# The Mediating Role of Spiritual Intelligence in the Relationship between Personality Characteristics and Academic Success in the Students of Dentistry in Tehran University of Medical Sciences, Tehran, Iran

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**Background and Objective:** There is evidence to show that academic success has an important role in keeping cultural and scientific innovations up to date. Different variables affect academic success and predict it. Accordingly, the present study is an attempt to evaluate the relationship between personality traits and the academic success of the students of dentistry, as mediated by spiritual intelligence, in Tehran University of Medical Sciences (Tehran, Iran).

Methods: The present study is descriptive correlational. The statistical population included the students of dentistry in Tehran University of Medical Sciences in the academic year of 2016-2017, out of whom 214 students were randomly selected. The data collection instrument included standard questionnaires. Content analysis was used for analyzing validity of the questionnaire based on the views of experts in educational sciences. Reliability of the questionnaire was also examined using Cronbach's alpha, which was found to be 0.85 for the spiritual intelligence questionnaire, and 0.82 for the personality traits questionnaire. The collected data were analyzed using descriptive and inferential statistics. In this study, all ethical considerations were observed and the authors reported to conflicts of interest.

Results: The findings showed that the direct effects of Neuroticism (-0.29), Openness to Experience (0.35) and Conscientiousness (0.38) on the academic Success were significant (P<0.01). Also, the indirect effects results tested by the Sobel test showed that the indirect effect of Neuroticism (-2.22), Agreeableness (2.90), Openness to Experience (2.28) and Conscientiousness (3.13) on academic success, as mediated by spiritual intelligence, were positive and significant at 95% level of significance.

Conclusion: Based on the findings, in order to enhance students' academic success, attention should be paid to personality traits and spiritual intelligence.

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### Summary

#### **Background and Objective**

Today, education can be regarded as a continuous process that continues throughout the life of an

individual and countries spend a large part of their income on educational activities (1); hence, understanding academic success is valuable in many respects (2). Different variables are believed to affect and predict academic success (3). For example, one of the specific variables is a person's

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characteristics (4-7). Personality is a set of psychological traits and an organized and relatively stable mechanism within an individual that affects the individual's adaptability in the environment. In recent years, the five-factor perspective has emerged in the form of a prominent theoretical framework to guide the research into personality traits (8, 9). A review of the previous studies conducted on this topic indicates that conscientiousness, meaning the ability to insist on a responsibility and goaloriented behavior, has the strongest relationship with academic success, and that in some cases openness has a positive relationship with academic progress (10); another factor that can cause academic success is spiritual intelligence (3, 9). According to Emmons, spiritual intelligence has several characteristics or capabilities that vary from person to person. These characteristics include: the ability to achieve excellence and to ascend, the ability to delve into spiritual depths and profound reflection, which includes things such as meditation and self-adherence, the ability to use spiritual capacities and resources to solve daily problems (11, 12).

Despite the fact that the previous studies were dedicated to scrutinizing the relationship between personality traits and spiritual intelligence and also the relationship of personality traits and spiritual intelligence with academic success, one of the major issues unaddressed in these studies was that they did not pay a simultaneous attention to the relationship between these variables; therefore, the main purpose of this study is to analyze the mediating role of spiritual intelligence in the relationship between personality traits and academic success among the PhD students of dentistry in Tehran University of Medical Sciences.

#### Methods

Compliance with ethical guidelines: In the current study, an attempt was made to respect the freedom of participants to be in the study or not. Also, to stock to the ethical guidelines, assurance was given to the participants that their answers would be kept confidential.

The present study is descriptive correlational. The statistical population included PhD students of dentistry in the academic year of 2016-2017 in Tehran University of Medical Sciences, out of whom 114 were randomly selected using Cochran's formula. The data collection instrument included standard questionnaires. Content analysis was used for analyzing validity of the questionnaire based on the views of experts in

educational sciences. Reliability of the questionnaire was also examined using Cronbach's alpha, which was found to be 0.85 for the spiritual intelligence questionnaire, and 0.82 for the personality traits questionnaire. The collected data were analyzed using descriptive and inferential statistics.

#### Results

The findings showed that Neuroticism (-0.29), Openness to Experience (0.35) and Conscientiousness (0.38) had a significant effect on academic success. Also, the results obtained in relation to indirect effects, as tested by the Sobel test, showed indirect effect of Neuroticism (-2.22), Agreeableness (2.90), Openness to Experience (2.28) and Conscientiousness (3/13) on academic success via spiritual intelligence as the mediating variable.

#### Conclusion

The results related the relationship between personality traits and academic success showed that the psychological aspect of neuroticism had a negative and significant effect on academic success. In explanation for this result, it can be stated that neuroticism is a long-term desire to be in a negative emotional state (13); Also, the results showed that openness conscientiousness had a positive and significant effect on academic success, which was consistent with the results of some of the previous studies (14-16) and was inconsistent with the results of some other studies (3, 17). Also, among the five dimensions of personality, the conscientiousness dimension had the greatest impact on academic success, which is in line with the findings of the previous studies (18, 19). The findings related to the relationship between personality traits and academic success as mediated by spiritual intelligence showed that the indirect effect of variables such neuroticism, consensus, as openness and conscientiousness on academic success was significant through the mediating role spiritual intelligence. The neuroticism dimension had a negative relationship and other dimensions had a positive relationship with spiritual intelligence. The obtained results are matched with those of Zare et al. (6).

In explaining the results, it can be stated that neuroticism characteristics prevent the reception of the truth. Among these groups of people, the sensation that there is a higher power in whom they could trust is less strongly felt, and the existence of a great ego increases the distance between these individuals and the truth, and this

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can have a negative effect on academic success. In contrast, the results have shown conscientiousness has the highest correlation with spiritual intelligence. Therefore, since responsible people make every endeavor to achieve their goals, they are expected to have a higher level of academic success.

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#### **Ethical considerations**

The Ethics Committee in Biomedical Research of Shahid Beheshti University of Medical Sciences has confirmed this research.

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#### **Conflict of interest**

The authors declared no conflicts of interest.

#### **Authors' contributions**

Writing all sections of the article: First author; statistics consultant: Second author.

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# الدور الوسيط للذكاء المعنوي في العلاقة بين الخصوصيات الشخصية والنجاح الدراسي لطلبة كلية طب الأسنان في جامعة العلوم الطبية في طهران

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#### معلومات المادة

الوصول: ٤ محرم ١٤٤١ وصول النص النهايي: ٩ صفر ١٤٤١ القبول: ١١ ربيعالاول ١٤٤١ النشر الإلكتروني: ٤ صفر ١٤٤٢

#### الكلمات الرئيسة:

الذكاء الشخصية طلبة طب الأسنان النجاح الدراسي

#### الملخّص

خلفية البحث وأهدافه: تشير الشواهد إلى أن للنجاح الدراسي دوراً مهماً في الحفاظ على تجدد الإبداعات الثقافية والعلمية. وأن هناك متغيرات مختلفة لها تأثيرها على النجاح الدراسي، كما أن لها أثرها في حصوله. ومن هنا، فإن هذه الدراسة الحاضرة تحدف إلى دراسة العلاقة بين الخصوصيات الشخصية والنجاح الدراسي لطلبة فرع طب الأسنان في جامعة العلوم الطبية لطهران من خلال الدور الوسيط للذكاء المعنوي.

منهجية البحث: تعتبر هذه الدراسة من النوع الوصفي-التشاركي. وتشمل مجموعة الدراسة طلبة مرحلة الدكتوراه العامة لفرع طب الأسنان في جامعة العلوم الطبية لطهران للعام الدراسي ١٦-١٦ وبلغ عددهم ٤٧٤ فرداً، ومن بينهم فقد تم احتيار ٢١٤ فرداً بطريقة عشوائية. وكانت وسيلة جمع البيانات ورقة اختبار معيارية، ولتعيين صلاحيتها فقد تمت الاستفادة من الصلاحية المضمونية وبالاستعانة بآراء متخصصي العلوم التربوية. وكانت موثوقية ورقة الاختبار طبقاً لمعدل آلفاي كرونباخ لاختبار الذكاء المعنوي ٥٨/، ولاختبار الخصوصيات الشخصية ٢٨/، . كما تم تفكيك وتحليل البيانات أيضاً على مستويين وصفي واستنباطي. وقد تمت في هذه الدراسة مراعاة كافة المسائل الأخلاقية ولم يلحظ مؤلفو المقالة أي تقرير عن تعارض للمنافع.

الكشوفات: تشير النتائج إلى أن الأثر المباشر لمتغيرات القلق النفسي (۲۹،۰)، والانفتاح ( $^{7}$ 0)، والشعور بالمسؤولية ( $^{7}$ 0) على النجاح الدراسي له معنى ( $^{7}$ 0). ومضافاً إلى ذلك فإن نتائج اختبار الآثار غير المباشرة بالاستعانة باختبار معدّل سوبل قد دلّت أيضاً على أن الأثر غير المباشر لمتغيرات القلق النفسي ( $^{7}$ 1)، والتوافق ( $^{7}$ 1)، والانفتاح ( $^{7}$ 1)، والشعور بالمسؤولية ( $^{7}$ 1) لها معنى للنجاح الدراسي من خلال متغير معدّل الذكاء المعنوي بمستوى اطمئنان و بالمائة.

الاستنتاج: طبقاً للمعطيات الحاصلة فإنه من أجل رفع مستوى النجاح الدراسي للطلبة فإنه لابد من الاهتمام بخصوصياتهم الشخصية وذكائهم المعنوي.

#### يتم استناد المقالة على الترتيب التالي:

Jafari S, Mollaei Z. The Mediating Role of Spiritual Intelligence in the Relationship between Personality Characteristics and Academic Success in the Students of Dentistry in Tehran University of Medical Sciences, Tehran, Iran. Journal of Pizhūhish dar dīn va salāmat. 2020;6(3):61-73. https://doi.org/10.22037/jrrh.v6i3.25242

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# نقش واسطهای هوش معنوی در ارتباط بین ویژگیهای شخصیت و موفقیت تحصیلی دانشجویان رشتهٔ دندان پزشکی دانشگاه علوم پزشکی تهران

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#### اطلاعات مقاله

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#### واژگان کلیدی:

دانشجویان دندان پزشکی شخصیت موفقیت تحصیلی هوش

#### چکیده

سابقه و هدف: شواهد حاکی از آن است که موفقیت تحصیلی نقش مهمی در بهروز نگهداشتن نوآوریهای فرهنگی و علمی ایفا کرده است و متغیّرهای مختلفی در موفقیت تحصیلی تأثیر دارد و آن را پیشبینی میکند. ازاینرو، پژوهش حاضر با هدف بررسی رابطهٔ بین ویژگیهای شخصیت با موفقیت تحصیلی دانشجویان رشتهٔ دندان پزشکی دانشگاه علوم پزشکی تهران با نقش میانجی هوش معنوی انجام گرفته است.

روش کار: این پژوهش از نوع توصیفی-همبستگی است. جامعهٔ آماری پژوهش دانشجویان مقطع دکتری عمومی رشتهٔ دندان پزشکی دانشگاه علوم پزشکی تهران در سال تحصیلی 9- 9 به تعداد 97 نفر بودند که از میان آنان به طور تصادفی نمونه ای به تعداد 97 نفر بودند که از میان آنان به طور تصادفی نمونه ای به تعداد 97 نفر انتخاب شد. ابزار گردآوری داده ها، پرسش نامهٔ استاندارد بود که برای تعیین روایی آن از روایی محتوایی با استفاده از دیدگاه متخصصان علوم تربیتی بهره گرفته شد. میزان پایایی پرسش نامهٔ با ضریب آلفای کرونباخ برای پرسش نامهٔ هوش معنوی 97 و برای پرسش نامهٔ ویژگی های شخصیت 97 به دست آمد. تجزیه و تحلیل داده ها نیز در دو سطح توصیفی و استنباطی انجام شد. در این پژوهش همهٔ موارد اخلاقی رعایت شده است و مؤلفان مقاله تضاد منافعی گزارش نکر ده اند.

یافتهها: نتایج نشان داد اثر مستقیم متغیّرهای روانرنجوری (P<1/-)، گشودگی (1/7/-) و وظیفه شناسی (1/7/-) بر موفقیت تحصیلی معنادار بود (1/7/-). علاوه براین، نتایج آزمون اثرات غیرمستقیم با استفاده از آزمون میانجی سوبل نیز نشان داد که اندازهٔ اثر غیرمستقیم متغیّرهای روانرنجوری (1/7/-)، سازگاری (1/7/-)، گشودگی (1/7/-) و وظیفه شناسی (1/7/-)، بر موفقیت تحصیلی از طریق متغیّر میانجی هوش معنوی در سطح 1/7/- درصد اطمینان، معنادار بود.

**نتیجه گیری**: بر اساس یافته های به دست آمده، برای اینکه موفقیت تحصیلی دانشجویان افزایش یابد، باید به ویژگی های شخصیت و هوش معنوی آنان توجه شود.

#### استناد مقاله به این صورت است:

Jafari S, Mollaei Z. The Mediating Role of Spiritual Intelligence in the Relationship between Personality Characteristics and Academic Success in the Students of Dentistry in Tehran University of Medical Sciences, Tehran, Iran. Journal of Pizhūhish dar dīn va salāmat. 2020;6(3):61-73. https://doi.org/10.22037/jrrh.v6i3.25242

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