 1993). Thus, future research is needed on the antecedents and outcomes of hopelessness in job-seeking.

Although the present results provide support for the proposed model, some limitations should be taken into account when interpreting the findings. First, the correlational nature of these data precludes conclusions concerning strong causality inferences between model variables. Second, shared method variance may exist between self-report measures. Thus, stronger support for this model could be obtained by using a multitrait-multimethod approach to evaluate these constructs. However, using self-report measures enabled us to evaluate students' phenomenal view of their internal states and to show that self-determined motivation predicts increases in hopelessness through procrastination. Third, gender was entered as a covariate (i.e., main effect) but the invariance (i.e., moderating effect) of the model across sex was not considered because of the limited number of participants. Although the same processes may be operating, the strength of the regressions coefficients may not be the same for men and women. Fourth, this study focused on a limited number of factors predictive of procrastination and hopelessness in job-seeking. As we pointed out above, other individual and social factors may be related to these variables.

In sum, despite the limitations mentioned above, a model of procrastination toward job-seeking was tested and supported through regression

analyses and a prospective research design. We believe that the present findings have outlined the importance of self-determined motivation in procrastination as well as the negative consequences of this self-regulation deficit in job-seeking.

## REFERENCES

- Abramson, L.Y., Metalsky, G.I., & Alloy, L.B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review*, *96*, 358–372.
- Abramson, L.Y., Seligman, M.E.P., & Teasdale, J.D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, *87*, 49–74.
- Alloy, L.B., & Clements, C.M. (1992). Illusion of control: Invulnerability to negative affect and depressive symptoms after laboratory and natural stressors. *Journal of Abnormal Psychology*, *101*, 234–245.
- Audet, M. (1995). *Qu'advient-il de nos diplômés?* Québec: Les Éditions du Québec.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Beck, A.T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. Philadelphia: University of Pennsylvania Press.
- Beck, A.T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, *42*, 861–865.
- Beswick, G., Rothblum, E.D., & Mann, L. (1988). Psychological antecedents of student procrastination. *Australian Psychologist*, *23*, 207–217.
- Blankstein, K.R., & Flett, G.L. (1990). Cognitive components of test anxiety: A comparison of assessment and scoring methods. *Journal of Social Behavior and Personality*, *5*, 187–202.
- Blankstein, K.R., Flett, G.L., Watson, M.S., & Koledin, S. (1990). Test anxiety, self-evaluative worry, and sleep disturbance in college students. *Anxiety Research*, *3*, 193–204.
- Deci, E.L. (1980). *The psychology of self-determination*. Lexington, MA: DC Health.
- Deci, E.L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, *18*, 105–115.
- Deci, E.L. & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E.L. & Ryan, R.M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, *53*, 1024–1037.
- Deci, E.L. & Ryan, R.M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation: Vol. 38. Perspectives on motivation* (pp. 237–288). Lincoln: University of Nebraska Press.
- Ferrari, J.R. (1991). Self-handicapping by procrastinators: Protecting self-esteem, social-esteem, or both? *Journal of Research in Personality*, *25*, 245–261.

- Ferrari, J.R. (1992). Procrastination in the workplace. Attributions for failure among individuals with similar behavioral tendencies. *Personality and Individual Differences*, *13*, 315–319.
- Ferrari, J.R. (1998). Procrastination. *Encyclopedia of Mental Health*, p.5-1.
- Ferrari, J.R., Johnson, J.L., & McCown, W.G. (Eds.). (1995). *Procrastination and task avoidance: Theory, research, and treatment*. New York: Plenum Publications.
- Ferrari, J.R., Parker, J.T., & Ware, C.B. (1992). Academic procrastination: Personality correlates with Myers-Briggs types, self-efficacy, and academic locus of control. *Journal of Social Behavior and Personality*, *7*, 495–502.
- Guay, F., & Vallerand, R.J. (1997). Social context, students motivation, and academic achievement: Toward a process model. *Social Psychology of Education*, *1*, 211–233.
- Guay, F., & Vallerand, R.J. (1998). *On the assessment of situational intrinsic and extrinsic motivation: The Situational Motivation Scale*. Manuscript submitted for publication.
- Hackett, G. (1997). Self-efficacy in career choice and development. In A. Bandura (Ed.), *Self-efficacy in changing societies*, (pp. 232–258). Cambridge: Cambridge University Press.
- Hartup, W.W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, *121*, 355–370.
- Hull, J.G., & Mendolia, M. (1991). Modeling the relations of attributional style, expectancies, and depression. *Journal of Personality and Social Psychology*, *61*, 85–97.
- Lay, C.H. (1986). At last, my research on procrastination. *Journal of Research in Personality*, *28*, 474–495.
- Lay, C.H. (1990). Working to schedule on personal projects: An assessment of person-project characteristics and trait procrastination. *Journal of Social Behavior and Personality*, *5*, 91–103.
- Lay, C.H. (1992). Trait procrastination and the perception of person-task characteristics. *Journal of Social Behavior and Personality*, *6*, 605–617.
- Lay, C.H., & Brokenshire, R. (1997). Conscientiousness, procrastination, and person-task characteristics in job searching by unemployed adults. *Current Psychology: Developmental, Learning, Personality, Social*, *16*, 83–96.
- Mann, L. (1982). *Decision-making questionnaire*. Unpublished manuscript. Flinders University of South Australia, Australia.
- McCrae, R.R., & Costa, P.T., Jr. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science*, *3*, 173–175.
- Metalsky, G.I., Halberstadt, L.J., & Abramson, L.Y. (1987). Vulnerability to depressive mood reactions: Toward a more powerful test of the diathesis-stress and causal mediation components of the reformulated theory of depression. *Journal of Personality and Social Psychology*, *63*, 386–393.
- Metalsky, G.I., & Joiner, T.E. (1992). Vulnerability to depressive symptomatology: A prospective test of the diathesis-stress and causal mediation components of the hopelessness theory of depression. *Journal of Personality and Social Psychology*, *63*, 667–675.
- Metalsky, G.I., Joiner, T.E., Hardin, T.S., & Abramson, L.Y. (1993). Depressive reactions to failure in a naturalistic setting: A test of the hopelessness and

- self-esteem theories of depression. *Journal of Abnormal Psychology*, *102*, 101–109.
- Pintrich, P.R., & DeGroot, E.V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, *82*, 33–40.
- Rothblum, E.D., Solomon, L.J., & Murakami, J. (1986). Affective, cognitive, and behavioral differences between high and low procrastinators. *Journal of Counseling Psychology*, *33*, 387–394.
- Ryan, R.M., & Connell, J.P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, *57*, 749–761.
- Ryan, R.M., Deci, E.L., & Grolnick, W.S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathology. In D. Cicchetti et D.J. Cohen (Eds.), *Developmental psychology- Vol. 1: Theory and methods*, 618–655. New York: John Wiley & Sons.
- Schouwenburg, H.C. (1992). Procrastinators and fear of failure: An exploration of reasons for procrastination. *European Journal of Personality*, *6*, 225–236.
- Senécal, C. (1998a). *The Job-Seeking Motivation Inventory*. Unpublished manuscript. Université Laval, Québec, Canada.
- Senécal, C. (1998b). *The Job-Seeking Procrastination Scale*. Unpublished manuscript. Université Laval, Québec, Canada.
- Senécal, C., Koestner, R., & Vallerand, R.J. (1995). Self-Regulation and Academic Procrastination. *The Journal of Social Psychology*, *135*, 607–619.
- Senécal, C., & Vallerand, R.J. (1998). *Antecedents and Outcomes of Work-Family Conflict: Toward a Motivational Model*. Manuscript submitted for publication.
- Sharf, R.S. (1997). *Applying career development theory to counseling*, 2nd ed. Brooks/Cole Publishing Company.
- Solomon, L.J., & Rothblum, E.D. (1984). Academic procrastination: Frequency and cognitive behavioral correlates. *Journal of Counseling Psychology*, *31*, 503–509.
- Swendsen, J.D. (1998). The Helplessness-Hopelessness Theory and Daily Mood Experience: An Idiographic and Cross-Situational Perspective. *The Journal of Personality and Social Psychology*, *74*, 1398–1408.
- Vallerand, R.J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology*, *29*, 271–361.
- Vallerand, R.J., Fortier, M., & Guay, F. (1997). Self-Determination and Persistence in a Real-Life Setting: Toward a Motivational Model of High School Dropout. *Journal of Personality and Social Psychology*, *72*, 1161–1176.
- Williams, G.C., & Deci, E.L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, *70*, 767–779.



Copyright of Journal of Social Behavior & Personality is the property of Select Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.