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"I'll go to therapy, eventually": Procrastination, stress and mental health

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ABSTRACT

Procrastination and stress are associated with poorer mental health, health problems, and treatment delay. We examine procrastination in the domain of mental health. Higher levels of procrastination and stress were predicted to correlate with poorer mental health status and fewer mental health help-seeking behaviours. Undergraduate participants (135 females, 65 males) completed online questionnaires on procrastination, stress, mental health issues, and mental health help-seeking behaviours. Three significant canonical correlations were obtained between the predictor variables of procrastination, stress, (with controls for age, gender, and social desirability) and the criterion mental health variables. The first canonical correlation supported the main hypothesis associating stress and procrastination with poorer mental health. The second suggested that greater age and female gender are positively correlated to mental health help-seeking. The third canonical correlation depicted reduced procrastination and reduced concern for social desirability as associated with a pattern of poorer mental health and increased mental health help-seeking behaviours. These findings are discussed with a view to addressing the discrepancy between the considerable extent of mental health suffering and the comparatively low levels of mental health help-seeking.

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1. Introduction

A considerable gap exists between the extent of mental health suffering and the prevalence of help-seeking behaviour in many industrialized societies. For example, the United States' National Comorbidity Study (NCS) and the NCS Replication (NCS-R) determined the prevalence of any type of mental disorder was 29.4% and 30.5%, respectively, although among patients with a disorder, only 20.3% and 32.9% received treatment, respectively (Kessler et al., 2005). Furthermore, an international consortium (Bijl et al., 2003) examined the prevalence rates of treated and untreated mental disorders in five countries: Canada, Chile, Germany, the Netherlands and the United States. The largest discrepancies were found for Canada (19.9% of people diagnosed with a DSM-IV disorder and only 7% seeking treatment in the past year), the United States (29.1% and 10.9%) and the Netherlands (24.4% and 13.4%). Research on procrastination and physical health (Sirois, 2007; Sirois, Melia-Gordon, & Pychyl, 2003) suggests an investigation of procrastination as both a possible contributor to ailment and a behavioural barrier to treatment in the mental health domain.

1.1. Procrastination, stress and mental health

To procrastinate is to put off acting on one's intentions; for some individuals engaging in procrastinatory behaviour may be-

come a habitual activity, labeled trait procrastination. Trait procrastination is the predisposition to postpone that which is necessary to reach some goal (Lay, 1986). The current study examines trait procrastination on academic and everyday tasks as it relates to mental health and help-seeking. Procrastination has been linked to many negative mental health states. Anxiety and depression are positively correlated with self-report and behavioural measures of procrastination (Beswick, Rothblum, & Mann, 1988; Martin, Flett, Hewitt, Krames, & Szanto, 1996).

Stress and mental health have been repeatedly found to vary inversely (e.g., DeLongis, Lazarus, & Folkman, 1988) and with likely reciprocal influence (Hammen, 2005). Defining stress as the organism's reaction to external survival-related demands (Lazarus & Folkman, 1984), and mental health as "... a state of well-being in which the individual ... can cope with the normal stresses of life ..." (World Health Organization, 2001), it is also clear that stress and mental health are linked by definition.

Procrastination and stress are positively correlated (Flett, Blankstein, & Martin, 1995). In a student sample, all participants reported experiencing stress resulting from procrastination (Schraw, Wadkins, & Olafson, 2007). Procrastinating online was also linked to perceived stress relief (Lavoie & Pychyl, 2001). The relation between procrastination and stress may vary depending on the urgency of the stressor. Tice and Baumeister (1997) found that students who procrastinated at the beginning of a semester experienced less stress and fewer illness symptoms. However, at the end of a semester, with deadlines and examinations looming, procrastinators tended to have greater stress, more illness symptoms, more

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health care visits, and poorer academic performance than nonprocrastinators.

1.2. Procrastination, stress and treatment delay

Individual differences in personality are related to help-seeking for emotional problems (Rickwood & Braithwaite, 1994). More specifically, procrastination acts as a barrier to help-seeking for drug abuse (McCoy, Metsch, Chitwood, & Miles, 2001) and gambling (Bellringer, Pulford, Abbott, DeSouza, & Clarke, 2008). Procrastination may thus be a barrier to help-seeking for other mental health concerns.

The present study extends into the mental health domain previous research (Sirois, 2007; Sirois et al., 2003) examining the relation between procrastination, stress, physical illness and the practice of wellness behaviours (i.e. seeing a physician or ensuring proper nutrition). Sirois and colleagues (2003) examined university students during a high stress period and measured their procrastination, physical health, treatment delay, stress, and wellness behaviours. Procrastinators experienced poorer health, treatment delay, stress, and fewer wellness behaviours. Stress was found to fully mediate the procrastination-illness relationship. Analyses in a subsequent replication generalized original findings to a community-dwelling adult sample (Sirois, 2007). Consistent with the previous findings, procrastination was associated with higher stress, more acute health problems, and the practice of fewer wellness behaviours. Procrastinators also reported less frequent household safety behaviours and dental and medical check-ups. In this study (Sirois, 2007), stress fully mediated the procrastination-health relationship. Initially, health behaviours also appeared to mediate the procrastination-health relationship. However, after considering the covariance with stress, health behaviours proved not to be a significant mediator (Sirois, 2007). In an effort to replicate Sirois' findings (2007) as applied to mental health, we used a similar array of measures, namely, measures of procrastination, stress, mental health, and mental health behaviours. Nevertheless, we designed our analysis to remain sensitive to the possibility that mental health distress might affect help-seeking behaviour in a different way than physical illness. Due to the nature of mental distress, the cognitive functioning required to seek help may be more impaired in this context than with physical ailments.

1.3. The current study

In this exploratory study we aimed to examine how procrastination and stress may both work to predict mental health and help-seeking. We predicted that the combination of procrastination tendencies and stress levels would affect mental health and help-seeking conjunctively. Consequently, we included both procrastination and stress as predictor variables of mental health and help-seeking. Due to the presence of multiple predictor and criterion variables we used a canonical correlation analysis. This analysis can also reveal more subtle associations between measured constructs if there are multiple canonical functions that satisfy a null-hypothesis approximate test of significance.

On the basis of previous findings, we predicted that participants who score high on procrastination and stress will have poorer mental health than participants who score low on procrastination and stress. In addition, we predicted that participants who score high on procrastination and stress measures will engage in fewer mental health help-seeking behaviours than participants who score low on procrastination and stress.

2. Methods

2.1. Participants

Undergraduate students (135 women, 65 men; age 17–22 years, $M = 18.42$, $SD = .75$) from the University of Western Ontario participated in this study through an online departmental portal for course credit. Self-assessed English proficiency was listed as a participation requirement to foster valid questionnaire responding.

2.2. Materials

2.2.1. Measures of procrastination

General procrastination scale (GP; Lay, 1986). The GP scale is composed of 20 items that measure trait procrastination on a variety of everyday activities (e.g. "I always seem to end up shopping for birthday gifts at the last moment"). Items are scored on a 5-point Likert scale ranging from 1 (False of me) to 5 (True of me). The mean of all items yields a composite score, with higher values indicating a higher tendency to procrastinate. The internal consistency has been shown to be .78 and the test-retest reliability .80 (Ferrari, Johnson, & McCown, 1995). The internal consistency for the present sample was $\alpha = .89$.

Procrastination Assessment Scale for Students (PASS; Solomon & Rothblum, 1984). The PASS measures trait procrastination on six varied academic task domains such as studying, writing, and attendance. While the PASS is specific to academic concerns, it measures procrastination as an academic disposition across situations, making it a plausible measure of academic procrastination as a trait. The PASS contains two questions for each of the six academic tasks: "To what degree do you procrastinate on this task?" and "To what degree is procrastination on this task a problem for you?" Each question is scored on a 5-point rating scale. Internal consistency for the first question (PASS-1) was .79 in past research (Shanahan & Pychyl, 2007) and .77 in the present sample. Internal consistency for the second question (PASS-2) was .72 in previous research (Shanahan & Pychyl, 2007) and .78 in the present sample.

2.2.2. Measure of stress

Daily Hassles Scale-Revised (DHS-R; Holm & Holroyd, 1992). The Daily Hassles Scale lists 61 "hassles", which are irritating or frustrating demands in one's life. Each hassle is rated on a 5-point rating scale, plus a "not applicable" option. Sample hassles are "concerns about owing money" and "physical appearance." The cumulative severity rating (sum of all items) was the stress measure used in our study (as per Holm & Holroyd, 1992). Internal consistencies of .80 and .88 are reported for overt and covert hassles, respectively (Holm & Holroyd, 1992).

2.2.3. Measures of mental health

Mental Health Inventory (MHI; Veit & Ware, 1983). The MHI measures general levels of psychological distress and well-being. The MHI consists of 38 items that are scored on a 6-point Likert scale according to the frequency of its occurrence over the past month. For example, "During the past month, how often did you feel isolated from others?" The MHI has elicited reliably strong internal consistencies ranging from .83 to .96 (Veit & Ware, 1983). The internal consistency for the present sample was .78. In the interest of isolating cognitive factors, MHI can be further divided into a 32-item Mental Health Index (MHI-32) and a 6-item Cognitive functioning subscale (CF-6). The CF-6 encompasses questions on concentration, memory, and problem-solving, among other daily cognitive skills. In the present sample, the internal consistency for the CF-6 is .78 and for the MHI-32, .66.

Mental health behaviour (MHB). Mental health help-seeking behaviour was assessed with two questions, modeled on health care behaviour questions in previous research (Sirois, 2007). The two questions were: “I have spoken to a physician or nurse about my personal mental health issues” and “I have seen a Mental Health Professional (psychologist, psychiatrist, counsellor, therapist, etc.)”, scored on a 5-point rating scale. The internal consistency for the present sample was .82.

Social desirability. The shortened Marlowe–Crowne social desirability scale (M–C (20); Strahan & Gerbasi, 1972) is valuable to assess social desirability as a control variable when assessing generally undesirable constructs (procrastination, stress, poor mental health) with self-report measures. The M–C (20) consists of 20 True–False items. A higher score suggests socially desirable responding. The reliability coefficients for the M–C (20) range from .73 to .83 in past research (Strahan & Gerbasi, 1972), and .70 in the present sample.

2.3. Procedure

Participants were recruited online from the research participation pool at the University of Western Ontario. Responses were collected in an online format through a controlled-access departmental portal. Participants first saw a letter of information followed by a consent form. The consent form included a request for contact information for potential follow-up in the case of results flagged for severe depression or risk of self-harm.

The questionnaires appeared in the following order: the demographic information questions, the PASS, the GP, the DHS-R, MHB questions, the MHI, and the M–C (20). This order was chosen to separate longer and shorter questionnaires to minimize participant fatigue. Finally a debriefing letter was presented that included contact information for two campus mental health services.

3. Results

3.1. Examination of the data

All the variables were approximately normally distributed, with the exception of the summation score of the mental health behaviour questions, which was positively skewed. A control analysis on a dichotomized MHB scale did not substantially impact results. Large sample size reduces the undesirable impact of kurtosis and skew and canonical correlation analysis tends to be robust to violations of parametric assumptions (Tabachnick & Fidell, 2001). Consequently, the MHB scale's original format was retained.

3.2. Mental health issues screening

To assess a difference between need for treatment and treatment-seeking in the current sample, a 5-item screen was used to flag participants likely to be experiencing clinically significant mental distress (MHI-5; Berwick et al., 1991). A total of 48 individuals were flagged as likely to be *currently* experiencing clinically significant distress, but only 22 (46%) of these indicated they had ever sought out mental health help (as indicated by a non-zero response to MHB questions).

3.3. Correlation matrices for the variable sets

Table 1 reports the correlations among the predictor, control, and criterion variables. Examining Table 1, there is a moderate correlation between the procrastination measures and stress measure, and a negative moderate correlation between the procrastination measures and cognitive functioning. Comparing between predictor and criterion sets, the DHS-R and the mental health measures (CF-6 and MHI-32), share the greatest degree of variance. This was also reflected in the canonical correlation analyses, below. Social desirability appears to be present as a nuisance variable, but not to an inordinate degree. There is a plausible correlation between mental health and mental health behaviour, such that, to some degree, poorer mental health would be associated with increased mental health behaviour, and vice versa. Finally, a weak but statistically significant correlation exists between stress and mental health behaviour, indicating that participants who experience more stress, on the whole, are more likely to be seeking mental health help.

3.4. Canonical correlation analysis

A canonical correlation analysis was used to determine the ways in which the procrastination and stress variables were related to the mental health and mental health help-seeking behaviour variables (for methodology see, e.g., Neufeld, 1977). Social desirability, age and gender were included as controls among the predictor variables in the canonical correlation analysis to determine the magnitude of their impact on the criterion variables. The canonical correlation analysis revealed three significant functions between the set of procrastination, stress and control variables and the set of mental health variables ($R_c = .69$, Wilk's $\lambda = .453$, $p < .001$; $R_c = .30$, Wilk's $\lambda = .856$, $p < .01$; $R_c = .25$, Wilk's $\lambda = .938$, $p < .05$).

The main predictors loading on the first canonical function (CF-I) are DHS-R (canonical loading of .89) and the procrastination measures (GP, .60; PASS-1, .48, PASS-2, .56). The main criterion variables loading onto CF-I are CF-6 (canonical loading = .98)

Table 1
Correlations among variables of interest.

		1	2	3	4	5	6	7	8	9	10
1	General procrastination (GP)	–									
2	Academic procrastination (quantity; PASS-1)	.72***	–								
3	Academic procrastination (problem; PASS-2)	.59***	.65***	–							
4	Daily stress (cumulative severity; DHS-R)	.22**	.26***	.25***	–						
5	Age (years)	.08	.07	.05	–.08	–					
6	Gender (male = 1; female = 2)	.02	.02	.07	.12	–.02	–				
7	Social desirability (MC-20)	–.27***	–.25***	–.17*	–.17*	.07	.07	–			
8	Cognitive functioning (CF-6)	–.42***	–.34***	–.38***	–.59***	–.02	–.10	.18*	–		
9	Mental Health Index (MHI-32)	–.28***	–.21**	–.27***	–.55***	.06	–.01	.23**	.74***	–	
10	Mental health behaviours (MHB)	.00	–.01	–.08	.15*	.12	.14	–.10	–.21**	–.31***	–

* $p < .05$.

** $p < .01$.

*** $p < .001$.

and MHI-32 (canonical loading = $-.85$). This canonical function supports our hypothesis that higher levels of stress and procrastination will be associated with poorer mental health. It appears that the strongest relation is with cognitive functioning specifically (CF-6), a subset of the full Mental Health Inventory (MHI-38).

The main predictors loading on the second canonical function (CF-II) are gender (.64) and age (.61). The main criterion variable loading onto CF-II is MHB (.76). Being female and older are characteristics associated with higher reported levels of mental health behaviours. This is a desirable clustering of the demographic variables and might be termed a “maturity factor”.

The main predictors loading on the third canonical function (CF-III) are the procrastination variables (GP, $-.53$; PASS-1, $-.52$; PASS-2, $-.57$). Registering just below the standard cut-off of .50 for an interpretable canonical loading, social desirability appears to play a role (MC-20, $-.48$). The main criterion variables loading onto the third canonical function are MHB (.63) and MHI-32 ($-.50$). Values for loadings are reported such that the highest loading, for MHB, is reported in the positive direction. CF-III supports our hypothesis that higher levels of procrastination are associated with lower levels of mental health behaviours, or conversely, that an adaptive pursuit of mental health behaviours is predicted by lower levels of self-reported procrastination. Consistent with an “adaptive behaviour” interpretation, CF-III describes a significant portion of variance attributable to this specific combination of lower levels of procrastination, reduced concern for socially desirable behaviour, poorer mental health status, and increased help-seeking behaviour. Interpretations within a given canonical function must be made in terms of the concerted action of all variables with important loadings.

Descriptive analysis indicates the data may in future studies be approached as coming from two distinct groups: “have sought help” (MHB-Yes) and “have never sought help” (MHB-No). The means and confidence intervals for each group on the Mental Health Inventory (MHI-38) are: MHB-Yes ($n = 54$), $M = 154.39$, 95% CI [145.41, 163.37], and MHB-No ($n = 146$), $M = 170.00$, 95% CI [165.85, 174.15].

3.5. Assessment for mediation and curvilinear trend

In previous research, a mediational approach to procrastination and physical illness (Sirois et al., 2003) found no direct effect (Baron & Kenny, 1986) after controlling for stress in a regression analysis predicting illness from procrastination ($R = .14$, n.s.). We conducted a parallel analysis using procrastination (GP scale) to predict mental health (MHI-38), mediated by stress (DHS-R). The bivariate correlation (total effect) between the GP and MHI-38 scores was significant ($r = -.32$, $p < .001$). As shown in Fig. 1, stress only partially mediated the prediction of mental health from procrastination scores, as a significant direct effect remained ($R = -.19$, $p < .01$). Caution must be exercised (see Baron & Kenny, 1986) in interpreting a correlation of similar magnitude as significant in our sample ($N = 200$) and non-significant for Sirois and colleagues ($N = 120$; 2003). Nonetheless, the magnitude of our sample's correlation value comes in just below what is traditionally interpreted as the threshold for a notable weak correlation ($r = .20$).

Procrastination (GP) and mental health behaviours were not directly correlated, and so not investigated further ($R = .00$, n.s.). There was a curvilinear trend between GP and MHI-38, but it did not dominate the linear relation (each accounting for a similar amount of variance, $R^2 = .10$). Adding provision for the curvilinear-ity was deemed to complicate the analysis over and above possible informational returns.

4. Discussion

Given the discrepancy between the number of people suffering from mental health problems and the number who are seeking mental health treatment, it is crucial that psychological science attempt to uncover individual difference variables that contribute to poor mental health and act as behavioural barriers to treatment. This is particularly applicable to the present sample, where only 46% of those flagged as likely experiencing current mental health problems reported ever having sought treatment, much less seeking treatment currently. In this exploratory study, we hypothesized that participants high in procrastination and stress would report more mental health issues and fewer mental health help-seeking behaviours.

Our results support the expected relation between higher scores on procrastination and poorer mental health (see CF-I, Table 2), higher procrastination and fewer mental health behaviours (see CF-III, Table 2), higher stress and poorer mental health (CF-I, Table 2), but not the expected relation between more stress and fewer mental health behaviours, which instead are weakly positively correlated in our sample (Table 1). The first canonical correlation (CF-I) was of high moderate value, the second (CF-II) was of low moderate value and the third (CF-III) was weak, but significant. CF-I indicated that higher levels of stress and, to some degree, higher levels of procrastination, were associated with poorer mental health and poorer cognitive functioning. CF-II indicated that greater age and female gender predicted more mental health help-seeking behaviours. CF-III indicated an “adaptive behaviour” pattern wherein lower levels of procrastination and less concern for socially desirable self-presentation was associated with poorer mental health status and increased levels of mental health behaviours. A reasonable interpretation may be that when individuals

Table 2
Canonical loadings for procrastination/stress and mental health variables.

	Canonical function (CF)		
	CF-I	CF-II	CF-III
<i>Canonical loadings (n = 200)</i>			
General procrastination (GP)	.60	.10	-.53
Academic procrastination (quantity; PASS-1)	.48	.10	-.52
Academic procrastination (problem; PASS-2)	.56	-.22	-.57
Daily stressors (cumulative severity; DHS-R)	.89	.04	.28
Age	-.02	.61	-.08
Gender (male = 1, female = 2)	.10	.64	-.11
Social desirability (MC-20)	-.30	.04	-.48
Cognitive functioning (CF-6 from MHI-38)	-.98	-.18	.13
Mental Health Index (MHI-32)	-.85	.18	-.50
Mental health behaviour (MHB)	.16	.76	.63

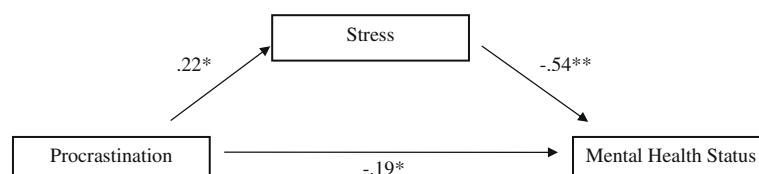


Fig. 1. Mediational model of the procrastination – mental health relationship. Numbers reflect standardized regression coefficients. * $p < .01$, ** $p < .001$.

with a reduced tendency to procrastination and less regard for the stigma of seeking mental health care are experiencing mental distress, they are the most likely to be engaged in mental health help-seeking behaviours.

The relation between greater daily stress severity and poorer mental health is very strong. These factors are heavily represented in the first canonical function. In fact, the cognitive functioning subscale of mental health loads almost fully ($-.98$) onto the linear aggregate of criterion variables in CF-I. It appears that cognitive functioning may have a role in stress management that is profitably distinguished from mental health generally. Inasmuch as stress may “compromise its own negotiation” (Neufeld, 1990), appropriate decision-making under stress may be affected by cognitive load as a stressor itself (cf. Shanahan & Neufeld, 2010). The relation between stress and mental health (including cognitive functioning), rather than procrastination and mental health behaviours, were the driving factors of this function. Posing stress as a level of environmental demands on the organism (Lazarus & Folkman, 1984; c.f. Neufeld, 1990), it may be that when external demands exceed an organism's resources, or, ability to cope, mental illness itself may be a chaotic, haphazard, *ad hoc* response to what is perceived as an impossible situation. Preservation of some degree of effective cognitive functioning may be implicated with treatment-seeking. Unlike the procrastination measures which vary together in each of the three canonical functions, the CF-6 subscale of the MHI-38 behaves differently between canonical functions from its MHI-32 counterpart. This recommends future investigation of the hypothesis that effective cognitive functioning is a factor in the mental health help-seeking picture.

Although the main hypotheses employed in the current study were supported, there were some patterns suggested that were not predicted. For example, in CF-III procrastination was shown to be associated with *better* mental health. However, in CF-I the expected association between high procrastination and poorer mental health was obtained. The action in concert of each important loading must be considered, as has been discussed above. The pattern of increased procrastination and better mental health status may also suggest that procrastination can act as a temporarily adaptive, avoidance coping-related buffer. Over a prolonged period of time, however, procrastination is detrimental to one's mental health (e.g., Martin et al., 1996; Tice & Baumeister, 1997).

Examining the directionality of the canonical loadings for procrastination and cognitive functioning reveals a tendency towards functioning in opposite directions. In Table 1, procrastination and cognitive functioning are associated with a robust moderate negative relation. This suggests that impaired cognitive functioning plays a role in increased procrastination. Related research has argued that cognitive functioning can be theoretically related to procrastination (Shanahan & Pychyl, 2007) and goal-oriented attention control has been found empirically to be negatively related to procrastination (Steel, 2002).

Finally, two of three control variables, age and gender, clustered as “drivers” for CF-II, onto which mental health behaviour loaded heavily. It appears that older and female participants were much more likely to seek mental health help. This may be a more promising avenue of research into interventions to foster increased overall rates of help-seeking behaviour, for example, by targeting males when publicizing campus mental health services, or by targeting more junior students.

4.1. Limitations

Standard issues associated with self-report measures are relevant concerns for this study. Additionally, concerns may arise

with online questionnaire completion. However, strictly controlled-access through the departmental portal sufficiently assures identity and single-occasion participation. The order of questions and of questionnaires did not vary such that findings may be subject to order effects. Socially desirable responding was measured and correlated weakly with procrastination, stress, and mental health. It registered just below a common cut-off point (.48, standard cut-off of .50) in CF-III, but did not substantially alter findings.

The canonical correlation analysis jointly assessed the effects of procrastination and stress on mental health and help-seeking, making it difficult to delineate their individual effects. However, the three significant canonical functions parceled out the variance in such a way that the individual relation between the variables could be detected, providing some preliminary insight into their individual contributions to mental health and help-seeking.

For the mental health focus of this study, we utilized the MHB questions modeled after the health care behaviours questions of Sirois (2007). Results on these questions were highly positively skewed, likely due to the relative infrequency of mental health behaviours as compared with Sirois' health care behaviours (visits to a dentist or physician). Nonetheless, large sample size and the robustness of a canonical correlation analysis to violations of normality support the validity of the results. Future versions of the scale could include sub-clinical mental health *wellness* behaviours (e.g., “I go for a walk when I'm stressed.”) in order to reliably produce a normal distribution. Additionally, the help-seeking behaviour questions did not include a specification of the presence or absence of a mental health issue. This may confound participants who have not sought help because of the lack of a mental health issue with participants who have a mental health issue but have not sought help because of other factors (such as procrastination or stress). However, use of the MHI-5 screen aids in addressing the mental health profile of our sample.

4.2. Implications and conclusions

The present study provided evidence that the documented associations of procrastination and stress on physical health and treatment-seeking can be extended to the domain of mental health. High levels of trait procrastination and daily stress are maladaptive, being associated with poorer mental health and, with some qualifications, a lack of mental health help-seeking. Although the strong connection between stress and poorer mental health is by no means a new finding, the problematic impediment of trait procrastination can now be verifiably incorporated within this picture. Our findings suggest that procrastinators, younger people, males, and those influenced by social desirability concerns are more likely to be impeded from seeking help with mental health concerns. There may also be fruitful avenues of research on the interaction of cognitive functioning, mental health, and treatment-seeking. A crucial question arises: If someone is not well enough, organized enough, or demographically predisposed to initiating a course of treatment, how can this person be reached? We hope our preliminary exploration of relevant variables will contribute to an answer and help alleviate anguish unnecessarily borne.

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