

The Explanation of The Academic Procrastination Behaviour of Pre-Service Teachers With Five Factor Personality Traits

(Öğretmen Adaylarının Akademik Erteleme Davranışlarının Beş Faktör Kişilik Özellikleri ile Açıklanması)

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Abstract

Academic procrastination and personality traits are regarded as important factors affecting academic success and attitudes in education process. This study was to examine the correlation between the subscales of personality traits and the academic procrastination behaviour of pre-service teachers and to explore gender differences in the academic procrastination and personality traits. The research group included 165 female (%77.46) and 48 male (%22.53) pre-service teachers studying in Pedagogical Formation Certificate Program at Yıldız Technical University. In the data collection phase of the present research, the Tuckman Procrastination Scale developed by Tuckman (1991) and the Adjective Based Personality Test having been developed by Bacanlı, İlhan and Aslan (2009) were used. The data were analysed using correlation and independent samples t-test. The findings of this study show that the subscales of personality traits were related to the academic procrastination. And, gender difference was not found to be significant in case of it.

Keywords: Academic procrastination, personality traits, pre-service teachers, five factor personality theory.

Özet

Akademik erteleme ve kişilik özelliklerinin, akademik başarıyı ve eğitim sürecindeki yaklaşımları etkileyen önemli etkenler olduğu kabul edilmektedir. Bu çalışmanın amacı, görevdeki öğretmenlerin Beş Faktör Kişilik Kuramına göre kişilik özellikleri ile akademik erteleme davranışı arasındaki korelasyonu incelemek, öğretmenlerin akademik ertelemelerde davranışında ve kişilik özelliklerinde bir cinsiyet farkının olup olmadığını araştırmaktır. Çalışmanın araştırma grubu, Yıldız Teknik Üniversitesi'nin Pedagojik Formasyon Sertifika Programında okuyan 165 kadın (%77.46) ve 48 erkek (%22.53) öğretmenden oluşmaktadır. Araştırmanın veri toplama aşamasında, Tuckman (1991) tarafından geliştirilen Tuckman Erteleme Ölçeği ve Bacanlı, İlhan ve Aslan (2009) tarafından geliştirilen Sıfatlara Dayalı Kişilik Ölçeği kullanılmıştır. Korelasyon ve t-test, araştırmada veri analizi için kullanılan yöntemlerdir. Bu çalışmanın sonunda elde edilen bulgular ise kişilik özelliklerinden olan dışadönüklüğün, yumuşak başlılığın, sorumluluk sahibi olmanın, duygusal dengesizliğin ve deneyime açıklığın akademik erteleme ile ilgili olduğunu göstermektedir. Sonuçlara göre kadın öğretmenlerin daha çok dışadönük olduğu ortaya söylenebilirken akademik erteleme ile cinsiyet farkı arasında tam anlamıyla bir ilişki bulunamamıştır.

Anahtar Kelimeler: Akademik erteleme, kişilik özellikleri, öğretmen adayları, beş faktör kişilik kuramı.

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Introduction

Steel (2007) stated that the nature of procrastination history back to 800 B.C. But, Schouwenburg (2004) brought up that procrastination in academic settings was not studied until the 1980s. Since then, various studies have been conducted to reveal the relationships of procrastination with other variables. And, many researchers such as Beswick, Rothblum, and Mann (1988), Klassen, Krawchuk, and Rajani (2008), and Steel (2007) revealed negative association between academic procrastination and academic achievement.

Procrastination is argued to be a modern illness and is prevalent in both developed and developing countries (Milgram & Tenne, 2000). Procrastination was defined as the act of needlessly delaying tasks to the point of subjective discomfort by Solomon and Rothblum (1984). Also, according to Urdan and Midgley (2001), the definition of procrastination is an intentional decisions and intentional production of impediments to success. Howell and Watson (2007), Senecal, Koestner and Vallerand (1995), and Steel (2007) highlighted that academic procrastination is a students' tendency to intentionally postpone such academic tasks. In spite of its negative outcomes, students may postpone reading assignments, homework and studying for examinations. Moreover, Klassen and Kuzucu (2009) found that more than %40 of the Turkish adolescents spends three or more hour with procrastinating during school days.

A tremendous amount of research has been conducted regarding students' procrastination behaviour, but very little on that of teachers. However, teaching as a profession requires the possession of certain characteristics such as accepting students as individuals and cherishing them. The notion has raised the teaching is not only about educating students in academic subjects but also about educating them in lessons of life. Therefore, teachers' positive behaviours have an impact on the students' ultimate development. The academic procrastination behaviour leads to a number of negative results such as stress, isolation, and poor performance. If the teacher exhibits the academic procrastination behaviour, the student is affected by these negative results directly or indirectly (Wyk, 2004).

Procrastination and Academic Procrastination

The term *procrastinate* comes from the Latin word *procrastinare*. It means to put off, delay, prolong, or postpone performing a task (Schouwenburg, 2004). According to Schouwenburg, procrastinating is a performing an alternative activity to the one intended, and it is not synonymous with idleness. Dewitte and Lens (2000) said that procrastination can be temporary or permanent. It can be defined as a function of the behavioural output or the cognitive output. In addition to these, Blunt and Pychyl (2005) regarded procrastination as the

inconsistency between one's intention to act and actual performance of that act. While most of the researchers have used self-report inventories such as the Tuckman Procrastination Scale (Tuckman, 2005) to determine the presence or extent of procrastination (Davis & Abbitt, 2013), others have used more direct methods to measure procrastination such as Rotenstein, Davis, and Tatum (2009).

Procrastination is regarded as a behavioural problem that can be harmful both to the procrastinator's psychological, physical, and financial well-being, and to other people that count on him or her (Jaffe, 2013). Also, Zacharis (2009) conveyed procrastination leads to a number of negative results, including stress, isolation, and poor performance. Despite of the fact that many studies' results showed that procrastination has negative effects on academic success (Klingsieck, Fries, Horz & Hoferd, 2012) and most researchers stated procrastination as a damaging trait (Rabin, Fogel & Nutter-Upham, 2011), some researchers suggested that it may be favourable under certain conditions. For example, Chu and Choi (2005) described between traditional *passive* procrastinators and a new group termed *active* procrastinators. Whereas active procrastinators are more likely to accomplish tasks with satisfactory outcomes, passive procrastinators are often paralyzed by indecision regarding action.

There is a wealth of research on procrastination and there are many researches on this topic. Most of them focus on the causes or factors influencing procrastination (Davis & Abbitt, 2013). For example, Rabin et al. (2011) suggested that academic procrastination is a problem of executive functioning. It was examined motivation and demonstrated the inverse relationship between procrastination and both intrinsic motivation and effort regulation by Rakes and Dunn (2010). Similarly, Steel (2007) and van Eerde's (2003) meta-analysis investigated the processes involved in procrastination, which focused on variables such as personality traits and performance.

Klassen and Kuzucu (2009) expressed that academic procrastination is a universal behaviour pattern. Even though, many studies have been conducted about that subject since 1990s, the psychological base of academic procrastination behaviour is not yet fully revealed. However, Balduf (2009), Lee (2005), and Nonis and Hudson (2010) stated that such procrastination behaviours have impact on academic achievement. The studies which were carried out by Onwuegbuzie (2004), Howell and Watson (2007) aim to comprehend academic procrastination indicate the presence of a relationship between academic procrastination and many variables, including personal characteristics, self-efficacy beliefs, motivation, self-respect, anxiety, time management and attribution styles. According to recent convention, Kandemir (2014) stated that personality studies are to be based upon five factors. Furthermore, this

structure is showed to be one of the most important variables for explaining procrastination in relevant literature such as Lay, Kovacs and Danto (1998), McCown, Petzel and Rupert (1987), Moon and Illingworth (2005), and Watson (2001). That is to say, the personality trait of responsibility is closely related to procrastination (Kandemir, 2014). In addition to these, Rosário, Costa, Mourão, Núñez, González-Pienda, and Valle (2007) stated that academic procrastination is highly frequent in students in spite of the fact that Alexander and Onwuegbuzie (2007) indicated that procrastination occurs in all kinds of daily tasks.

With respect to academic procrastination, Steel (2007) said that gender difference is a controversial issue as it may be hard to predict. Even though some researchers such as Milgram, Marshevsky and Sadeh (1994), and Pychyl, Coplan and Reid (2002) found significant gender differences, other studies such as Ferrari (2001) and Schouwenburg (1992) found no such gender difference. Yet, in the present study, it was believed that investigating the effects of gender on academic procrastination was important. Because there is little empirical research having been conducted to determine the levels of academic procrastination among pre-service teachers in Turkey, the results of the present study may provide important cues for counsellors, university staff and Ministry of National Education to develop new programs that may reduce the negative effects of such behaviours on pre-service teachers' academic performance. Consequently, it may be significant for the pre-service teachers who would like to reduce the power of academic procrastination.

Personality and Big Five Personality Traits

The term personality originated from the word *persona*. And, originally *persona* is used to denote *mask* that is worn by theatre actors (Kopliman, 2007). However, today personality denotes *the whole moral and spiritual qualities that are unique to a person* (Türk Dil Kurumu [TDK], 2013). Parker (2000) stated that research effort focused on the broad areas of personality and the last decade has seen a renewed interest in it. Cuceloglu (2008) explained that personality is a coherent and settled form of relationship that an individual established with his/her internal and external environment and distinguishes him/her from other individuals. According to Perkmen and Cevik (2010), the concept of coherency means whether the individual's behaviour changes in similar situations in time. And also, settled means personality is a system which consists of numerous units, each of which develops interrelated patterns. Also, Kokkinos (2007) added that personality characteristics affect an individual to interpret events in a particular way, which support or hinder adaptive and psychologically healthy behaviours and interactions. Liu and Zhai (2011) suggested that several theories focus on personality factors and trait attempt to explain the underlying cause of individual behaviours and differences in terms of personality. They stated

that researchers continue to develop new theories in spite of the fact that seminal theorists include Sigmund Freud and Carl Jung. They also reported that classical personality theory consists of the psychoanalytical approach, the behavioural approach, the trait approach, and the humanistic approach while the new approaches to personality theory include the social-cognitive approach, the biological approach, and the evolutionary approach.

Even though many ideas have been raised about personality, the Big Five Factor theory seems to have gathered all those ideas under a single title (Bacanlı, İlhan & Aslan, 2009). Owing to this, the Big Five model has emerged as the most widely accepted and extensively researched framework for normal personality available today (Lounsbury, Hutchens & Loveland, 2005). The five factors contain *extroversion* which is directing of one's interest outwards, *agreeableness* which can be defined that persons with a high degree of agreeableness are sympathetic and easily moved, *conscientiousness* which is characterized by a high degree of responsibility and determination, *neuroticism* which is characterized by negative emotions such as anxiety and low self-esteem extroversion which is defined by being sociable and assertive, *openness to experience* which means curiosity (Ripski, LoCasale-Crouch & Decker, 2011). Yet, Big Five model does not indicate that personality differences can be reduced to only five traits. Instead, these represent personality at the broadest level of abstraction. And also, each of them summarizes a large number of distinct (John & Srivastava, 1999). The research which was carried out by Bacanlı, et al. (2009) aimed to develop a bipolar personality scale based on Five Factor Theory with few items using appropriate adjective pairs. Direct Oblimin rotations and principal component analysis method was used to determine the factor structure of the Adjective Based Personality Scale (ABPT). They revealed that studies related to personality can be organized in five factors. And, they determined that these factors were shown to be extroversion, agreeableness, conscientiousness, emotional instability/neuroticism and openness to experience many cross-cultural studies.

McCrae and Costa (1985), Hurley (1998), Caligiuri (2000), and Thompson, Brossart, Carlozzi, and Miville (2002) stated that the defined roles of proposed personality dimensions have been studied in various sample groups in the relevant literature. The dimensions of the Five Factor Theory have been scrutinized with regard to personality variables (Avery, 2003; Saucier, 1997), education (Chamorro-Premuzic, Furnham, Dissou & Heaven, 2005; Bassili, 2006), various occupational groups (Barrick & Mount, 1991; Borges & Gibson, 2005), job performance and career achievement (Caldwell & Burger, 1998; Lounsbury, Tatum, Chambers, Owens & Gibson, 1999), life insurance, religious orientation and difference of sexual life (McManus & Kelly, 1999; Barrick, Patton & Haugland, 2000; Witt 2002; Rowatt & Schmitt, 2003).

Most research on procrastination and personality traits was largely conducted on students. For example, the study managed by Hill, Chabot and Barrall (1978) demonstrates that a great number of university students experience emotional distress as a result of behaviour of procrastination. But, procrastination is also observed among adults (Dilmaç, 2009). Teaching requires the ability to teach lessons, but what is more, an understanding of the rules and routines of the school culture, the ability to collaborate with other education professionals, and an awareness of the communities in which one teaches. People are highly variable in the degree to which they can meet these multi-level demands. And investigating the personalities of teachers is not a novel idea seeing that personality characteristics are likely to be important predictors of this ability (Decker & Rimm-Kaufman, 2008). Inasmuch as the personality traits and the academic procrastination are important issues for teaching, the present study is to determine the relationship between pre-service teachers' personality traits and their academic procrastination behaviour and explore gender differences in the academic procrastination behaviour of them. For this purpose, following research questions are the frame for this study:

1. Is there a significant relationship between pre-service teachers' personality traits and academic procrastination behaviours?
2. Are there any gender differences in the academic procrastination behaviour and personality traits of pre-service teachers?

Method

Participants and Setting

This study was conducted during 2013-2014 academic year with the participation of 165 female (%77.46) and 48 male (%22.53) pre-service teachers studying in Pedagogical Formation Certificate Program at Yildiz Technical University. All participants took part in the study voluntarily. The distribution of the sample with respect to programs which were accepted in two main fields as social sciences and applied sciences is shown in Table 1.

Table 1

Pre-service Teachers Participating in the Survey by Subject Area

Field	Program	N	%
Social Sciences	Theology	3	1.40
	History	10	4.69
	Turkish Philology	1	0.46
	English Philology	8	3.75
	American Culture and Literature	8	3.75
	Music and Performing Arts	2	0.93
	Music	2	0.93

Applied Sciences	Mathematics	65	30.51
	Physics	1	0.46
	Biology	61	28.63
	Chemistry	15	7.04
	Food engineering	16	7.51
	Graphic and Photography	3	1.40
	Naval Architecture	1	0.46
	Electrical and Electronic Engineering	1	0,46
	Aquaculture Engineering	3	1.40
	Nautical	5	2.34
	Graphic design	8	3.75
Total		213	100

Data Collecting Instrument

This study is based on survey design. The Tuckman Procrastination Scale (TPS) developed by Tuckman (2005) and the Adjective Based Personality Test (ABPT) having been developed by Bacanlı, et al. (2009) were used as the data collection instruments. These scales are concluded that they can explain the relationship between the subscales of personality traits and the academic procrastination behaviours of pre-service teachers. The Tuckman Procrastination Scale consists of 14 items for a total. For each procrastination scale item, respondents were asked to rate themselves on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The highest point to be obtained in the Tuckman Procrastination Scale was 57 and the lowest point was 14. The Adjective Based Personality Test is based on the Big Five Personality Theory. That test comprised of 40 items on a five-point Likert type scale (1 = strongly disagree, 5 = strongly agree) was administered. The ABPT is a self-report instrument comprised of five factors (Extroversion, Agreeableness, Conscientiousness, Emotional Instability/Neuroticism and Openness to Experience).

Analysis of Data

Data acquired by means of the applications of the Tuckman Procrastination Scale (TPS) and the Adjective Based Personality Test (ABPT) was analysed using Pearson correlation and independent samples t-test via SPSS (Statistical Package for Social Sciences) 21.0 software program. The analysis of Pearson correlation was used to define whether there was a relationship between the academic procrastination behaviours of pre-service teachers and the personality traits of them. Also, the analysis of independent samples t-test was used to define whether there was a significant difference in pre-service teachers' academic procrastination behaviours and the personality traits in terms of gender.

Findings

In this section, the relationship between the subscales of personality traits according to the Five Factor Personality Theory and the academic procrastination behaviour of pre-service teachers are analysed. And also, it intends to explore gender differences in the academic procrastination behaviours and personality traits.

Table 2 summarizes the following findings which include descriptive statistics on pre-service teachers' academic procrastination behaviours and personality traits.

Table 2.
Means, Standard Deviations and Maximum Scores

	AP	E	A	C	N	OE
N	213	213	213	213	213	213
Mean	39.04	33.33	35.64	27.52	18.73	31.21
%	68.49	74.06	79.2	78.62	60.41	78.02
Max.	57.00	45.00	45.00	35.00	31.00	40.00
Std. D.	6.05	6.12	5.89	4.71	4.38	4.76
Std. Er.	.41	.41	.40	.32	.29	.32

AP (Academic procrastination), N (Neuroticism), C (Conscientiousness), E (Extroversion), A (Agreeableness), OE (Openness to experience).

According to the findings in Table 2, the mean of academic procrastination scores of pre-service teachers is 39.04, which is above the medium level. The highest score pre-service teachers' get from the big five personality traits was agreeableness dimension (%79.2). The other dimensions, conscientiousness (%78.62), openness to experience (%78.02), extroversion (%74.06) and neuroticism (%60.41), respectively followed each other.

In Table 3, the findings regarding the correlation analysis among pre-service teachers' academic procrastination behaviours and personality traits are shown.

Table 3
Correlation Analysis among Pre-service Teachers' Academic Procrastination and Personality Traits

		AP	E	A	C	N	OE
AP	R	1	-.16*	-.29**	-.38**	.29**	-.14*
	Sig. (2-tailed)		.01	.00	.00	.00	.03
	N	213	213	213	213	213	213
E	R	-.16*	1	.35**	-.38**	-.10	.54**
	Sig. (2-tailed)	.01		.00	.00	.12	.00
	N	213	213	213	213	213	213
A	R	-.29**	.35**	1	.47**	-.39**	.38**
	Sig. (2-tailed)	.00	.00		.00	.00	.00
	N	213	213	213	213	213	213
C	R	-.38**	-.38**	.47**	1	-.12	.31**
	Sig. (2-tailed)	.00	.00	.00		.07	.00
	N	213	213	213	213	213	213
N	R	.29**	-.10	-.39**	-.12	1	-.11
	Sig. (2-tailed)	.00	.12	.00	.07		.09
	N	213	213	213	213	213	213
OE	R	-.14*	.54**	.38**	.31**	-.11	1
	Sig. (2-tailed)	.03	.00	.00	.00	.09	
	N	213	213	213	213	213	213

* Correlation is significant at the .05 level (2-tailed).

** Correlation is significant at the .01 level (2-tailed).

AP (Academic procrastination), E (Extroversion), A (Agreeableness), C (Conscientiousness), N (Neuroticism), OE (Openness to experience).

As can be seen in Table 3, as a result of correlation analysis there have been found some significant positive and negative correlations between variables. It was found that there is a significant positive correlation between academic procrastination and neuroticism ($r=.29, p<.01$). Also, it could be reported that there is significant negative correlation between academic procrastination and extroversion ($r=-.16, p<.05$), between academic procrastination and agreeableness ($r=-.16, p<.01$), between academic procrastination and conscientiousness ($r=-.38, p<.01$), and between academic procrastination and openness to experience ($r=-.14, p<.05$). In terms of the correlations among big five personality traits, a significant negative correlation was seen between neuroticism and agreeableness ($r=-.39, p<.01$). Conscientiousness is positively correlated with agreeableness ($r=.47, p<.01$) and openness to experience ($r=.31, p<.01$). Extroversion is positively correlated with agreeableness ($r=.35, p<.01$) and openness to experience ($r=.54, p<.01$). Lastly, it is also viewed that there is a positive correlation between agreeableness and openness to experience ($r=.38, p<.01$).

Table 4

T-Test Analysis Regarding Pre-service Teachers' Academic Procrastination and Personality Traits In Terms of Gender

	Gender	N	M	Std. D.	Std. E.	t	P
AP	Female	165	38.61	5.97	.46	-1.95	.05
	Male	48	40.54	6.16	.88		
E	Female	165	33.97	5.85	.45	2.89	.00
	Male	48	31.12	6.56	.94		
A	Female	165	35.74	6.09	.47	.46	.64
	Male	48	35.29	5.14	.74		
C	Female	165	27.62	4.59	.35	.55	.57
	Male	48	27.18	5.15	.74		
N	Female	165	18.90	4.43	.34	1.02	.30
	Male	48	18.16	4.20	.60		
OE	Female	165	31.03	4.77	.37	-.99	.32
	Male	48	31.81	4.72	.68		

* The mean difference is significant at the .05 level

** The mean difference is significant at the .01 level

AP (Academic procrastination), E (Extroversion), A (Agreeableness), C (Conscientiousness), N (Neuroticism), OE (Openness to experience)

Based on the results of t-test analysis in Table 4, relating to academic procrastination, it could be reported that female teachers' academic procrastination ($M=38.61$) is lower than male teachers' academic procrastination ($M=40.54$). In view of this, it was observed a significant difference in favour of female teachers ($t=-1.95, p<.05$). Regarding the t-test findings of extroversion dimension of big five personality traits, it was seen that female teachers' score ($M=33.97$) is higher than male teachers' ($M=31.12$). The significant difference is in favour of female teachers ($t=2.89, p<.05$).

Discussion and Conclusion

The personality traits are considered as important factors affecting academic procrastination in the literature. The main purpose of this study is to examine whether there is a significant correlation among

academic procrastination and personality traits in a sample of pre-service teachers. Besides, whether there is a significant difference among pre-service teachers' academic procrastination and personality traits in terms of gender is another focus point of the present study.

Based on the correlation analysis among pre-service teachers' academic procrastination and personality traits it was found that there is a significant positive correlation between academic procrastination and neuroticism. This means that pre-service teachers who are more neurotic have higher academic procrastination behaviour. This result is consistent with the results of previous studies. For example, Rabin et al. (2011), Rakes and Dunn (2010), Steel (2007) and van Eerde (2003) found that academic procrastination correlated positively with neuroticism.

According to the other result of this study, a significant negative correlation between academic procrastination and agreeableness was observed. In the literature there are some mixed and uncertain results about the function of agreeableness in predicting academic achievement. Whether some studies claimed that agreeableness was negatively associated with academic procrastination (Farsides & Woodfield, 2003; Gray & Watson, 2002; Poropat, 2009), others pointed that agreeableness did not predict academic procrastination (Farsides & Woodfield, 2003; Paunonen, 1998; Poropat, 2009; Rothstein, Paunonen, Rush & Kinget, 1994).

Another result is that academic procrastination was negatively associated negatively with conscientiousness, agreeableness, openness to experience and extroversion. The results of prior studies, focusing on inverse link to procrastination, relating to conscientiousness are in line with this result (Costa & McCrae, 1992; Johnson & Bloom, 1995; Laverdiere, Morin & St-Hilaire, 2013; Lay, Kovacs & Danto, 1998; Scher & Osterman, 2002; Schouwenburg & Lay, 1995; Watson, 2011). Regarding negative relationship of academic procrastination with extroversion in this study, while some studies have found the relationship to be positive (McCown et al., 1987; Johnson & Bloom, 1995), others have found it to be negative (Lay, 1992; Wessman, 1973).

There is a significant negative correlation was seen between neuroticism and agreeableness in terms of the correlations among big five personality traits. Due to the overall effect of neuroticism tends to be negative rather than positive and contains anxiety, angry, depression, impulsiveness, and vulnerability (Costa & McCrae, 1992) and unlike that agreeableness contains trust and friendly compliance this finding is expected and parallel with the findings of prior studies.

The present study also showed that female teachers' extroversion score is higher than male teachers'. Unlike the result of this study, inter-correlations among the big five were modest, and females were rated significantly higher than males on all personality factors; except for extroversion, where no gender differences were found (Neuenschwander, Cimeli, Röthlisberger & Roebbers, 2012). To sum up, the results from this preliminary analysis show that there is a strong relationship among these variables.

The findings of the current study suggest that there is a relationship between the personality traits and the academic procrastination behaviours of pre-service teachers. Actually, this relationship can occur not only in the pre-service teacher populations but also in the broader community. The most important

finding that can be drawn from the present study was that there was a significant difference between pre-service teachers' extroversion personality traits in terms of gender. Further research should expand upon this issue insofar as academic procrastination is a universal behaviour pattern. Owing to this, individuals can be affected lesser by a number of negative results of the academic procrastination behaviour.

Many researchers agree with the premise that academic procrastination can lead to many adverse effects. On account of this, it is important that research continues in this field. Since the subscales of personality traits according to the Five Factor Personality Theory are predictors of the academic procrastination, researchers should investigate how to enhance personality types such as extroversion, agreeableness, conscientiousness, emotional stability and openness to experience in the future.

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