

**Mental Health Services Use Intentions Among Canadian Military Recruits**

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**Abstract**

Identifying the factors associated with mental health services use (MHSU) is an important step in developing strategies to improve services access and delivery. The aims of the present study were to i) identify personality and individual difference characteristics associated with MHSU intentions within the framework of the Theory of Planned Behavior (TPB) and ii) explore complex relationships that might exist between these characteristics and determinants of MHSU intentions identified in TPB, including attitudes, subjective norms, and perceived behavioral control. Data for 244 Canadian Armed Forces recruits who completed a MHSU questionnaire following mental health training were linked to personality data collected earlier. Multivariate analyses showed that the relationship between agreeableness and MHSU intentions was mediated by instrumental attitudes and subjective norms. The relationship between hardiness and MHSU intentions was mediated by subjective norms and self-efficacy. Findings suggest it may be worthwhile to consider mental health education initiatives to improve MHSU.

Keywords: mental health services use, personality, individual differences, theory of planned behavior

### **Mental Health Services Use Intentions Among Canadian Military Recruits**

In order to develop strategies to improve access to mental health care services, it is helpful to identify determinants of mental health services use (MHSU). This is particularly true for those who may be at greater risk of developing mental health conditions due to occupational stressors and who may also be more reluctant to seek services due to occupational culture and values, such as military personnel. Research in this area has frequently been informed by Andersen's Behavioral Model of Health Services Use (e.g., Fleury, Grenier, Bamvita, Perreault, Kestens, & Caron, 2012). Based on this model, determinants of mental health care may include predisposing, enabling, or needs factors, respectively (Andersen, 1995). The aim of the present study was to examine the role of personality and individual difference characteristics as possible predisposing factors for MHSU.

Over and above identifying basic demographic determinants, such as age, sex, education and income (Fleury et al., 2012), there have been increasing efforts to delineate the role of attitudes, such as beliefs regarding the efficacy of mental health care or perceptions of stigma, as determinants of MHSU. One of the most influential theoretical models that has been applied for this purpose is the Theory of Planned Behavior (TPB) (Ajzen, 1991). According to TPB, positive attitudes towards the behavior, subjective norms towards engaging in the behavior, and greater perceived control all lead to greater levels of intention to engage in the behavior, and greater likelihood of actual engagement in the behavior. Still, attitudes may vary greatly across individuals, and it may be helpful to understand factors that may explain these variations.

In later revisions of the Behavioral Model of Health Services Use, it was suggested that it might be helpful to examine personality and individual difference characteristics, such as autonomy, as predisposing variables for MHSU (Andersen, 1995). Consequently, a number of

studies have assessed the role of personality and individual difference factors in MHSU. Among the Big Five personality traits, conscientiousness, neuroticism and openness have been relatively consistently associated with greater odds of MHSU (Goodwin, Hoven, Lyon, & Stein, 2002; Klockner & Hicks, 2008). Individuals characterized by a strong sense of personal growth, positive thinking (e.g., hope) and a future-oriented disposition have also demonstrated a greater likelihood of MHSU (Klockner & Hicks, 2008). Conversely, those with high perceived internal locus of control have demonstrated decreased odds of MHSU, possibly as a result of their preference for self-help (McWilliams, Cox, Enns, & Clara, 2006). Finally, individual differences in the processing of emotional information may also influence MHSU. Komiya, Good, and Sherrod (2000), for example, found that discomfort with emotions during psychotherapy contributed to a reluctance to seek psychological help.

Along with being associated with MHSU, personality and individual difference characteristics may influence attitudes and beliefs that are thought to contribute to MHSU, such as those outlined in the TPB. Indeed, TPB posits that attitudes, subjective norms, and perceived control play a mediational role as determinants of behaviour. However, few studies have explicitly tested such mediational models to date. To address this gap, the objectives of the present study were to identify personality and individual difference characteristics associated with MHSU intentions, and to assess the possible mediating role of MHSU attitudes, subjective norms, and perceived control in this relationship.

## **Method**

### ***Participants and Procedures***

The data were drawn from a larger study investigating the effect of different teaching methods for a mental health training program for Canadian Armed Forces (CAF) recruits. The

protocol of the study was approved by the Defence Research and Development Canada Human Research Ethics Committee. Recruits were informed that participation in the study was completely voluntary and were given a consent form to review. A total of 307 recruits (272 male, 34 female, one did not report sex) from six platoons ( $M_{\text{age}}=22.6$ ,  $SD_{\text{age}}=4.6$ ) completing their 13-week Basic Military Qualification (BMQ) volunteered to participate in the study. Around week two of their BMQ, recruits received training to change their MHSU intentions. The next day, they completed various measures including a self-report instrument assessing the constructs in TPB as they relate to MHSU.

As part of the study consent process, participants could choose to have their data linked with personality data collected in a separate study, the Recruit Health Questionnaire (RHQ). Participants completed the RHQ in the first few weeks of basic training; in most cases, within a week of the MHSU survey. A total of 244 participants (79.5%) agreed to data linkage. The majority were male (213 male, 31 female), and they were 22.6 years of age ( $SD=4.8$ ), on average.

### ***Measures***

MHSU attitudes, subjective norms, and perceived behavioral control were measured by the CAF Recruit Mental Health Service Use Questionnaire (CAF-R-MHSUQ; Fikretoglu, Blais, & Lam, 2014). The CAF-R-MHSUQ assesses instrumental attitudes (i.e., whether MHSU is a good or a bad thing) and affective attitudes (i.e., how MSHU will feel); subjective norms; perceived self-efficacy (i.e., expectations around how easy or difficult MHSU would be and confidence that one can overcome difficulties) and perceived control (i.e., perceived control over the performance of the behavior); and MHSU intentions with seven, six, nine, and four items, respectively. The psychometric evaluation of the CAF-R-MHSUQ is ongoing, but results of

initial psychometric analyses are promising (Fikretoglu et al., 2014). In the current study, internal consistency estimates (i.e., Cronbach's alphas) for the six scale scores ranged from .68 (less than ideal) to .92, as shown in Table 1.

In the RHQ, personality and individual difference characteristics were assessed using a variety of validated measures. Big Five personality traits were measured using a 40-item adapted version of the Big Five Inventory (John & Srivastava, 1999), with all subscale scores but openness demonstrating adequate internal consistency (see Table 1).

Akin to internal locus of control and positive thinking, mastery and hardiness were assessed using a 7-item measure developed by Pearlin and Schooler (1978) and an 11-item adapted version of Bartone's Hardiness Scale<sup>1</sup> (Bartone, 1999; Lee, 2008), respectively, while dispositional positive affect was measured using a 10-item subscale from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988).

Finally, as an indicator of emotion processing, alexithymia was assessed using the 20-item Toronto Alexithymia Scale (TAS-20; Taylor, Bagby & Parker, 2003). This tool includes subscales measuring three components of alexithymia: difficulty identifying feelings (DIF; 7 items), difficulty describing feelings (DDF; 5 items), and externally oriented thinking (EOT; 8 items). Internal consistency was adequate for all but the EOT subscale (i.e., .49).

### ***Analyses***

Associations between personality and individual difference characteristics with MHSU intentions were examined through pairwise correlations and a sequential multiple linear

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<sup>1</sup> Two items reflecting the commitment dimension of hardiness were removed ("*Working hard doesn't matter, since only bosses profit by it*" and "*Most of the time, people listen carefully to what I say*"). Three other items reflecting the challenge dimension of hardiness ("*It bothers me when my daily routine gets interrupted*", "*I enjoy the challenge when I have to do more than one thing at a time*" and "*I like having a daily schedule that doesn't change very much*") were replaced with the single item, "*I know I can overcome whatever difficulties I am faced with*".

regression analysis, with demographic variables added in step 1, personality variables added in step 2, and TPB determinants of MHSU added in step 3 as predictors of MHSU intentions. Finally, the possible mediating role of MHSU attitudes, subjective norms, and perceived control in the relationship of personality and individual difference characteristics with MHSU intentions was examined using the INDIRECT macro developed by Preacher and Hayes (2008).

## Results

### *Pairwise Correlations*

Some missing values were identified on variables of interest. This was primarily the case for personality and individual difference characteristics, with the proportion of missing data ranging from 2% on both DDF and DDI and 11.1% on mastery. Missing data were therefore handled using Multiple Imputation (MI) of five datasets (Pigott, 2001). A summary of descriptive statistics and correlations is provided in Table 1. Few significant associations were observed. Among the socio-demographic variables, only age was significantly associated with MHSU intentions ( $r=.21$ ). Only agreeableness ( $r=.18$ ), hardiness ( $r=.23$ ) and DDF ( $r=-.18$ ) were significantly associated with MHSU intentions among the personality and individual difference variables. Thus, MHSU intentions increased significantly as age, agreeableness, and hardiness increased, but decreased significantly as DDF increased.

### *Sequential Multiple Linear Regression Analysis*

In the final model (step 3), the full set of variables, including age, agreeableness, hardiness, DDF and each of the determinants of MHSU identified in TPB was found to significantly predict MHSU intentions, with  $R^2=.63$ ,  $F(9, 235)=66.56$ ,  $p<.001$ , explaining 63% of the variance in MHSU intentions. However, the personality and individual difference variables accounted for only an additional 6% of the total variance above and beyond age (step 2). Only

hardiness emerged as a significant predictor, with higher scores predicting greater MHSU intentions. In the final model, none of the personality and individual difference variables significantly predicted MHSU intentions. All of the determinants of MHSU based on TPB – except perceived control – were significantly associated with MHSU intentions. Specifically, more favourable instrumental attitudes, affective attitudes, subjective norms, and self-efficacy were associated with greater MHSU intentions. Results are presented in Table 2.

### ***Multiple Mediation***

, Bootstrapped estimates based on 5000 samples were produced using INDIRECT to assess the indirect effects of agreeableness, hardiness, and DDF on MHSU intentions through TPB determinants of MHSU intentions. Since it was not possible to use MI for these analyses, missing values were handled using Expectation-Maximization (E-M) imputation (Pigott, 2001). Adjusting for age, hardiness, and DDF, a significant indirect effect of agreeableness on MHSU intentions (controlling for covariates) was observed (point estimate of .0361, with bias corrected and accelerated 95% confidence intervals [BCa 95% CI] of .0052-.0662). However, only the specific indirect effects involving instrumental attitudes (point estimate of .0087, with BCa 95% CI of .0007-.0220) and social norms were significant (point estimate of .0199, with BCa 95% CI of .0059-.0381). Similarly, adjusting for age, agreeableness, and DDF, the indirect effect of hardiness on MHSU intentions was also significant (point estimate of .0523, with BCa 95% CI of .0188-.0903). Here, significant specific indirect effects involved both social norms (point estimate of .0203, with BCa 95% CI of .0073-.0408) and self-efficacy (point estimate of .0160, with BCa 95% CI of .0057-.0334). Last, no indirect effects of DDF were observed.

### **Discussion**



An important proportion of military personnel fail to access mental health care (Sudom, Zamorski, & Garber, 2012). Understanding the factors that serve as either barriers or facilitators of MHSU is an important step in developing approaches to encourage treatment seeking. The present study focused on various personality and individual difference factors as possible MHSU barriers and facilitators. Results revealed very few significant associations between personality and individual difference factors and MHSU intentions. Personality and individual difference characteristics explained a substantially lower proportion of variance in MHSU intentions than did TPB-based determinants of MHSU intentions. Only agreeableness and hardiness were found to be indirectly associated with MHSU intentions through these determinants. In particular, the relationship of agreeableness with MHSU intentions was mediated by instrumental attitudes and subjective norms, while the relationship of hardiness with MHSU intentions was mediated by self-efficacy and subjective norms.

On the whole, results provided only a small amount of support for an important role of personality and individual difference characteristics in MHSU intentions. Many variables that have been associated with MHSU in past research (Goodwin et al., 2002; Klockner & Hicks, 2008) were not found to be associated with MHSU intentions. The lack of significant findings may have resulted from factors such as the failure to account for other confounding variables, or from differences in the populations studied. On the other hand, results pointed to personality and individual difference characteristics for which evidence of a relationship with MHSU has either been inconsistent (in the case of agreeableness) or unexplored (in the case of hardiness and DDF).

In a previous study, more agreeable individuals were found to be more likely to report a perceived need for mental health care for specific types of services, such as information or

medication (Seekles, Cuijpers, van de Ven, Penninx, Verhaak, Beekman, & van Straten, 2012). Other characteristics that might be regarded as the opposite of agreeableness, such as cynicism, have been linked with a failure to obtain needed care (Arbisi, Rusch, Polusny, & Thuras, 2013). However, other studies suggest agreeableness has the least utility for distinguishing individuals who have and have not sought psychosocial support (Klockner & Hicks, 2008). If the effect of agreeableness on MHSU is mediated by other factors, as suggested by the present findings, this might account for the inconsistency of past findings.

Evidence from the limited research examining the relationship between hardiness and MHSU reveals that similar constructs, such as dispositional hope, can be useful MHSU determinants (Klockner & Hicks, 2008). A sense of control over life circumstances, tendency to perceive obstacles as challenges, and perception of life activities as meaningful could lead hardy individuals to have more positive MHSU expectations. Hardy individuals are also more likely to adopt active, planning-oriented, or proactive coping such as MHSU (Maddi, 2007).

The identification of subjective norms as a significant mediator was noteworthy. It could be that agreeable or hardy individuals are more likely to perceive others in their social environment to have favourable opinions of MHSU or that they seek others with more favourable MHSU opinions. This is in line with individuals' tendency to favour relationships with people who hold similar attitudes or values (Bahns, Pickett, & Crandall, 2012).

While they are of note, the modest relationships observed in the present study must be considered in light of some limitations. First, because data were collected from two separate studies administered at different times (albeit within a few days of one another), relationships among some of the variables may have been attenuated. Second, use of a small sample size from a specific military subgroup may limit the generalizability of findings. Third, the use of self-

report measures in combination with their administration in the early stages of basic training may have posed problems, as military recruits may have inaccurately reported their beliefs to make themselves appear as stronger candidates for the military profession. Fourth, the low reliability of some measures could explain the lack of relationship between some of the individual characteristics (especially openness) and MHSU intentions, despite the fact that such variables have been consistently linked with MHSU in past research (Goodwin et al., 2002). Finally, MHSU intentions, rather than behaviours, were assessed. There is still much debate regarding the gap between intentions and behaviour in theories of health behaviour change, and the factors that could bridge this gap (Sheeran, 2002).

Given the preliminary nature of these findings, results chiefly call for greater research efforts aimed at identifying the role of personality and individual difference characteristics both in the resilience process and as determinants of MHSU attitudes and intentions. In particular, further research is necessary to confirm the association of these individual characteristics with MHSU in military populations, identify other variables that may be important to target, and identify ways in which such characteristics can be enhanced.

### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Andersen, R.M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36, 1-10.
- Arbisi, P.A., Rusch, L., Polusny, M.A., Thuras, P., & Erbes, C.R. (2013). Does cynicism play a role in failure to obtain needed care? Mental health service utilization among returning U.S. National Guard soldiers. *Psychological Assessment*, 25(3), 991–996.
- Bagby, R. M., Taylor, G. J., & Parker, J. D. (1994). The twenty-item Toronto Alexithymia Scale. II. Convergent, discriminant and concurrent validity. *Journal of Psychosomatic Research*, 38, 33–40.
- Bahns, A.J., Pickett, K.M., & Crandall, C.S. (2012). Social ecology of similarity: Big schools, small schools and social relationships. *Group Processes & Intergroup Relations*, 15(1), 119-131.
- Bartone, P.T. (1999). Hardiness protects against war-related stress in Army Reserve Forces. *Consulting Psychology: Practice and Research*, 51(2), 72-82.
- Fleury, M.-J., Grenier, G., Bamvita, J.-M., Perreault, M., Kestens, Y., & Caron, J. (2012). Comprehensive determinants of health service utilisation for mental health reasons in a Canadian catchment area. *International Journal for Equity in Health*, 11(1), 20.
- Fikretoglu, D., Blais, A-R., & Lam, Q. (2014). *Development and validation of a new Theory of Planned Behavior Questionnaire for mental health service use behaviors*. Manuscript submitted for publication.

- Goodwin, R.D., Hoven, C.W., Lyon, J.S., & Stein, M.B. (2002). Mental health service utilization in the United States: The role of personality factors. *Social Psychiatry and Epidemiology*, 37, 561-566.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed.). New York: Guilford.
- Klockner, K.D., & Hicks, R. (2008). *My next client: Understanding the Big Five and positive personality dispositions of those seeking psychosocial support interventions*. Robina, Queensland, Australia: Faculty of Humanities & Social Sciences, Bond University.  
Retrieved from [http://epublications.bond.edu.au/hss\\_pubs/266](http://epublications.bond.edu.au/hss_pubs/266)
- Komiya, N., Good, G.E., & Sherrod, N.B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking professional help. *Journal of Counseling Psychology*, 47(1), 138-143.
- Lee, J.E.C. (2008). *Psychometric properties of psychological scales in the Recruit Health Questionnaire: Internal consistency of scales* (DRDC CORA TM 2008-048). Ottawa, Ontario, Canada: Defence Research and Development Canada – Centre for Operational Research and Analysis.
- Maddi, S. R. (2007). Relevance of hardiness assessment and training to the military context. *Military Psychology*, 19(1), 61–70.
- McWilliams, L.A., Cox, B.J., Enns, M.W., & Clara, I.P. (2006). Personality correlates of outpatient mental health service utilization. *Social Psychiatry and Epidemiology*, 41, 357-363.

- Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*(1), 2-21.
- Pigott, T.D. (2001). A review of methods for missing data. *Educational Research and Evaluation, 7*(4), 353-383.
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891.
- Seekles, W.M., Cuijpers, P., van de Ven, P., Penninx, B.W.J.H., Verhaak, P.F.M., Beekman, A.T.F., & van Straten, A. (2012). Personality and perceived need for mental health care among primary care patients. *Journal of Affective Disorders, 136*, 666–674.
- Sheeran, P. (2002). Intention–behavior relations: A conceptual and empirical review. In W. Strobe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 12, pp. 1–30). Chichester: Wiley.
- Sudom, K.A., Zamorski, M.A, & Garber, B.G. (2012). Stigma and barriers to mental health care in deployed Canadian Forces personnel. *Military Psychology, 24*, 414-431.
- Taylor, G.J., Bagby, R.M., & Parker, J.D. (2003). The 20-item Toronto Alexithymia Scale. IV. Reliability and factorial validity in different languages and cultures. *Journal of Psychosomatic Research, 55*(3), 277-283.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063-1070.

Table 1

*Summary of Descriptive Statistics and Pairwise Correlations Among Variables (N=244)*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<i>M</i> (excluding cases with missing data)	22.6	--	--	--	33.3	33.1	26.4	20.3	23.3	19.6	33.0	40.3	13.1	12.4	20.9	6.0	4.5	5.7	5.3	5.7	5.3
<i>SD</i>	4.8	--	--	--	5.0	5.5	5.8	6.3	3.3	5.3	5.1	5.9	6.3	4.7	4.4	1.1	1.5	1.0	1.1	1.0	1.5
Cronbach's alpha	--	--	--	--	.74	.81	.82	.88	.67	.81	.79	.86	.90	.77	.49	.84	.81	.88	.75	.68	.92
1. Age	1																				
2. Sex	.16 <sup>a</sup>	1																			
3. Family history of mental illness	.02	.06	1																		
4. Past year MHSU	.06	.20 <sup>b</sup>	.11	1																	
5. Agreeableness	.16 <sup>a</sup>	.02	.03	.05	1																
6. Conscientiousness	.22 <sup>c</sup>	.09	-.11	.01	.25 <sup>c</sup>	1															
7. Extroversion	.01	.13 <sup>a</sup>	.01	-.06	.16 <sup>a</sup>	.23 <sup>c</sup>	1														
8. Neuroticism	-.06	.08	.17 <sup>b</sup>	.10	-.27 <sup>c</sup>	-.51 <sup>c</sup>	-.28 <sup>c</sup>	1													
9. Openness	.10	-.07	.00	-.09	.12	.38 <sup>c</sup>	.25 <sup>c</sup>	-.27 <sup>c</sup>	1												
10. Mastery	.07	-.10	-.14 <sup>a</sup>	-.13 <sup>a</sup>	.25 <sup>c</sup>	.47 <sup>c</sup>	.32 <sup>c</sup>	-.59 <sup>c</sup>	.34 <sup>c</sup>	1											
11. Hardiness	.06	.01	-.07	-.13 <sup>a</sup>	.28 <sup>c</sup>	.54 <sup>c</sup>	.45 <sup>c</sup>	-.50 <sup>c</sup>	.38 <sup>c</sup>	.58 <sup>c</sup>	1										
12. Positive affect	.05	-.05	-.09	-.08	.32 <sup>c</sup>	.41 <sup>c</sup>	.38 <sup>c</sup>	-.39 <sup>c</sup>	.35 <sup>c</sup>	.39 <sup>c</sup>	.49 <sup>c</sup>	1									
13. DIF	-.10	-.04	.22 <sup>c</sup>	.05	-.19 <sup>b</sup>	-.45 <sup>c</sup>	-.26 <sup>c</sup>	.65 <sup>c</sup>	-.22 <sup>c</sup>	-.48 <sup>c</sup>	-.45 <sup>c</sup>	-.36 <sup>c</sup>	1								
14. DDF	-.12	-.08	.13 <sup>a</sup>	-.01	-.27 <sup>c</sup>	-.43 <sup>c</sup>	-.47 <sup>c</sup>	.51 <sup>c</sup>	-.29 <sup>c</sup>	-.46 <sup>c</sup>	-.50 <sup>c</sup>	-.40 <sup>c</sup>	.63 <sup>c</sup>	1							
15. EOT	-.15 <sup>a</sup>	-.09	.14 <sup>a</sup>	-.03	-.08	-.29 <sup>c</sup>	-.10	.10	-.42 <sup>c</sup>	-.27 <sup>c</sup>	-.23 <sup>c</sup>	-.22 <sup>c</sup>	.21 <sup>c</sup>	.30 <sup>c</sup>	1						
16. Instrumental attitude	.01	-.01	.00	.09	.15 <sup>a</sup>	.01	-.01	.05	.05	.04	.17 <sup>b</sup>	.04	-.01	-.10	-.06	1					
17. Affective attitude	.00	-.09	-.04	-.03	.09	.03	.11	-.02	.14 <sup>a</sup>	.13	.17 <sup>b</sup>	.11	-.07	-.17 <sup>b</sup>	-.12	.43 <sup>c</sup>	1				
18. Subjective norms	.14 <sup>a</sup>	-.02	.04	.03	.23 <sup>c</sup>	.04	.05	.04	.14 <sup>a</sup>	.04	.21 <sup>c</sup>	.15 <sup>a</sup>	-.02	-.01	-.10	.48 <sup>c</sup>	.35 <sup>c</sup>	1			
19. Self-efficacy	.09	-.08	-.03	.04	.19 <sup>b</sup>	.13 <sup>a</sup>	.14 <sup>a</sup>	-.22 <sup>c</sup>	.17 <sup>b</sup>	.28 <sup>c</sup>	.29 <sup>c</sup>	.16 <sup>a</sup>	-.28 <sup>c</sup>	-.23 <sup>c</sup>	-.12	.37 <sup>c</sup>	.39 <sup>c</sup>	.41 <sup>c</sup>	1		
20. Perceived control	-.06	-.08	.02	.00	.15 <sup>a</sup>	.03	.07	-.18 <sup>b</sup>	.07	.13	.11	.13 <sup>a</sup>	-.23 <sup>c</sup>	-.15 <sup>a</sup>	.04	.09	.04	.22 <sup>c</sup>	.38 <sup>c</sup>	1	
21. MSHU intention	.21 <sup>c</sup>	.00	-.01	.05	.18 <sup>b</sup>	.04	.10	.04	.08	.07	.23 <sup>c</sup>	.13	-.07	-.16 <sup>b</sup>	-.12	.58 <sup>c</sup>	.57 <sup>c</sup>	.61 <sup>c</sup>	.55 <sup>c</sup>	.11	1

*Note.* Sex coded as 1=male, 2=female; Family history of mental illness coded as 0 = no, 1 = yes. MHSU=mental health services use; DIF=difficulty identifying feelings; DDF=difficulty describing feelings; EOT=externally oriented thinking.

<sup>a</sup>*p* < .05. <sup>b</sup>*p* < .01. <sup>c</sup>*p* < .001.

Table 2

*Summary of Sequential Multiple Regression Analysis Predicting MHSU Intentions*

	Step 1			Step 2			Step 3		
	<i>B</i>	<i>SE</i> <i>B</i>	<i>t</i>	<i>B</i>	<i>SE</i> <i>B</i>	<i>t</i>	<i>B</i>	<i>SE</i> <i>B</i>	<i>t</i>
Constant	3.82	0.45	8.58	1.61	1.16	1.38	-1.98	0.86	-2.31
Age	0.06	0.02	3.34 <sup>c</sup>	0.06	0.02	2.91 <sup>b</sup>	0.04	0.01	3.27 <sup>c</sup>
Agreeableness				0.03	0.02	1.38	-0.01	0.01	-0.38
Hardiness				0.05	0.02	2.37 <sup>a</sup>	0.00	0.01	0.00
Positive affect				0.00	0.02	-0.18	0.00	0.01	0.02
DDF				-0.01	0.02	-0.38	-0.01	0.02	-0.65
Instrumental attitude							0.29	0.07	4.33 <sup>c</sup>
Affective attitude							0.26	0.05	5.53 <sup>c</sup>
Subject norms							0.44	0.07	6.01 <sup>c</sup>
Self-efficacy							0.36	0.07	4.95 <sup>c</sup>
Perceived control							-0.12	0.06	-1.87
Total <i>R</i> <sup>2</sup>		.04			.10			.63	
$\Delta R^2$		.04			.06			.53	
$\Delta F$		11.19 <sup>c</sup>			3.80 <sup>b</sup>			66.56 <sup>c</sup>	

Note. DDF=difficulty describing feelings.

<sup>a</sup>*p* < .05. <sup>b</sup>*p* < .01. <sup>c</sup>*p* < .001.