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Academic identity status and psychological well-being among medical sciences students

Background: Identity formation is regarded as the most important issue during adolescence. The present study aimed to assess the role of academic identity status in psychological well-being.

Method: This descriptive correlation study was conducted on medical sciences students admitted to Birjand University of Medical Sciences in 2017. The statistical population included 600 cases out of whom 240 subjects were selected via the simple random sampling method. Two questionnaires were employed for data collection: Isaacson's academic identity, and Ryff's scale of psychological well-being. The data were analyzed in SPSS (version 19) using descriptive statistics and stepwise regression.

Results: The achieved identity was positively and significantly correlated with the variables of relationships with others, self-acceptance, and independence ($P < 0.05$). The diffused identity had a significantly negative correlation with self-acceptance and positive relationship with others. Moratorium identity was significantly and negatively associated with self-acceptance. Furthermore, the correlation between foreclosed identity and self-acceptance was positive and significant.

Conclusion: As evidenced by the results of the current study, successful identity contributes greatly to various dimensions of psychological well-being; therefore, family, school, and media perform a major educative role in the provision of appropriate training during growth and facilitation of search and discovery.

Keywords: Academic Identity Status, Psychological Well-being, Medical Sciences Students

حالة الهوية الأكاديمية والرفاه النفسي لدى طلاب العلوم الطبية

الخلفية: يعتبر تكوين الهوية أهم قضية خلال فترة المراهقة. هدفت الدراسة الحالية إلى تقييم دور حالة الهوية الأكاديمية في الرفاه النفسي.

المنهج: أجريت دراسة الارتباط الوصفية هذه على طلاب العلوم الطبية المقبولين في جامعة بيرجند للعلوم الطبية في عام 2017. وشمل المجتمع الإحصائي 600 حالة، تم اختيار 240 شخصاً منهم بطريقة العينة العشوائية البسيطة. تم استخدام استبيانين لجمع البيانات: الهوية الأكاديمية لإيساكسون و مقياس ريف للرفاهية النفسية. تم تحليل البيانات في SPSS (الإصدار 19) باستخدام الإحصاء الوصفي والانحدار التدريجي.

النتائج: ارتبطت الهوية المحققة بشكل إيجابي ومعنوي بمتغيرات العلاقات مع الآخرين و قبول الذات و الاستقلالية ($P < 0.05$). كان للهوية المنتشرة علاقة سلبية بشكل ملحوظ بقبول الذات و العلاقة الإيجابية مع الآخرين. ارتبطت هوية الوقف بشكل كبير و سلبي بقبول الذات. علاوة على ذلك، كانت العلاقة بين الهوية المحجوبة و قبول الذات إيجابية و ذات مغزى.

الخلاصة: كما يتضح من نتائج الدراسة الحالية، تساهم الهوية الناجحة بشكل كبير في مختلف أبعاد الرفاهية النفسية؛ لذلك، تؤدي الأسرة و المدرسة و وسائل الإعلام دوراً تريبولياً رئيسياً في توفير التدريب المناسب أثناء النمو و تسهيل البحث و الاكتشاف.

الكلمات المفتاحية: حالة الهوية الأكاديمية، الرفاه النفسي، طلبة العلوم الطبية

بایگاه های هویت تحصیلی و بهزیستی روانشناختی در دانشجویان علوم پزشکی

زمینه و هدف: مهمترین مسأله در دوران نوجوانی، شکل گیری هویت است. این مطالعه به بررسی نقش وضعیت هویت تحصیلی در پیش بینی بهزیستی روانشناسی پرداخته است.

روش: این یک مطالعه توصیفی از نوع همبستگی است که در نوامبر 2017 در میان دانشجویان پذیرفته شده در دانشگاه علوم پزشکی بیرجند انجام شد. از 600 دانشجوی سال اول، 240 دانشجو به طور تصادفی به عنوان نمونه انتخاب شدند. برای جمع آوری داده ها از پرسشنامه هویت تحصیلی واس و ایساکسون و مقياس بهزیستی روانشناختی ريف استفاده شد. برای تجزیه و تحلیل داده ها از آمار توصیفی و رگرسیون گام به گام با کمک نرم افزار SPSS (نسخه 19) استفاده شده است.

یافته ها: نتایج نشان داد بین هویت موفق و متغیرهای روابط با دیگران، پذیرش خود و استقلال رابطه مثبت و معناداری وجود دارد ($p < 0/05$). هویت آشفته، با پذیرش خود و رابطه مثبت با دیگران رابطه منفی معناداری داشت. هویت معوق، به طور معنی دار و منفی با پذیرش خود مرتبط بود. همبستگی بین هویت زودرس و پذیرش خود نیز مثبت و معنادار بود.

نتیجه گیری: نقش تربیتی خانواده، مدرسه و رسانه برای ارائه آموزش مناسب در دوران رشد و تسهیل هویت یابی نوجوانان مهم است.

واژه های کلیدی: هویت تحصیلی، بهزیستی روانشناسی، دانشجویان علوم پزشکی

میتیکل طلباء میں تعلیمی شناخت اور نفسیاتی بہبود کا ڈیٹا

پس منظر اور مقصد: جوانی میں سب سے اہم مسئلہ شناخت کی ہے۔ یہ مطالعہ نفسیاتی بہبود کی پیش گوئی کرنے میں علمی شناخت کی حیثیت کے کردار کی تحقیقات کرتا ہے۔

طریقہ: یہ ایک وضاحتی مطالعہ ہے جو نومبر 2017 میں برجنڈ یونیورسٹی آف میتیکل سائنسز میں داخل طلباء کے درمیان کیا گیا تھا۔ 600 نئے برادر طلباء میں سے، 240 طلباء کو تصادفی طور پر نمونے کے طور پر منتخب کیا گیا۔ ڈیٹا اکٹھا کرنے کے لیے وس اور آٹراکسن اکیڈمک آئیڈنٹی سوالنامہ اور ریف سائیکولوجیکل ویلینگ اسکیل کا استعمال کیا، ڈیٹا کا تجزیہ کرنے کے لیے وضاحتی اعدادوشمار اور SPSS سافٹ ویئر (ورژن 19) کی مدد سے مرحلہ ہوا

نتائج: نتائج نے ظاہر کیا کہ کامیاب شناخت اور دوسروں کے ساتھ تعلقات کے تغیرات، خود قبولیت اور آزادی کے درمیان ایک مثبت اور اہم تعلق ہے ($p < 0.05$)۔ پریشان شدہ شناخت کا خود قبولیت اور دوسروں کے ساتھ مثبت تعلقات کے ساتھ ایک اہم منفی تعلق تھا۔ نمایاں طور پر شناخت میں تاخیر اور منفی طور پر خود قبولیت سے متعلق تھی۔ ابتدائی شناخت اور خود قبولیت کے درمیان تعلق بھی مثبت اور اہم تھا۔

نتیجہ: نوجوانی کے دوران مناسب تعلیم فراہم کرنے اور نوعمروں کی شناخت کو آسان بنانے کے لیے خاندان، اسکول اور میڈیا کا تعلیمی کردار اہم ہے۔

مطرحہ الفاظ: تعلیمی شناخت، نفسیاتی بہبود، طبی طلباء

INTRODUCTION

Inquiry into the evolution of identity can be detected way back to the early writings of Freud, Erikson's theoretical interpretations and conclusions, Marcia's experimental operation, and six alternative theories, which have been introduced since 1987 (Berzonsky, Grotevant, Waterman, Kurtines, Adams, Côté) (1,2). Identity is defined as self-image (one's mental model of oneself), self-esteem, and individuality. Moreover, a psychological identity is associated with three components: the core of identity (self-definition, importance, affect), the content of identity (skills, values, personality, goals, interest), and behaviors of identity (3).

Based on Marcia's theory about identity status (4), Was and Isaacson (5) introduced four academic identity statuses: achieved, moratorium, foreclose, and diffused academic identity. Individuals with achieved academic identity have greater academic self-efficacy, self-esteem, and academic achievement (6,7). They are more autonomous and self-confident than their peers with other types of academic identity status; moreover, they suffer from less anxiety. They often do what they can and will in their life, and are open to new experiences. In addition, they have a desirable status in terms of psychological and spiritual well-being; moreover, they are self-conscious, hopeful about the future, and capable of solving problems (8-16).

For the most part, moratorium identity is due to painful and deliberate decisions about such issues as school, university, or first jobs. People with this type of identity hate wasting time and aim to create some space to pursue their psychological self and objective reality perfectly. Although the hopes and expectations of their parents are important, they try to arrive at a compromise between such expectations and their own social demands and ability. Some of these people are anxious, while others are considered to be thoughtful and quiet (17).

Individuals with foreclosed identities are committed to the values and goals without investigating other alternatives. They accept and acquire the identity that a powerful person (usually parents, sometimes teachers, religious leaders, or lovers) has selected for them. They have poor performance in goal orientation, academic engagement, and intrinsic motivation (7, 18). Furthermore, they are impulsive and show little independence and confidence (19).

Diffused identity refers to suspended life in which individuals have no stable choice about their commitment and fail to explore (20). These people usually have no fixed academic and career goals and have low levels of academic skills, self-control, and academic autonomy (19, 21). Some studies have reported that people with diffused identities are presented with social and academic problems when they enter the university. They show weaknesses in their learning style, establishment and maintenance of social protection systems, and lack of intimacy, flexibility, and confidence in others and social relations, as well as low creativity and psychological well-being (22,23).

Considering the importance of academic identity in students' health and many educational fields, the present study aimed

to assess the role of academic identity in psychological well-being among medical sciences students.

METHODS

This descriptive correlation study was conducted on medical sciences students admitted to Birjand University of Medical Sciences in 2017. The statistical population included 600 cases out of whom 240 subjects were selected via simple random sampling method and according to Krejcie and Morgan's (1970) sample size determination table (24). The inclusion criteria entailed: first-year student, the age range of 18-25 years, informed consent, while exclusion criterion included unwillingness to cooperate. The following two questionnaires were used for data collection:

1. Academic identity status: This questionnaire which was developed by Was & Isaacson (2008) consists of 40 items and 4 subscales: achieved, moratorium, foreclosed, and diffused identities. Cronbach's alpha coefficients of 0.79, 0.51, 0.52, and 0.81 were obtained for the moratorium, foreclosed, diffused, and achievement identities (10 items in each subscale). The results of exploratory factor analysis indicated the considerable and significant contribution of each of the items to the measurement of academic identity status (5, 17, 25). In this study, Cronbach's alpha coefficients were calculated at 0.76, 0.77, 0.80, and 0.76 for the achieved, foreclosed, moratorium, and diffused identities.

2. Ryff's psychological well-being scales (26): This 18-item questionnaire evaluates six factors: self-acceptance, environmental mastery, positive relations with others, purpose in life, personal growth, and autonomy. The items are rated on a 6-point Likert scale ranging from 1=strongly disagree to 6=strongly agree. The subscales of self-acceptance, positive relationships with others, autonomy, environmental, mastery, purpose in life, and personal growth were found to be 0.71, 0.77, 0.78, 0.77, 0.70, and 0.78 respectively (27). In the present study, the three components of self-acceptance, positive relations with others, and autonomy were examined, and Cronbach's alpha coefficients were obtained at 0.60, 0.65, and 0.70, respectively. The data were analyzed in SPSS software (version 19) using descriptive statistics, Pearson correlation coefficient, and stepwise regression.

RESULTS

The mean age score of students was 20.07 ± 2.036 (range: 18-39 years). Out of the respondents, 69.5% were female, 82% were single, and 37.8% were indigenous. To examine the descriptive statistics, the mean and standard deviation of the research variables were reported in Table 1. There was no significant difference between the two genders in psychological well-being. In academic identity subscales, there was a statistically significant difference between male and female students only in confused identity. The average score of boys was higher than girls; that is to say, boys experience more turmoil on their path to identity.

The results of the correlation matrix of the academic identity subscales and psychological well-being are displayed in Table 2.

Table 1. Mean and standard deviation of the research variables			
Variables	Gender	Mean (SD)	P
Self-acceptance	Female	4.23 (1)	0.077
	Male	4.16 (0.94)	0.118
Positive Relation	Female	4.59 (1.18)	0.91
	Male	4.46 (1.3)	0.47
Autonomy	Female	4.19 (1.12)	0.11
	Male	4.44 (0.93)	0.117
Moratorium	Female	3.30 (0.69)	0.53
	Male	3.42 (0.66)	0.22
Foreclose	Female	3.44 (0.67)	0.51
	Male	3.33 (0.80)	0.31
Achievement	Female	3.59 (0.64)	0.50
	Male	3.66 (0.70)	0.47
Diffuse	Female	2.02 (0.73)	0.56
	Male	2.29 (0.94)	0.02

The achieved identity was positively and significantly associated with positive relations with others, self-acceptance, and autonomy. The diffused identity had a negative and significant relationship with self-acceptance and positive relations with others; nonetheless, it had no significant relationship with autonomy. Moratorium identity had a negatively significant correlation with self-acceptance but no significant correlation with independence and positive relations with others. The correlation between the foreclosed identity and self-acceptance was positive and significant. The results of stepwise regression analysis are reported in Table 3.
(n=240)

DISCUSSION

As evidenced by the obtained results, the achieved identity was significantly and positively associated with self-acceptance, positive relations with others, and autonomy. The results of this study are in agreement with Marcia's theory (4). According to Marcia, individual psychological performance with achieved identity is at the highest level with such characteristics as autonomy (independence),

Table 2. Correlation matrix between the components of academic identity and psychological well-being							
	A	B	C	D	E	F	G
A) Moratorium identity	1						
B) Foreclosed identity	-0.01	1					
C) Achieved identity	-0.12	0.34**	1				
D) Diffused identity	0.35**	-0.13*	-0.31**	1			
E) Positive relationship	-0.06	-0.07	0.16*	-0.27**	1		
F) Self –acceptance	0.27**	0.13*	0.32**	-0.44**	0.22**	1	
G) Autonomy	0.11	0.01	0.25**	-0.06	0.09	0.12	1

P≤0.01 ** P≤0.05 *

Table 3. Results of stepwise regression academic identity and psychological well-being							
Dependent Variables	steps	Predictor Variables	β	B	P(sig)	R	R2
Positive relationship with	1	Diffused identity	-0.27	-0.4	0.01	0.27	0.07
	1	Diffused identity	-0.44	-0.52	0.01	0.44	0.19
	2	Diffused identity	-0.37	-0.45	0.01		
Self-acceptance		achieved identity	0.20	0.3	0.01	0.48	0.23
	3	Diffused identity	-0.33	-0.39	0.01		
		Achieved identity	0.20	0.29	0.001	0.49	0.24
		Moratorium identity	-0.13	-0.18	0.03		
Autonomy	1	Achieved identity	0.25	0.41	0.001	0.25	0.06
	2	Successful identity	0.26	0.43	0.01		
		Moratorium identity	0.14	0.22	0.06	0.28	0.08

intimacy in relationships with others, advanced moral arguments, self-acceptance, self-esteem, and resistance against the demands of a group.

In addition, the results of this study are consistent with those reported by Puspoky (6), Mohammadi and Akbari (7), Was et al. (8), Kroger, Martinussen, and Marcia (9) Horba, Was, and Isaacson(10), Jankowski (11), Waterman (12), Vleioras and Bosma (13), Shokri et al. (14), and Samadifard and Narimani (15). They reported that people with achieved identity are autonomous, more confident, and less anxious. Furthermore, they often feel good about what they can and will do in life, are open to new experiences, and have psychological well-being.

Diffused identity was negatively and significantly correlated with self-acceptance and positive relations with others; however, it showed a significant relationship with autonomy. This result is in line with the theory of Marcia (4). According to Marcia, these people have no certain sense of identity and responsibility of their own, have poor self-esteem and incoherent thoughts, and are closed by others. Puspoky (6), Mohammadi and Akbari (7), Berzonsky (2,19), Hejaz et al(17), Berzonsky (18), and Jankowski (11) have also reported that these people have no fixed and clear educational and occupational goals; moreover, they have low levels of academic skills, self-control, and educational autonomy. Dollinger, Dollinger and Centeno,(21), Gulf (22), Alavi and Toozandehjani (23) have reported that people with confused identities have social and academic problems when they enter the university due to their weaknesses in the establishment and maintenance of social protection systems, as well as the lack of intimacy, flexibility, and confidence in others in social relations.

Moratorium identity demonstrates a significant negative correlation with acceptance but not with independence and positive relations with others. According to Marcia's theory (4), these people are in the midst of the crisis and try to answer the question of who they are and what they are looking for. This confirms the fact that they do not consent to what they have, pointing to a negative relationship with self-acceptance. Marcia (4) reported that although parents' expectations are important, these people attempt to make a compromise between such expectations and their own social demands and ability.

The foreclosed identity had a positive correlation only with self-acceptance. This finding is in accordance with the theoretical foundations of Marcia (4) and Gulfem (22) who report that these individuals made a commitment to

an identity without the search process and exploration. This signifies the satisfaction of these individuals with self-acceptance. Moreover, the lack of relationship with independence and positive relations with others is consistent with the findings of Berzonsky (19) who reported that these people are impulsive and show independence and little confidence.

Among the notable limitations of the present study, we can refer to the use of self-reporting instruments. Moreover, this study was performed on the first-year students of Birjand University of Medical Sciences; therefore, great care should be taken in generalizing the results to other students. Nonetheless, the good cooperation of students in completing the questionnaires and lack of sample attrition are among the strengths of this study.

In general, identity formation is regarded as the most important issue during adolescence. As evidenced by the results of the current study, successful identity contributes greatly to various dimensions of psychological well-being; therefore, family, school, and media perform a major educative role in the provision of appropriate training during growth and facilitation of search and discovery.

Ethical Considerations

Ethical issues including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors. Ethical approval for this study was obtained from the Ethics Committee of Birjand University of Medical Sciences, Birjand, Iran (approval code: IR.bums.REC.1398.241). For anonymity and data protection in this study, the respondents were told that it was not necessary to write their names. They were also assured that their information would be kept confidential, and participation was also voluntary.

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Conflict of Interest: None

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