



This is a repository copy of *Personality and Consultations with Complementary and Alternative Medicine Practitioners: A Five-Factor Model Investigation of the Degree of Use and Motives*.

White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/91805/>

Version: Accepted Version

Article:

Sirois, F.M. and Purc-Stephenson, R.J. (2008) Personality and Consultations with Complementary and Alternative Medicine Practitioners: A Five-Factor Model Investigation of the Degree of Use and Motives. *Journal of Alternative and Complementary Medicine*, 14 (9). 1151 - 1158. ISSN 1075-5535

<https://doi.org/10.1089/acm.2007.0801>

Final publication is available from Mary Ann Liebert, Inc., publishers
<http://dx.doi.org/10.1089/acm.2007.0801>

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

RUNNING HEAD: Personality and CAM consultations

Please cite as:

Sirois, F. M., & Purc-Stephenson, R. J. (2008). Personality and consultations with complementary and alternative medicine practitioners: A five-factor model investigation of the degree of use and motives. *Journal of Alternative and Complementary Medicine*, 14(9), 1151-1158. doi:[10.1089/acm.2007.0801](https://doi.org/10.1089/acm.2007.0801)

Personality and consultations with complementary and alternative medicine practitioners: A five factor model investigation of the degree of use and motives.

Fuschia M. Sirois, Ph.D., BSc., Rebecca J. Purc-Stephenson, M.A.

Department of Psychology

University of Windsor

Correspondence concerning this article should be addressed to Fuschia M. Sirois, PhD, Department of Psychology, University of Sheffield, 309 Western Bank, Sheffield, S10 2TP, United Kingdom. Email: f.sirois@sheffield.ac.uk

KEYWORDS: Complementary and alternative medicine; personality; motivations

Abstract

Objectives. As interest in and use of complementary and alternative medicine (CAM) providers continues to grow, it is important to understand which characteristics incline people to experiment with and become frequent consumers of CAM practitioners. The purpose of this study was to examine how personality, as assessed by the five factor model, was related to the breadth, frequency, and types of provider-based CAM use. Relationships between the personality factors (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) and motives for consulting CAM providers were also explored.

Methods. A convenience sample of 184 current CAM clients recruited through the offices of 12 conventional medicine and 17 CAM practitioners completed a survey package including measures of health status, CAM use, personality, and motivations for using CAM.

Results. Only Openness and Agreeableness were consistently linked to different dimensions of CAM use, with each associated with consultations with CAM practitioners, and homeopaths and naturopaths in particular. After controlling for sociodemographic and health status variables in the stepwise multiple regressions, Openness was associated with the variety of CAM providers tried, whereas Agreeableness was linked to both the breadth and frequency of CAM consultations.

Holistic and proactive health motivations were associated with both personality factors, and Agreeableness was also associated with motives reflecting a desire for shared decision-making.

Conclusions. Findings indicate that individuals who are open and agreeable, as described by the five factor model of personality, consult CAM practitioners to a greater extent. The motives involved suggest a congruency between CAM and their own [perspectives regarding](#) health and patient-provider interactions, which may have implications for understanding treatment adherence and outcomes.

The growing acceptance of complementary and alternative medicine (CAM) as a health care choice in recent years has been documented in Canada¹, the US², Europe³, and Australia⁴. And as more people consult CAM providers for the first time, many of these individuals may go on to become CAM consumers who integrate CAM within their existing health-care repertoire⁵. In keeping with this trend, researchers have continued to examine the factors associated with CAM use to better understand this phenomenon, and have identified a variety of sociodemographic and psychosocial variables that may play a role in the choice to use CAM. For example, there is some evidence that enduring patient characteristics, such as personality, may predispose people to use CAM⁶. However, the research examining how personality may be linked to CAM use is fraught with inconsistencies and equivocal findings, with some investigations finding that personality is linked to CAM use, whereas others have found no associations.

One reason for these discrepancies may involve how CAM use was examined. Most studies have investigated how personality discriminates between those who do and do not use CAM, or how personality is related to undifferentiated CAM use rather than to specific CAM modalities, or to the degree of CAM use. Despite the increasing interest and use of CAM, little is known about the personality characteristics of CAM consumers that may incline them to use CAM to a greater degree, or the motivations involved. The purpose of the current study was to examine how the personality of CAM consumers was related to the type and extent of CAM consultations made, and to their motivations for using CAM.

Personality and Health Behaviours

Personality has been consistently linked to a variety of health behaviours. Much of this research has employed the five-factor model of personality⁷ as a framework for examining the relationship between personality and health behaviors. The five factors, or Big Five as they are

often referred to, are empirically derived and involve broad categories of characteristics that describe unique dimensions of human behaviour⁸. Accordingly, these five factors are proposed to be a taxonomy of higher order traits which integrate and organize a variety of personal characteristics [and perspectives](#). They include Openness (artistic, intellectually curious, and willing to experiment), Conscientiousness (persistence, goal-directedness, and self-discipline), Extraversion (sociability, assertiveness, and positive affect), Agreeableness (trust in others, sincerity, and non-confrontational), and Neuroticism (strong negative emotions and stress sensitivity)^{7, 8}. Rather than personality types, which suggest a unique profile of individual traits, the Big Five represent a unique group of characteristics that can be present to a greater or lesser degree in any individual.

With regards to personality, the consistent predictors of health behaviors that have emerged from this research include Conscientiousness, Neuroticism, and Agreeableness⁹⁻¹¹. For example, both Conscientiousness and Agreeableness are linked to the practice of more health-enhancing behaviours such as healthy eating and exercise^{9, 10}, and fewer health-compromising behaviours, such as smoking and excessive drinking^{9, 11}. Conversely, Neuroticism is associated with increased harmful health practices and fewer positive health behaviors^{9, 10}, although there is some evidence that individuals scoring high on this personality factor are also more worried about their health and may therefore practice more preventive health behaviours¹¹. The importance of personality for the practice of health behaviours has also been demonstrated, with childhood Conscientiousness and Agreeableness predicting better health practices in adulthood, which in turn led to improved health¹².

Personality and CAM use

Consulting CAM practitioners can be conceptualized as a type of health behaviour that can

serve either a health-promoting or health-protective function. However, research on the role of personality in CAM use is scant, with few studies employing the five-factor framework. Among those that have, Openness is the personality factor that has received the most attention. Early studies found that Openness, or similar traits, predicted who did and did not use CAM. For example, Astin¹³ found that being a “cultural creative” predicted CAM use. Sirois & Gick¹⁴ similarly found that Openness discriminated CAM clients from non-CAM clients. Recent studies investigating the relations of Openness with CAM use have begun to take a more detailed approach, and have found that Openness is linked to the use of all modalities of CAM except manipulative body-based methods¹⁵, and to using a greater variety of CAM types¹⁶. Openness is likely linked to CAM use through its association with higher education levels, which are suggested to predict CAM use^{1,17}.

There is less consistent evidence regarding the roles of the other five personality factors in consulting CAM providers. One study found that Neuroticism discriminated between those who did and did not use CAM in the previous 12 months¹⁵, whereas two other studies found no association of Neuroticism with CAM use.^{14, 18} In these investigations, none of the remaining factors, Extraversion, Agreeableness, and Conscientiousness, were significantly associated with CAM use^{14, 15, 18}. However, only undifferentiated CAM use was examined in two of these investigations^{14, 18}, and in the other CAM self-care and provider delivered CAM were combined into broader CAM categories (i.e., biologically-based therapies, etc.)¹⁵. Determining which personality traits are linked to specific types of CAM consultations may be useful for better understanding the fit between consumers’ needs and CAM modalities. Such information can help inform providers in their efforts to support individual’s CAM related decision-making.

The current study

Many people who initially consult CAM practitioners may go on to use CAM to a greater degree, either by making more frequent consultations or by using a greater variety of CAM practices. However, little is known about the role of personality among CAM consumers and how it may affect their choices. The focus of the current study was therefore to examine the association of the Big Five personality factors with specific dimensions of provider-based CAM use. Accordingly, we examined how each of the five personality factors may be linked to the frequency of CAM consultations, the breadth of CAM therapies tried, and also to the types of CAM practitioners consulted. We also explored the role that personality may play in the motivations for consulting CAM practitioners by examining the associations of the five factors with several common reasons for using CAM identified in previous research.

Considering the previous research on personality and CAM use, we expected that Openness would be related to the frequency and breadth of CAM use. However, there is little evidence regarding whether any of the other five factors may be related to CAM consultations. Based on the existing evidence linking Conscientiousness and Agreeableness to the practice of health promoting behaviours, we speculated that each of these personality factors may also be associated with consulting CAM providers. We also expected that each of the personality factors would be linked with a different set of motives for CAM use that would reflect the unique perspective of each trait.

Method

Participants and procedure

Following institutional approval from the research ethics board, the study was conducted over a 14-month period beginning in January 2005 in Ontario, Canada. A total of 61 clinics (37 conventional medicine and 24 CAM) were invited to participate, and 32 (52.5%) clinics refused to

participate for various reasons (e.g., lack of space in the waiting room, lack of interest). A total of 12 conventional medicine and 17 CAM practitioner offices/clinics agreed to distribute surveys. Offices/clinics that were invited to participate were chosen to represent a broad variety of different CAM practices among those available in the city. If after the first wave of invitations an office/clinic declined to participate, another office that offered a similar complement of CAM practices was invited in an attempt to obtain a maximum variation sample of CAM clinics from which to recruit participants. Offices/clinics were also chosen from several areas of the city, including areas from the city outskirts, and areas of both high and low affluence from the central region of the city. Offices that offered one or more CAM practices, or were staffed with one or more general physicians, and that had a separate waiting room for clients staffed by a receptionist were selected as potential sites for the distribution of the questionnaire packages. No integrative medicine clinics were invited to participate.

Questionnaires were made available to potential participants through a display box and sign advertising the study placed in the waiting room of each participating clinic or office. Due to space constraints, three clinics opted to post a sign advertising the study on a bulletin board. Patients interested in participating took a questionnaire package to complete at a location of their choice, or contacted the researchers and were mailed a questionnaire package to be completed and returned by mail in the postage paid return envelope. As an incentive, participants were given the option to enter their name into a draw for one of several gift certificates. Because participation was on a self-selection basis exact responses rates cannot be calculated, only estimated based on the number of surveys displayed versus those returned. A total of 679 surveys were displayed over the 14 months of the study, and 242 (35.6%) were returned, with response rates from individual clinics ranging from 20% to 57%. The majority of returned surveys were distributed through

conventional medicine offices (142), despite the fact that more CAM offices participated in the study.

Although 242 completed questionnaires were returned, only data from the 184 participants who indicated that they were current CAM users and who provided data for the main study variables, was included in the present study. The participants were predominantly female (83.2%), and Caucasian (94.0%), with a mean age of 41.4 ($SD = 13.7$), ranging in age from 15 to 86. Approximately 24 % of participants reported their highest level of education as high school, 66% reported undergraduate University as their highest level of education, and 10% reported graduate school as their highest level of education. Most were employed full-time (53.8%), 16.3 % were employed part-time, 23.4% were unemployed or retired, and 6.5% were disabled. The majority of participants were married (63.9%), with 19.7% never married, and 16.4% divorced, widowed or separated.

Materials

Participants completed a self-report questionnaire that assessed the study variables including demographic information, health problems, use of provider-based CAM, and personality factors. Participants reported general demographic information regarding age, gender, employment, education level, ethnicity, and marital status. Health status was assessed with the Brief Health History questionnaire ¹⁴, a self-report checklist that includes an assessment of the experience of 13 acute and 16 chronic health problems within the previous six months. The total number of acute and chronic health problems reported was summed for each individual.

The use of a variety of provider-based CAM was assessed with a checklist adapted from previous CAM research ¹⁴. For each CAM listed in the checklist, participants indicated those that they had ever used, as well as those that they were currently using. Current CAM users indicated

how often they had used each of the CAM listed (if at all) in *the past three months* and *the past year* by checking one of the following categories: “not at all”, “once or twice”, “3 to 5 times”, “more than 5 times”. The list included chiropractic, homeopathy/naturopathy, acupuncture, massage therapy, reflexology, and other, with a space for participants to list any other therapies they had tried. Frequency scores were calculated by summing the use categories across all CAM therapies used for each time interval. A breadth score was calculated by summing the number of different provider-based CAM ever tried. *In addition, participants reported whether their overall use of CAM was to supplement or replace conventional medicine.*

Personality factors were assessed with the Big Five Factor Inventory (BFFI)⁸, a well-validated measure which includes scales for the five personality factors Openness (10 items), Conscientiousness (9 items), Extraversion (8 items), Agreeableness (9 items), and Neuroticism (8 items). All items begin with the stem “I see myself as someone who...” and are completed with descriptive statements relating to each personality factor. The degree of agreement with each statement is scored on a 5-point Likert-type scale with response options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The subscales demonstrated good internal consistency in the current study (see Table 1 for Cronbach alphas).

Reasons for CAM use were assessed with seven items derived from previous research¹⁹ and tested in an investigation of the motivations to use CAM¹⁴. Each item started with “I use complementary/alternative medicine/therapies because...”, and ended with a different reason. The content of the items focused on motivations reflecting either the positive aspects of CAM or the negative aspects of conventional medicine. Items were scored on a 6-point Likert-type scale with response options ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

Statistical analyses

Data were first screened for cases with more than 20% missing data on the variables of interest. There were four cases with missing data for one of the study variables, personality. Mean values for the missing variable were imputed using a linear interpolation, and results were found to be essentially the same as those obtained with the missing cases removed. Correlations between the five factors, CAM reasons, and the CAM use variables, including individual therapies, were examined to identify significant associations. To examine the unique contributions of significant personality factors to the frequency and breadth of CAM use, two stepwise hierarchical multiple regressions were conducted for each of the CAM use variables. Because both frequency and breadth of CAM visits made may be dependent upon an individual's health status, gender, age, and education level, demographic variables were entered in the first step, followed by the number of acute and chronic health problems in the second step. Personality was entered in the final step to determine its unique contribution to CAM use.

Results

CAM use

Just over half of the participants (54.3%) had used CAM for more than five years, 22.3% for three to five years, 11.4 % for 1 to 2 years, 6.5% for six months to a year, and the remaining 5.4% had used CAM for less than 6 months. The majority (88%) used CAM to supplement rather than to replace conventional medicine. Participants had tried between one and twelve different CAM modalities. These included therapeutic touch practitioners, iridologists, cranial sacral practitioners, osteopaths, energy healers, herbalists, and art therapists, in addition to the other CAM practitioners listed.

Personality and CAM use

The relations among the personality factors, the CAM frequency and breadth variables, and

selected demographics are presented in Table 1. Among the Big Five factors, only Openness and Agreeableness were significantly associated with the CAM use variables. In addition, education level was significantly related to both Openness and Conscientiousness. Agreeableness was positively associated with age and negatively associated with the number of self-reported acute health problems. Openness was unrelated to age or health problems. When the relations of the five personality factors to individual CAM therapy use were examined, Openness and Agreeableness again emerged as the only significant correlates. The results for these two personality factors are presented in Table 2. For specific modalities, both Openness and Agreeableness were significantly associated with consultations to homeopaths or naturopaths within the past three months and the past year, and there was a marginally significant trend with reflexologists within the previous three months. Agreeableness was associated with consultations to other CAM practitioners, whereas Openness was not.

Table 3 presents the correlations between the Big Five factors and the reasons for using CAM. As expected, each personality factor was related to a unique group of motives, with Openness, Agreeableness, and Conscientiousness each demonstrating significant associations with three or more CAM motives.

Multivariate analysis of CAM consultations

The results of the two hierarchical multiple regressions are presented in Table 4. Among the control variables entered in the first two steps, being older, female, and having a greater number of acute health problems were each significant predictors, accounting for 8% of the variance in the frequency of CAM consultations made in the past year. With the addition of Openness and Agreeableness in the final step, an additional 6% of the variance was explained. However, only Agreeableness, but not Openness, was significantly associated with making more

consultations to CAM providers in the past year. Age and acute health problems, but not sex, also remained significant. Together the group of predictors accounted for 14% of the variance in the CAM frequency score.

The results of the regression for the breadth of CAM therapies ever tried were similar. In the first two steps, being older and having a greater number of acute health problems were each significantly associated with having tried a greater variety of CAM providers, together explaining 6% of the variance. Each of the personality factors, Openness and Agreeableness, added in the final step were also significant predictors of the breadth of CAM use, and accounted for an additional 6% of the variance in the variety of CAM providers ever consulted.

Discussion

In this study we examined the association of personality to specific dimensions of provider-based CAM use among current CAM consumers. Among the Big Five personality factors examined, only two factors, Openness and Agreeableness, were consistently linked to consulting CAM practitioners. Agreeableness in particular was linked to the CAM consultation dimensions independent of the effects of sociodemographic factors and the number of self-reported health problems. Consistent with other research²⁰, female gender was associated with the frequency of CAM visits. Both Openness and Agreeableness were also associated with making more consultations to specific CAM practitioners including homeopaths or naturopaths, and other CAM practitioners, as well as reflexologists although this was only marginally significant. The motive profiles of both personality factors were similar but unique.

The findings with respect to Openness were for the most part consistent with previous research. Openness was independently linked to breadth but not the frequency of CAM use, a finding that has been noted in at least one other investigation¹⁶. People who score high on this

personality factor enjoy experimenting and are intellectually curious, and may therefore be more inclined to try a broad spectrum of CAM therapies rather than being satisfied with using only one or two CAM modalities. Openness was also linked to motives for CAM use that focused on a holistic and proactive approach to health. Although each of these reasons is well-known to predict CAM use^{4,14}, and the use of homeopathy and naturopathy in particular⁴, this is the first study that we are aware of to connect CAM motivations to specific personality dimensions.

Given the previous research linking Agreeableness to health promoting practices in general^{9,10}, the association of Agreeableness with the frequency and breadth of CAM use was somewhat expected. Nonetheless this is a unique finding within the CAM literature which may also be explained by particular facets of Agreeableness, namely straightforwardness and trust. For example, people who are agreeable may be more inclined towards relationships with health care providers in which they can build trust and be honest¹¹. People who score high on Agreeableness also have a tendency to be kind and empathetic towards others. Therefore, having a relationship with a health care provider that provides an opportunity to be treated in the same manner may be especially appealing, and accordingly motivate a greater degree of CAM use. Indeed, Agreeableness was linked to wanting to be treated as an equal partner by CAM providers as a motive for using CAM in the current study. One implication of this finding is that people who are agreeable may have a better quality of relationship with their CAM providers, an outcome which has been found to significantly impact CAM treatment adherence and ultimately treatment success²¹, perhaps through their increased satisfaction with care. Indeed, other investigations have noted that people scoring high on Agreeableness are more satisfied with their health care²²⁻²⁴. Satisfaction and the quality of the patient-provider relationship may in turn serve as a continuing motivator of CAM use.

Although we found that Agreeableness was associated with dimensions of CAM use reflecting a greater degree of use of this type of health care, it is also possible that this personality factor may be more broadly associated with frequent and varied use of any type of health care, including conventional care. This may be true irrespective of medical need, as Agreeableness was marginally and inversely related to the number of acute health problems in the current study. Providing patient-centered care and building a strong, trusting relationship with patients is becoming increasingly important in conventional care settings²⁵. This proposition is consistent with the finding that Agreeableness was not related to any of the CAM motivations reflecting a dissatisfaction with conventional care, with research suggesting that Agreeableness is linked to satisfaction with health care in general²²⁻²⁴, and with other studies which indicate that people who consult CAM providers also tend to use a greater number of different conventional health care services^{26, 27}.

These findings have several implications. Because CAM use is often self-initiated, the suggested links between personality and the degree of CAM use may also apply for understanding adherence to recommendations made by CAM providers. Adherence to a particular treatment regimen and many of the self-care tasks that CAM clients engage in to maximize the benefits of treatment, is largely a result of the individual's choice. Thus, the same personality traits that may influence the choice to use CAM to a greater extent may also play a role in adherence to CAM providers' recommendations. Examining how CAM motives may be linked to treatment adherence in the context of personality may be a fruitful and important area for future research.

There are several limitations which should be considered when interpreting the current findings. One limitation includes the exclusive focus on the associations of personality with the use of provider-based CAM. The current findings may therefore not apply to the use of CAM self-

care alone or combined with provider-based CAM, especially given the suggested reasons for the associations between Agreeableness and CAM consultations.

Other limitations involve the small, self-selected convenience sample which was predominantly female. This may have implications for the findings with respect to the links between personality and CAM use, as women generally score higher on the Agreeableness factor than do men²⁸. Because the sample was predominantly female there may have been a restricted range of Agreeableness scores, and therefore the variance in the frequency and types of CAM consultations explained by this personality factor may have been underestimated. This could have contributed to the relatively small amount of variance in CAM frequency and breadth that was explained by personality. Nonetheless, it is not uncommon for personality factors to explain only modest variance in health-related behaviours on their own, and therefore a consideration of contextual factors and their interaction with personality is needed to maximize the explanatory power of personality for understanding health-related behaviours²⁹. In the current study, only health status and demographic variables were included with the personality factors in the models. The inclusion of other contextual factors such as barriers for making CAM consultations (cost, time, accessibility), satisfaction with CAM consultations, and the purpose of the CAM visits (therapeutic versus preventive) could have increased the explanatory power of the frequency and breadth of CAM use. Therefore, it may be wise to include such variables in future investigations examining the links between personality and the extent of CAM use.

Conclusions

With interest and use of CAM providers continuing to grow it is important to understand the characteristics of people who may be inclined to experiment with and eventually use CAM to a greater degree. Our findings indicate that individuals who are open and agreeable, as described by

the five factor model of personality, consult CAM providers to a greater extent. The motives involved suggest a congruency between CAM and their own [perspectives regarding](#) health and patient-provider interactions. In the case of Agreeableness, such motives may reinforce continued satisfaction with and use of CAM through fostering quality relationships with CAM providers, which in turn may lead to better adherence and treatment outcomes. Although it has been noted that the motives for using CAM may be both varied and changeable over time³⁰, the relative stability of higher order personality traits such as the Big Five factors suggest that it may be possible to identify a collection of CAM motives that characterize these traits. With such knowledge, practitioners may find it valuable to learn to recognize these traits, and perhaps tailor aspects of the patient-provider interaction to satisfy individual motives in order to maximize patient satisfaction and outcomes.

References

1. Park J. Use of alternative health care. *Health Rep* 2004;16
2. Barnes PM, Powell-Griner E, McFann K, et al. Complementary and alternative medicine use among adults: United States, 2002. *Adv Data* 2004;343:1-19
3. Rossler W, Lauber C, Angst J, et al. The use of complementary and alternative medicine in the general population: Results from a longitudinal community study. *Psychol Med* 2007;37:73-84
4. Robinson A, Chesters J, Cooper S. People's choice: Complementary and alternative medicine modalities. *Compl Health Pract Rev* 2007;12:99-119
5. Sirois FM. Treatment seeking and experience with complementary/alternative medicine: A continuum of choice. *J Altern Complement Med* 2002;8:127-134
6. Sirois FM. Provider-based complementary and alternative medicine use among three chronic illness groups: Associations with psychosocial factors and concurrent use of conventional health-care services. *Complement Ther Med* 2007
7. Costa PTJ, McCrae RR, Dye DA. Facet scales for agreeableness and conscientiousness: A revision of the NEO Personality Inventory. *Pers Individ Dif* 1991;12:887-898
8. John OP, Srivastava S. The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In: Pervin LA, John OP, eds. *Handbook of Personality: Theory and Research*. New York: The Guilford Press; 1999
9. Booth-Kewley S, Vickers RR. Associations between major domains of personality and health behavior. *J Pers* 1994;62:281-298
10. Lemos-Giraldez S, Fidalgo-Aliste AM. Personality dispositions and health-related habits and attitudes: A cross-sectional study. *Eur J Pers* 1997;11:197-209

11. Vollrath M, Knoch D, Cassano L. Personality, risky health behaviour, and perceived susceptibility to health risks. *Eur J Pers* 1999;13:39-50
12. Hampson SE, Goldberg LR, Vogt TM, et al. Mechanisms by which childhood personality traits influence adult health status: Educational attainment and healthy behaviors. *Health Psychol* 2007;26:121-125
13. Astin JA. Why patients use alternative medicine: Results of a national study. *J Am Med Assoc* 1998;279:1548-1553
14. Sirois FM, Gick ML. An investigation of the health beliefs and motivations of complementary medicine clients. *Soc Sci Med* 2002;55:1025-1037
15. Honda K, Jacobson J. Use of complementary and alternative medicine among United States adults: The influences of personality, coping strategies, and social support. *Prev Med* 2005;40:46-53
16. Hildreth KD, Elman C. Alternative worldviews and the utilization of conventional and complementary medicine. *Soc Inquiry* 2007;77:76-103
17. Foltz V, St Pierre Y, Rozenberg S, et al. Use of complementary and alternative therapies by patients with self-reported chronic back pain: A nationwide survey in Canada. *Joint Bone Spine* 2005;72:571-577
18. Furnham A. Are modern health worries, personality and attitudes to science associated with the use of complementary and alternative medicine? *Br J Health Psychol* 2007;12:229-243
19. Vincent C, Furnham A. Why do patients turn to complementary medicine? An empirical study. *Br J Clin Psychol* 1996;35:37-48

20. Shumay DM, Maskarinec G, Gotay CC, et al. Determinants of the degree of complementary and alternative medicine use among patients with cancer. *J Altern Complement Med* 2002;8:661-671
21. D'Crus A, Wilkinson JM. Reasons for choosing and complying with complementary health care: An in-house study on a South Australian clinic. *J Altern Complement Med* 2005;11:1107-1112
22. Hendriks AAJ, Smets EMA, Vrieling MR, et al. Is personality a determinant of patient satisfaction with hospital care? *International Journal for Quality in Health Care* 2006;18:152-158
23. Serber ER, Cronan TA, Walen HR. Predictors of patient satisfaction and health care costs for patients with fibromyalgia. *Psychology and Health* 2003;18:771-787
24. Bigatti SM, Cronan TA, Grove M, et al. Predictors of health care satisfaction among older people with osteoarthritis. *Mind/Body Medicine* 1997;2:112–120
25. Swenson SL, Zettler P, Lo B. 'She gave it her best shot right away': Patient experiences of biomedical and patient-centered communication. *Patient Educ Couns* 2006;61:200-211
26. Sirois FM. Provider-based complementary and alternative medicine use among three chronic illness groups: Associations with psychosocial factors and concurrent use of conventional health-care services. *Complement Ther Med* 2008; 16: 74-81
27. Al-Windi A. Determinants of complementary alternative medicine (CAM) use. *Complement Ther Med* 2004;12:99-111
28. Costa PT, Terracciano A, McCrae RR. Gender differences in personality traits across cultures: Robust and surprising findings. *JPSP* 2001;81:322-331
29. Smith TW, Williams PG. Personality and health: Advantages and limitations of the five factor model. *J Pers* 1992;60:395-423

30. Cottencin A, Mullet E, Sorum PC. Consulting a complementary and alternative medical practitioner: A systematic inventory of motives among french patients. *J Altern Complement Med* 2006;12:791-798

Acknowledgments

Portions of this paper were presented at the 67th Annual Convention of the Canadian Psychological Association, Calgary, Alberta.

Table 1. Pearson Correlations and Means of the Big Five Personality Factors, Demographic, and CAM use Variables.

Scale	1	2	3	4	5	6	7	8	9	10	
1. Openness	---										
2. Conscientiousness	.12	---									
3. Extraversion	.29**	.20**	---								
4. Agreeableness	.16*	.35**	.24**	---							
5. Neuroticism	-.17*	-.28**	-.33**	-.39**	---						
6. CAM use 3 months	.16*	.09	-.03	.23**	-.08	---					
7. CAM use 1 year	.14 ⁺	.06	.00	.24**	-.10	.79**	---				
8. Number CAM tried	.19**	.07	.06	.19**	-.14 ⁺	.58**	.75**	---			
9. Education	.19**	.21**	.11	.08	-.09	.14 ⁺	.07	.05	---		
10. Age	.00	.19*	.01	.16*	-.27**	.12	.14 ⁺	.15*	-.03	---	
11. Sum of acute conditions	.05	-.10	-.10	-.14 ⁺	.25**	.17*	.16*	.10	-.07	-.17*	---
Mean	3.71	3.92	3.73	3.96	3.07	3.77	5.64	3.49	---	41.36	3.66
SD	.66	.73	.78	.60	.88	3.04	3.55	2.12	---	13.7	2.12
Cronbach's alpha	.81	.84	.83	.75	.85	---	---	---	---	---	---

Note: ($N = 184$) ⁺ $p < .06$, * $p < .05$, ** $p < .01$; CAM = Complementary and Alternative Medicine

Table 2: Univariate Associations of Personality With Consultations With Specific CAM Practitioners

Frequency of use	Openness		Agreeableness	
	3 mos.	1 year	3 mos.	1 year
Chiropractor	-.06	-.12	.12	.11
Homeopath or Naturopath	.18*	.21**	.21**	.21**
Acupuncturist	.13	.06	.08	.13
Massage therapist	.15	.11	.03	-.01
Reflexologist	.18*	.14 ⁺	.16*	.14 ⁺
Reiki practitioner	.05	.09	.12	.12
Other CAM practitioner ^a	.07	.05	.17*	.21**

Note: ($N = 184$) ⁺ $p < .06$, * $p < .05$, ** $p < .01$; CAM = Complementary and Alternative Medicine

^aOther practitioners included Therapeutic touch practitioner, iridologist, cranial sacral practitioner, osteopath, energy healer, herbalist, and art therapist.

Table 3: Associations of the Big Five Personality Factors to Motives for Consulting CAM Practitioners.

I use complementary/alternative medicine/therapies because...	Personality factors				
	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Conventional medicine was not effective for my health problem.	.04	.14 ⁺	-.04	.19*	-.10
I believe that complementary/alternative medicine allows me to take a more active role in maintaining my health.	.20**	.08	.16*	.16*	-.14 ⁺
The conventional medicine treatment I received had unpleasant side effects.	.03	.03	-.08	.03	.11
I value the emphasis that complementary/alternative medicine places on treating the whole person.	.27**	.10	.18*	.21**	-.11
I had difficulty communicating with my medical doctor (for example, he/she didn't understand my problem, didn't listen, etc.).	.17*	-.20**	-.12	-.14	.12
I value the way that complementary/alternative medicine practitioners treat me as an equal partner in managing my health.	.14	.17*	.11	.19*	-.09
Medical doctors did not let me have a say in my health treatment decisions.	.08	-.15*	-.10	-.08	.15*

Note: (N = 184) ⁺p < .06, *p < .05, **p < .01

Table 4. Stepwise Hierarchical Multiple Regression Showing the Relation of Personality, Sociodemographic and Health Characteristics, to Consultations with CAM Providers

Step and Independent variables	CAM use in the past year			Number of different CAM ever tried		
	<i>Beta</i>	<i>t</i>	ΔR^2	<i>Beta</i>	<i>t</i>	ΔR^2
1. Demographics						
Age	.17	2.32*		.16	2.16*	
Sex	-.17	-2.40*		-.04	-.59	
Education	.07	.95	.06*	.06	.84	.03
2.						
Age	.24	2.90**		.25	3.00**	
Sex	-.17	-2.25*		-.04	-.53	
Education	.07	1.00		.06	.76	
Health characteristics						
Total acute conditions	.21	2.59**		-.19	2.28*	
Total chronic conditions	-.10	-1.13	.03*	.16	-1.80	.03*
3.						
Age	.20	2.41*		.22	2.67*	
Sex	-.15	-2.11*		-.04	-.53	
Education	.04	.50		.01	.18	
Total acute conditions	.23	2.85**		.20	2.40*	
Total chronic conditions	-.09	-1.05		-.16	-1.77	
Personality factors						
Openness	.09	1.22		.16	2.11*	
Agreeableness	.21	2.95**	.06**	.15	2.04*	.06**
Total equation ($N = 184$) $R^2 = .15^{***}$			Total equation ($N = 184$) $R^2 = .11^{***}$			

Note. * = $p < .05$., ** = $p < .01$., *** = $p < .001$, for the sex variable, female = 1, male = 2

