

## INFLUENCES OF TEMPERAMENT TYPES ON UNIVERSITY STUDENTS' WELL-BEING, ACADEMIC PERFORMANCE AND COLLEGE ADJUSTMENT

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**Abstract:** The purpose of this present study was to investigate the influence of the temperament types toward university students' well-being, academic performance and college adjustment. Temperament types are basic dimensions of personality that are fundamentally based on biology and genetics. Its biological foundation posits that temperamental traits are relatively stable, consistent across cultures and situations, and evident throughout the lifespan. The marked individual differences are due to the developmental processes—a byproduct of maturation, heredity and experience. The use of temperament types poses greater advantage as it commands easy reference to the dominant personality characteristics, which bring clearer understanding of a person's strengths and limitations. The findings of the study showed that the temperament types of Sanguine, Choleric, Melancholic and Phlegmatic have variable effects on students' well-being, academic performance and college adjustment demonstrated. The implications of the findings illustrated that in order to achieve better well-being and adjustment, students have to get a good grasp of their temperament types and work accordingly on their positive and negative sides.

**Keywords:** Temperament, Temperament Types, Personality, Well-Being, Academic Performance, College Adjustment.

### Introduction

Personality tests have long been used in assessing personality characteristics of individuals. Whether the test is used for guidance purposes, or job placement, personality measures have become varied and wide-ranging, and are mainly distinguished by the constructs they are designed to measure. Many of these personality scales however, made use of personality traits as the criteria for measurement and not the temperament types. The advantage of using the temperament types as classified by Galen is its easy reference to the dominant characteristics of the individual, and clearer understanding of their strengths and limitations. This allows a more effective appraisal of what a person of a certain

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temperament type will do in a given situation. In this manner, a better way of handling oneself, other people and contexts will be made with prudence and careful attention.

Galen proposed that temperament types are classified into four distinct categories, which include Sanguine, which is characterized by extraversion, gregariousness, and sociability; Choleric, which is considered as goal-oriented, motivated yet demanding and bossy; Melancholic, which is observed to be emotional, sensitive yet loyal and thoughtful; and Phlegmatic, which is described as relaxed, calm yet passive and lazy.

The constitution of temperament based on biology and heredity made it better criteria of personality as it is relatively stable across time, universal in nature and evident throughout the lifespan (Teglasi, 1995; Rothbart & Derryberry, 1981). Proponents of the biological foundation of temperament contended that behavioral reactions that made up the personality structure are products of the physiological mechanisms in the nervous system (Cloninger, 1986), cortical arousal (Eysenck, 1967; Rothbart, 1989), hormonal activities (Carter, 1986; Schultz & Schultz, 2001), brain activity (O’Gorman & Lloyd, 1987) and the initial belief that fluids in the body affect personality dispositions (Stelmack & Stalikas, 1991; Bujalkova, Straka & Jureckova, 2001; Lewis & Beach 1998; Osborn, 2007). This makes the measurement of personality more authentic and solid as these physiological mechanisms are inherent in human system. Its universal nature and its corresponding genetic influences make temperament types as an important personality domain.

However, studies are limited when it comes to temperament types as predictor of university students’ well-being, academic performance and college adjustment. Most of the temperament studies reviewed usually involved secondary school students (e.g. Vinas, Gonzales, Malo, Garcia and Casas, 2014) and adult respondents (e.g. Spittlehouse, Vierck, Pearson, & Joyce, 2014), who were tested with the effects of their temperament on depression, anxiety and general well-being. Most of the studies on students’ academic conditions employed personality traits such as the Big Five Personality Scale as the independent variable towards well-being (e.g. Wang, Qi & Cui, 2014; Sheldon et al., 1997; Gagne, Shapka & Law, 2014; Su et al., 2014; Berger & Freund, 2012; Tabe Bordbar, 2013), academic performance (e.g. Richardson, Abraham and Bond, 2012; Poropat, 2009; Trapmann, Hell, Hirn & Schuler, 2007) and college adjustment (e.g. Becker, 2008; Mock, 1991; Puher, 2009 & Bono, 2011).

### *Personality Traits and Well-Being*

Studies abound as to the link between personality traits and well-being, and most prominent of which is with the use of Big Five Personality Scale. The significant relationships between the scales of extraversion and neuroticism and well-being have been demonstrated in many different studies (Steel, Schmidt and Shultz, 2008; Soto, 2013; Sheldon, et al., 1997) that involve adult participants (Soto, 2013) and adolescents (Salami, 2011) in the workplace setting (Hosseinkhanzadeh & Taher, 2013) and in schools (Wang, Qi & Cui, 2014; Sheldon et al., 1997; Gagne, Shapka & Law, 2014; Su et al., 2014; Berger & Freund, 2012; Tabe Bordbar, 2013). It was even claimed by Steel, Schmidt and Shultz (2008) that personality traits nowadays perform a greater role in identifying the general level of subjective well-being of individuals

than what was previously researched (Soto, 2013). They asserted that personality is extremely important in understanding subjective well-being, as it shows that countries or people who become notably wealthy do not necessarily have an increased well-being. Soto (2013) explained that individuals who are more extraverted, agreeable, and conscientious and emotionally stable tend to experience higher life satisfaction. From among these, extraversion was noted as a powerful predictor in all equations that forecast well-being (Hotard et al., 1989). This is so because extraverted people dispose more positive affect, and experience less frequent negative affect. Highly agreeable people are also observed to engage in more pro-social behaviors than their disagreeable counterparts (Soto, 2013). They tend to cooperate more with others, express their compassion freely with others, support and treat others with politeness and respect, and generate positive experiences in social situations (Hosseinkhanzadeh & Taher, 2013). In a study of Wang, Qi and Cui (2014), they showed that self-concealment, a personality trait that prompts a person to hide distressing or negative personal information together with neuroticism have negative effects on subjective well-being. Extraversion has been seen to have positive effects. The systematic cross-variability of Big Five Personality Scale towards well-being has also been demonstrated in the study by Sheu et al., (2014) who found that extraversion is performed more in a friend's role, while neuroticism in a student role, conscientiousness in the employee role and openness to experience in the romantic partner role. However, Hotard et al., (1989) clarified that despite the fact that extraverted people are generally happy people, it does not subsequently mean that introverted are the less happy ones. They explained that introverted people who experience low subjective well-being are only those whose social relationships are poor. But introverted people who reported to have a satisfying social relationship experience the same high subjective well-being as the extraverted people.

But this present study is more focused on identifying the link between subjective well-being to the temperamental predispositions of personality. As reviewed above, one of the suggested theories of happiness is by its association with genetic and personality predispositions (Diener, Lucas, & Oishi, 2012; Steel, Schmidt & Shultz, 2008). It is said that some people are genetically predisposed to be happy or unhappy, which is mainly due to the differences of the functioning of the nervous system (Diener et al., 1999). These differences in the physiological mechanism significantly influence the temperamental base of behavior, thus people with certain personality temperament may react to situations differently from those with another type of personality temperament. As stressed by Steel, Schmidt and Shultz (2008) there is a substantial portion of stable subjective well-being that comes from personality. The set point may be the intrapersonal, temperamental, and affective personality traits represented by such traits as extraversion, reusability, and negative affectivity that are all rooted from neurobiology. According to Diener et al., (1999) the strongest evidence for these temperamental predispositions to affect certain levels of subjective well-being is coming from the behavior-genetic studies of heritability. Based on these studies, the amount of variance in subjective well-being scores could be explained by one's genes (Tellegen et al., 1988 in Diener et al., 1999).

If this is considerably true, the main proposition of this study which is to identify which from among the four temperament types of Sanguine, Choleric, Melancholic

and Phlegmatic are more likely to experience high levels of well-being is supported. Since extraversion is more of a characteristic of a Sanguine person, it is hypothesized that students who are classified as Sanguine types may experience better well-being compared to other types. Overall, this study purports to investigate whether personality temperament types could predict the levels of well-being among the university students, and in so doing, identify which from among these types of people live a more satisfying university life.

### *Personality Traits and Academic Performance*

The importance of personality as an antecedent variable to predict academic performance has been so noted since in only within a span of ten years, three meta-analyses were conducted to establish the predictive effects of personality traits toward academic performance. In 2007, a meta-analysis was conducted by Trapmann et al. in relation with the Big Five Personality Scale and academic success in university. In 2009, another meta-analysis was conducted by Poropat regarding the relationship of the Five-Factor Model of Personality and academic performance. In the same vein, another meta-analysis was performed by Richardson, Abraham and Bond in 2012 to study the psychological correlates of university students' academic performance. All of the three meta-analytic studies investigated the effect of Big Five Personality Scale on academic performance, and all agreed that trait on conscientiousness created the strongest correlation among the five variables of personality as measured by Big Five. Each of the meta-analytic studies is reviewed hereunder.

Trapmann et al., (2007) conducted their meta-analysis in response to the growing interest of investigating the non-cognitive predictors of academic success among the German-speaking countries in Europe. They claimed that conscientiousness is a valid predictor of academic grades in university level, and this has been similarly demonstrated in job performance. They added that conscientiousness is an important trait for academic achievement even without considering mediating variables such as study majors, culture and age. Thus, they suggested that a corresponding personality development training gearing towards the development of conscientiousness trait among the students should be provided for in guidance services in universities.

Poropat (2009) considered the researches on personality and other variables such as personal, social and economic are as influential as ever. He acknowledged the contribution that these studies have on its impact on the school system and occupational organizations. He has been so enamored by how personality traits are correlated with job performance that he reckoned that there should be a meta-analysis to be done to identify the effects of personality to academic performance. It is on this juncture that Poropat decided to venture into conducting a meta-analysis on personality traits and academic performance.

The FFM or the Five Factor Model term used by Poropat (2009) in his study was based from the Big Five Personality Scale, and it similarly refers to the five measures such as agreeableness, conscientiousness, emotional stability, extraversion and openness to experience. The same as the previous meta-analysis, Poropat's (2009) definition of academic performance is the college grade, which is represented by GPA. In his results, Poropat (2009) reported that despite the medium-size effect, conscientiousness still turned out to be the trait that strongly predicts academic

performance, while agreeableness and openness to experience have both small effects, and emotional stability and extraversion as having relatively minor effects. These results are congruent to the previous researches and the meta-analysis conducted by Trapmann et al. (2007).

Richardson, Abraham and Bond (2012) are the recent researchers who performed meta-analysis regarding personality and other psychological correlates in relations with academic performance. In their review, Richardson, Abraham and Bond (2012) used the same Big Five Personality scale of agreeableness, conscientiousness, neuroticism, extraversion and openness to experience alongside other personality scales such as procrastination, need for cognition and emotional intelligence. Their results show that among the eight personality measures that were tested, only the conscientiousness, and need for cognition were positively correlated, albeit small to GPA. Procrastination was found to be negatively correlated. This coincides with the previously reviewed meta-analyses, and confirmed that conscientiousness predict the university students GPA. This again is largely attributable to the characteristics of conscientious individuals to be dependable and organized, and achievement-oriented or ambitious. Their motivation to perform better in their academic tasks is intrinsically drawn.

The popularity of academic performance as a research variable made researchers pursue studies that analyzed its relationships with other important variables. The review given here is a representation of how wide-ranging the scope of academic performance is. From its relationship with personality types, to self-efficacy and performance goals, academic performance has given a lot of interesting notes on students' success in their tertiary education. However, this present student is concerned about the effects of the proposed four temperaments of personality to academic performance. This present study aims to determine whether the personality types of Sanguine, Choleric, Melancholic and Phlegmatic predict the performance of students in terms of their semester's GPA. It is also the purpose of the study to investigate indirect effects of personality type to academic performance as mediated by such constructs as adversity quotient, emotional intelligence and coping styles.

#### *Personality Traits and College Adjustment*

College adjustment has been found to be influenced by certain personality traits, and these traits are predictive of students' success in college. Schnuck and Handal (2011) confirmed in their study that the Big Five trait of neuroticism is linked with the negative adjustments of students in college, while extraversion is linked with positive adjustment. This implies that students who are highly anxious and are easily depressed have a hard time adjusting themselves in their new university environment. But gregarious and outgoing individuals are seen to have better adjustments. Neuroticism was also the personality trait that Datu (2012) found in his study of first year university students in the Philippines to be predictive of their adjustments. In his discussion, Datu (2012) said that neuroticism indicates students' inclination to develop negative emotions that can affect their degree of adaptability towards their academic demands. He stressed that those students who scored high in neuroticism may experience difficulty in their adjustment, and may find university experience as distressing. In the same study, Datu (2012) found that aside from neuroticism,

conscientiousness and extraversion are positively correlated along with other variables such as permissive paternal parenting style, career preference and gender.

In a study to predict the potential college adjustment issues of high school seniors, Puher (2009) found that neuroticism was also significantly correlated with the students' personal and emotional adjustments. Thus, it is necessary that support is given to these incoming university freshmen. In the same study, Puher (2009) also found that extraversion and agreeableness were significantly correlated with social adjustments, while conscientiousness was correlated with academic scores. On the other hand, Christensen (2012) explained that conscientiousness, extraversion and emotional stability significantly account for a significant variance towards college adjustment. But the interaction among personality traits, gender and life events do not provide evidence of support. This means that personality traits alone can predict adjustments of students in college.

## Method

### *Participants*

A total of 1,200 participants (male:  $n=429$ , 35.8%; female:  $n=771$ , 64.3%) from Assumption University of Thailand volunteered to fill in the study's questionnaire. Their ages ranged from 18 to 26 years with a median age within the range 18 to 21 years. The majority of the participants were third and fourth year level students ( $n=922$ , 76.8%) and were enrolled in business degree program ( $n=896$ , 74.7%). Their reported GPA for the previous semester included 'below 2.5' ( $n=310$ , 25.8%), 2.5-3.00 ( $n=556$ , 46.3%), 3.01-3.50 ( $n=226$ , 18.8%), and 3.51-4.00 ( $n=108$ , 9.0%).

### *Materials*

Participants responded to a three-part questionnaire that consisted of the 40-item New Temperament Test (NTT), which measures the four temperament types of Sanguine, Choleric, Melancholic, and Phlegmatic. Each of the 40 items was scored on a 5-point Likert scale ranging from 1 = almost never true to 5 = almost always true, with high scores indicating strong endorsement of that temperament type; 5-item Satisfaction with Life Scale (SWLS) designed to measure the general well-being of the participants. The items were answerable through 7-point Likert scale in which 1 = strongly disagree to 7 = strongly agree; and 24-item Student Adaptation to College Questionnaire (SACQ) designed to measure the adjustment in college among the participants. The SACQ were answered through a 9-point scale in which 1 = doesn't apply to me at all to 9 applies very clearly to me. Academic performance was identified through the GPA of the students in the previous semester.

## Results

Structural equation modeling was employed to test the path model. According to this direct model, the four personality temperament factors—Sanguine, Choleric, Melancholic, Phlegmatic—are hypothesized to be *directly* associated with the three criterion variables of well-being, academic performance and college adjustment. As stated earlier, based on the accumulated research evidence on the relationship between personality temperaments and the aforementioned variables of well-being,

academic performance and college adjustment, it is hypothesized that the student participants' personality types of Sanguine and Phlegmatic will have direct positive influences on their reported levels of well-being, academic performance and college adjustment such that the higher their Sanguine and Phlegmatic personality, the higher will be their reported well-being, academic performance and college adjustment. On the other hand, their personality types of Melancholic and Choleric are hypothesized to have direct negative influences on their well-being, academic performance and college adjustment such that the higher their Melancholic and Choleric personality, the lower will be their well-being, academic performance and college adjustment. The fit of the path model posited to represent the hypothesized direct structural relationships between the personality temperament factors and the levels of well-being, academic performance and college adjustment was tested via structural equation modeling. This statistical technique analyzed the covariance matrix generated from the model's measurement variables.

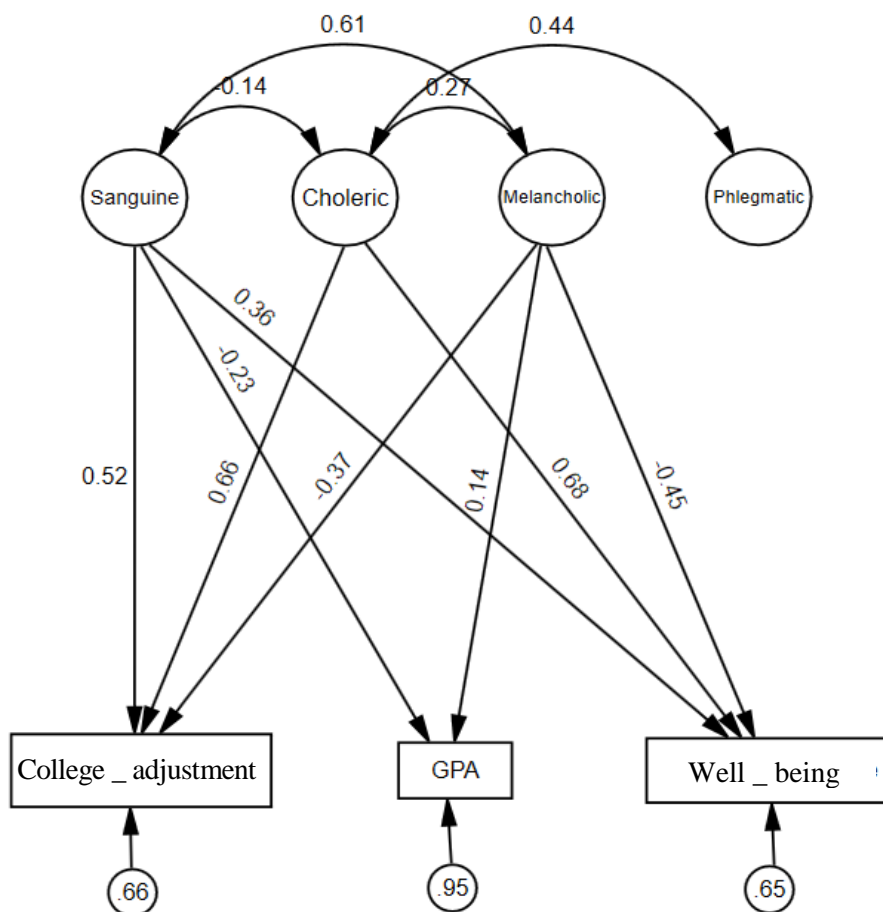
Although the overall chi-square goodness-of-fit value was significant,  $\chi^2 (df=75) = 338.698, p < .001$ , the incremental fit indices (NFI, IFI, TLI, CFI) are all close to or above 0.90 (range: 0.88 – 0.92). The RMSEA value of 0.05 is also within the range suggested by Browne and Cudeck (1993) and indicates that the model fits the population covariance matrix well. Together, these fit indices indicated that the model provided a good fit relative to a null or independence model (i.e. the posited model represented between 88% to 92% improvement in fit over the null or independence model), and support the hypothesized structure of the posited direct path model. The model also yielded a Parsimony Normed Fit index (PNFI) of 0.639 and an Akaike Information Criterion (AIC) value of 428.698. Both the PNFI and the AIC are used for comparing the goodness-of-fit of competing models. Figure 5 presents the direct model together with the significant standardized regression coefficients ( $p < .05$ ).

As can be seen from Figure 1, the student participants' temperaments of sanguine and melancholic directly influence all the three criterion variables of college adjustment, academic performance (GPA), and well-being. Thus, (1) the higher their sanguine temperament, the more positive their college adjustment, the higher their well-being, and the lower their reported GPA (Beta=.52, Beta=.36 and Beta=-.23 respectively); and (2) the higher their melancholic temperament, the more negative their college adjustment, the lower their well-being, and the higher their reported GPA (Beta=-.37, Beta=-.45 and Beta=.14 respectively). The student participants' temperament of choleric directly influences the two criterion variables of college adjustment and well-being. Thus, the higher their choleric temperament, the more positive their college adjustment and the higher their well-being (Beta=.66 and Beta=.68 respectively). The participants' temperament of phlegmatic was not found to be significantly related with any of the four criterion variables ( $p > .05$ ).

(See Figure 1 on the next page)

## Discussion

For this direct model (Figure 1), the four temperament types of Sanguine, Choleric, Melancholic and Phlegmatic were hypothesized to be *directly* influenced the three criterion variables of well-being, academic performance and college adjustment. It



**Figure 1: Direct Model in Which the Four Temperament Factors of Sanguine, Choleric, Melancholic, And Phlegmatic Are Hypothesized to Influence the Three Dvs of 'College Adjustment, 'Academic Performance (GPA)', and 'Well-Being' Directly**

was hypothesized that the student participants' temperament types of Sanguine and Phlegmatic will have direct positive influences on their reported levels of well-being, academic performance and college adjustment such that the higher their Sanguine and Phlegmatic personalities are, the higher will be their reported well-being, academic performance and college adjustment. On the other hand, their temperament types of Melancholic and Choleric were hypothesized to have direct negative influences on their well-being, academic performance and college adjustment such that the higher their Melancholic and Choleric personalities are, the lower will be their well-being, academic performance and college adjustment.

*Sanguine, Well-Being, Academic Performance and College Adjustment*



The findings from the path analysis showed that Sanguine has direct influence towards the three criterion variables of well-being, academic performance and college adjustment, in which it has direct positive influence towards well-being and college adjustment, and negative influence towards academic performance. These results are in accordance with many different researches that investigated the effects of personality types toward certain personal characteristics. For example, Hotard et al. (1989) expounded that extraversion was a powerful predictor in all equations that forecast well-being. Extraversion, which is closely associated with the Sanguine temperament type, disposes more positive affect and less frequent negative emotions. This effect has also been demonstrated in the studies of Wang, Qi and Cui (2014) and Sheu et al. (2014) who explained that extraversion has been seen to have positive effects on well-being as extraverted people performed friendly roles toward others. In the meta-analysis performed by Steel, Schmidt and Shultz (2008), extraversion was also ascertained to be a strong predictor of positive affect, happiness, overall affect and quality of life. This could mean that Sanguine, who are copiously extraverted individuals, regard life in a positive way, thus the results of this present study reflected that the higher the Sanguine the person is, the higher his reported level of well-being will be.

Positive association was also reported between Sanguine temperament type and college adjustment, which indicates that Sanguine students report better college adjustment than the other temperament types. In the study by Schnuck and Handal (2011), they reported that the personality trait of extraversion is linked with positive adjustment in school. This implies that students who are outgoing and sociable pose better adjustment in their academic life than those who are not. The friendly nature of Sanguine helps them create satisfying relationship with their friends in school. They usually bring positive vibes to others, and bring cheers to everyone. This flamboyant attitude of Sanguine makes them popular among their peers. As Puher (2009) put it, Sanguine students' extraverted personality trait significantly correlates with social adjustment.

The reported negative relationship between Sanguine temperament type and academic performance is also in accordance with the results of the previous studies that investigated the effects of personality traits towards academic success. In three different meta-analysis conducted by known researchers, extraversion, which is a distinct trait of a Sanguine person, was found to be either not a predictor of college success (Trapmann et al., 2007), or having only minor effects (Poropat, 2009) towards academic performance. Richardson, Abraham and Bond (2012) explained that extraverted students are expected to achieve lower grades due to many distractions in their academic activities. Sanguine students are sociable yet they are impulsive and disorganized, which lead them to mismanage their time and resources. They are gregarious and flamboyant but these characteristics potentially bring them to trouble as they come in late in classes, miss out meetings, forget appointments, and unmindful about their assigned tasks. This relationship has also been demonstrated among Assumption University students as the study by Pornsakulvanich et al. (2012) showed that extraversion was not related with GPA and course satisfaction.

In summary, the results of this present study as to the influence of the Sanguine temperament type towards well-being, academic performance and college adjustment

supported the hypotheses except academic performance, which was found to have a negative relationship. The results however, are in accordance with the previous studies' findings that Sanguine individuals, who are represented by their extraverted personality trait display higher well-being and better college adjustment but lower academic performance. These findings confirm the theoretical view about the characteristics of a Sanguine person and how this personality trait affects personal conditions.

#### *Melancholic, Well-Being, Academic Performance and College Adjustment*

The present study's findings indicated that aside from Sanguine, the temperament type that has direct significant influence towards the three criterion variables of well-being, academic performance and college adjustment is the Melancholic. The results showed that Melancholic temperament type has a direct negative influence towards well-being and college adjustment, while it has a direct positive influence towards academic performance. The negative influence stems from the fact that Melancholic individuals are by nature emotional and sensitive; they usually experience bouts of anxiety, doubts, depression and sadness. These traits are usually translated by their feelings of inadequacy and low self-esteem, which significantly leads to the lowering of their sense of well-being. Steel, Schmidt, and Shultz (2008) reported that neuroticism, which is one of the distinct characteristics of highly Melancholic individuals was found to be significantly correlated with subjective well-being measures, that is, neuroticism predicts negative affectivity (Fujita, 1991; Diener et al., 1999). Wang, Qi and Cui (2014) also reported that neuroticism along with self-concealment have corresponding negative effects on well-being. It is said that neurotic introverted people and introverted people who have poor social relationships tend to have lower subjective well-being than extraverted individuals (Hotard et al., 1989). This is evidently shown in the results where Melancholic, who are generally introverted have lower well-being compared to their extraverted counterparts which are the Sanguine and Choleric.

Along this line, Melancholic is also found to have lower college adjustment. Datu (2012) demonstrated this in his study among the students in the Philippines. In his results, Datu (2012) explained that neuroticism is one of the best predictors of college adjustment as it indicates students' tendency to develop negative emotions that can correspondingly affect their adaptation towards academic works. Students who scored high in neuroticism scale experience difficulty in their adjustment, and find university life distressing. Similarly, Puher (2009) found that neuroticism was also significantly correlated with students' personal and emotional adjustments, and negative emotions (Hotard et al., 1989).

In terms of academic performance, this present study's results showed that Melancholic temperament type has a direct positive relationship towards students' performance in school. This is understandable as their anxious nature prompts them to prepare accordingly towards the completion of their academic works. Melancholic people are considered to be conscientious. Their emotional nature brings them to be calculative and mindful about their actions and behaviors. In terms of academic activities, it is the Melancholic who have the high tendency to be systematic,

organized and efficient. This is what they do in order to redeem themselves from anxiety or doleful situation.

In the meta-analytic studies of Trapmann et al. (2007), Poropat (2009), and Richardson, Abraham and Bond (2012), they all concluded that only the conscientiousness trait has the direct, positive influence towards academic achievement. From among the four temperament types, it is the Melancholic who display high conscientiousness tendencies as they are careful about their actions and performance. Highly conscientious students would always think about the completion of their tasks because by not doing so, they will be bothered by their feelings of guilt and culpability. Conscientiousness is synonymous with diligence, reliability and dependability (Noftle & Robbins, 2007). These are the characteristics of Melancholic individuals who like to perform their best in their assigned tasks.

However, Trapmann et al. (2007) cautioned that when this conscientiousness trait is not nurtured well and is marred by neuroticism, it will still lead to poor academic performance. Trapmann et al. (2007) explained that different areas of neuroticism showed diverse correlation with academic achievement. Anxiety, anger and hostility are shown to have no validity for college grades but depression, self-consciousness, impulsiveness and vulnerability suggest small yet significant validities. This implies that Melancholic individuals who are bombarded with great levels of anxieties or anger may not be able to perform very well academically as they are predisposed by these deterring emotions. But if such emotions as self-consciousness or vulnerability dominate among them, they may regard it as motivation to perform well as they feel conscientious of leaving good opportunities behind. Thus, Melancholic students, who possess greater perspective on their vulnerabilities, will perform academically well since this is their way of showing their worth.

In summary, the results of this present study supported the contention that Melancholic students experience lower well-being and college adjustment brought about by their feelings of anxiety, fear and depression. But these same feelings of fear and anxiety motivate them to perform well in terms of their academic activities as it is their way to cope with the demands of the university life, and it is their nature to be organized, diligent and responsible in completing academic tasks.

#### *Choleric, Well-Being, Academic Performance and College Adjustment*

The findings from the path analysis showed Choleric to be significantly correlated with only two criterion variables, which are well-being and college adjustment. No significant relationship was found towards their academic performance. This indicates that Choleric people, as passionate and motivated as they are, have better perspective towards life and can adjust suitably well in situations. Say for instance, students who are passionate and active in the learning process can adapt significantly well in university life as it becomes part of their academic ideals (Tabe Bordbar, 2013). Choleric are the ones considered to be mechanical in their ways; they are idealistic and goal-oriented. Their focus on reaching their goals makes them concentrate on ways that help them achieve it. Basically, Choleric are leaders. They demand, they order but they achieve results.

Technically, Choleric are considered extraverted types but they are not as gregarious and disorganized as the Sanguine do. Because of their drive to achieve set goals, Choleric perform tasks and comply duties, which at times appears annoying and disturbing for others. Nonetheless, previous studies indicated that extraverted individuals have greater life satisfaction and better adjustment (Hotard et al., 1989 & Soto, 2013), which could also be attributed to the Choleric types.

Moreover, Steel, Schmidt and Shultz (2008) explained that those individuals found to have high openness to experience trait, another characteristic endemic among Choleric, have greater experiences of happiness, positive affect and quality of life. This supports the contention that when extraversion is coupled with a high openness to experience trait among the Choleric types, they can achieve higher well-being and better adjustment. This may be the explanation as to the results of this present study, in which Choleric students pose higher well-being and better adjustment in college. As Choleric are considered as leaders, students categorically know what they want, and find their ways to achieve it. This may also be the reason why in terms of their academic performance, Choleric was found to have no significant relationship with it. In a report by Trapmann et al., (2007) and Poropat (2009) regarding the relationship between personality trait and academic performance, they stated that openness to experience only have a slight positive correlation towards academic performance and extraversion has minor effects or no effects at all. This indicates that Choleric types are not as concerned on their academic performance as they apparently know that whenever they perform their tasks well, bounded by their demanding and goal-directed nature, they can well achieve better academic grades.

In summary, the results of this study were not in line with what was earlier postulated that the higher the Choleric the students are, the lower their well-being, academic performance and college adjustment. Choleric are extraverted types, who have higher tendencies to be open to experiences. These characteristics serve as the catalyst that brings them to experience higher well-being and better college adjustment. Their goal-directed and motivated behaviors lead them to achieve their set goals. They are determined, focused and driven although sometimes they are marred by feelings of bossiness and indifference, which may ineptly affect other people's feelings. However, they are not potentially concerned about their academic grades as they believe that hard work always come in with good results.

#### *Phlegmatic, Well-Being, Academic Performance and College Adjustment*

From among the four temperament types, the results of this present study showed no correlation between the Phlegmatic temperament type towards the three criterion variables of well-being, academic performance and college adjustment. This finding is in contrast to what was hypothesized that when it comes to well-being, academic performance and college adjustment, the Phlegmatic type poses significant positive relationship. For example, Soto (2013) explained that agreeableness, a distinct characteristic mostly attributed to the Phlegmatic type, experience higher life satisfaction and will likely engage in more pro-social behaviors. They like to cooperate with others and express compassion openly (Hosseinkhazadeh & Taher, 2013). Steel, Schmidt & Shultz (2008) further explained that agreeableness was part of those traits in the NEO scale to have significant relationship with well-being facets.

Since agreeable people do not look for points for argument, they usually follow what others lead them to do. They are calm, and dialectical yet thoughtful and logical in their ways. They generally avoid conflicts and are sympathetic and cooperative. Because of their calm and relaxed nature, Phlegmatic are also considered to be emotionally stable and well-adjusted. Thus, in terms of their college adjustment, Phlegmatic students are believed to be not taking things too seriously as compared with other temperament types. Puhar (2009) suggested that agreeableness trait is significantly correlated with social adjustment and in so doing have better adjustment in college (Datu, 2012; Christensen, 2012).

When it comes to academic performance, the agreeableness type showed a slight positive correlation but Trapmann et al., (2007) said that the size is negligible and cannot be generalized. This has also been resonated in the study by Poropat (2009) who found that agreeableness only has small effects on academic performance. In the study by Richardson, Abraham and Bond (2012), only the conscientiousness trait has a direct positive effect on academic performance, and other personality traits such as agreeableness does not have.

In summary, this present study's results were not in line with the notion that the higher the Phlegmatic the students are, the higher their level of well-being, academic performance and college adjustment. The nonchalant nature of Phlegmatic is usually translated into their oblivious regard about their well-being, academic performance and college adjustment. For them, achieving well-being is by leading their lives free from stresses brought about by anxieties and doubts that university life demands from them. They do not take life seriously, and they live life by the moment. This is conceivably the reason why in this present study's result, the Phlegmatic type does not have significant relationship among the three criterion variables as they are not generally cognizant with what is going on with their lives and their surroundings especially when it comes to tasks related to school. Their relaxed and calm nature allows them to take life easily, and live with it. However, this detachment may lead to troubles later on, thus they have to be reminded of their significant role in sustaining relationships and performance of academic tasks.

### **Limitations of the Study**

This study primarily aimed at investigating the effects of the temperament types of Sanguine, Choleric, Melancholic and Phlegmatic towards university students' well-being, academic performance and college adjustment. In as much as this study attempts to explain the corresponding relationships among the variables, there are certain limitations that are observed and noted, which should be taken into consideration for future research on this or related topics. In the interpretation of findings, a certain degree of caution should be taken into account when generalizing the results. First, the research design of this study is cross-sectional and descriptive therefore no definitive conclusions that can be drawn as to the causal sequential effects of the study's exogenous and criterion variables. The observed significant path coefficients denote only relationship, and not causality.

Second, this present study used English language as the main medium in the development and arrangement of the questionnaire, and since English is not the main language of the participants, there might be lapses in terms of the understanding of

items and interpretation of the statements. And since the questionnaire is a self-report measure, the reliance of the participants on their memory in answering the questions may also have affected the objectivity of their answers. They may not have expressed truthfully their thoughts and feelings.

Third, this study was conducted among university students in Thailand. Although it was earlier contended that measures of personality are universal, there might be cultural effects as to the students' perception about their well-being, academic performance, and college adjustment. There might be disparity in terms of what the measures want to present than how it is understood by the students. Moreover, in generalizing the findings to other population or groups, immense caution is advised as the results are only reflective of the perceptions and behaviors of Assumption University students and may not be true to other student population, or any other group for that matter.

### **Implications of the Findings**

The findings of this study demonstrated that the temperament types have varying influences on the students' level of adjustment, well-being and performance. This implies that each of the temperament type has its own effects on a specific personal condition. Say for instance, Sanguine types who are gregarious and flamboyant display higher well-being and college adjustment because of their happy and easy-going nature. However, when it comes to their academic performance, they reported lower level of performance because of their carefree and adamant attitudes. On the other hand, Melancholic types reported lower levels of well-being and college adjustment due to their bouts of anxiety, depression and heightened emotionality. But when it comes to their academic performance, they have higher tendencies to perform well because their anxious attitudes bring them to prepare and study well in order to avoid failure or embarrassment. Choleric types attain higher well-being and college adjustment because of their goal-directed and motivated behaviors. However, their temperament type poses no significance towards their academic performance they because they believe that hard work always pays off. Phlegmatic types do not pose any effects towards the three criterion variables and this is may be because their passive and nonchalant attitudes bring them to take life easily despite troubles. Attaining high well-being, performing well in school and adjusting in university life don't affect them at all. With these results, it goes to show that when it comes to dealing with their life and academic issues, students should get a good grasp of their temperament types, pointing out the areas that they feel most vulnerable so that proper precaution and intervention could be given.

### **Conclusion**

This present study about the influences of temperament types toward university students' well-being, academic performance and college adjustment showed that each of the person's temperament types is significant in understanding certain personal conditions. This indicates that each person is unique, and their corresponding distinct characteristics make them deal with their life problems differently. Thus, counseling and life coaching should take into consideration students' personality and temperament types so that proper education could be given to them as to their

potential and detrimental behaviors. When students get a good grasp about their personality dynamics, they can adjust well to situations and attain greater well-being, and perform fairly well in school.

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