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Profiling DISC Personality Types, Spiritual Intelligence, and Perceived Stress in Medical Students

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ABSTRACT: This descriptive study investigates the DISC personality types, spiritual intelligence, and perceived stress among medical students. Utilizing a cross-sectional design, data were collected from 71 pre-clinical medical students using DISC test, the Spiritual Intelligence Self-Report Inventory, and the Perceived Stress Scale (PSS). The study reveals that Steadiness (S) and Compliance (C) are the predominant personality types among the participants. There are no significant differences in spiritual intelligence across personality types, but notable differences in perceived stress levels, particularly among Dominance (D), Influence (I), and Steadiness-Compliance (SC) types.

KEYWORDS: medical students, perceived stress, spiritual intelligence, personality

I. INTRODUCTION

A healthy mental condition is one of the aspects that must be fulfilled to achieve individual well-being. Conversely, if mental health is disrupted, it can lead to problems in daily life. Various factors can cause mental health problems; Michaud & Fombonne (2005) mention that one factor is social change, including changes in family structure, rising unemployment, and increasing demands and pressures in work or education.

Various challenges arise as significant sources of pressure, particularly in university students' lives. Academic concerns, social interactions problems, the transition to adulthood, and financial management issues constitute crucial factors contributing to stress among individuals (Bouchrika, 2020). Addressing academic stress specifically, data from the American College Health Association – National College Health Assessment III report highlights noteworthy percentages, with stress and anxiety recorded at 45.2% and 35.2%, respectively, as prominent obstacles impacting academic performance (ACHA, 2021). In particular, a comparative analysis of stress levels among undergraduate students, based on prior research, reveals that medical students tend to experience higher stress and perceived stress levels compared to their counterparts in other disciplines (Jafri et al., 2017; Elias, Ping & Abdullah, 2011; Seedhom et al., 2019). The heightened stress levels in medical students result from academic, financial, transportation, and family-related factors. Notably, academic stressors play a significant role, acting as a primary cause of moderate to severe stress (Seedhom et al., 2019; Rahmayani, Liza, & Syah, 2019; Melaku, Mossie, & Negash, 2015). These academic stressors include heavy study loads, a competitive environment, and the challenges of examinations (Abouammah et al., 2020).

Perceived stress has serious implications for individuals. Lee, Kim, & Wachholtz (2016) state that perceived stress significantly affects individual life satisfaction. When individuals have high levels of perceived stress, life satisfaction tends to be low, and vice versa. In other research, it is also known that perceived stress is a predictor of life quality (Seo et al., 2018), and higher levels of perceived stress are likely to be associated with reporting chronic health problems (Leonelli et al., 2017). Additionally, other impacts can include substance abuse, alcohol consumption, and smoking (Melaku, Mossie, & Negash, 2015).

Perceived stress can vary among individuals even if they experience the same events. A study by Al Sunni & Latif (2014) found that 71.7% of medical students in the pre-clinical stage experienced stress, while 28.3% did not. The perceived level of stress also varies from mild to severe. A study by Heinen, Bullinger, & Kocalevent (2017) with first-year medical students showed percentages for each category of stress level: average stress (83.8%), slightly increased stress (12.8%), and high stress (3.4%).

Referring to the Encyclopedia of Behavioral Medicine, Phillips (2013) defines perceived stress as an individual's feelings or thoughts about the amount of stress experienced at a specific point in time or during a certain period. Perceived stress refers to how individuals feel about general life stress and their ability to cope with it. When individuals experience similar negative life

events, each may have different assessments and levels of impact on those events. This impact can be due to individual factors such as personality, coping resources, and support.

As one of the factors influencing individuals in providing assessments and behavioral responses, personality affects each individual differently. Previous researchers have researched personality and its relationship with stress or perceived stress. Anitei, Stoica, & Samsonescu (2013) suggest that individuals with high emotional stability tend to experience less physical stress and somatic complaints. On the other hand, in other research, Mirhaghi & Sarabian (2016) found that neuroticism is positively associated with perceived stress, while extraversion, agreeableness, and conscientiousness are negatively associated with perceived stress. A study by Akgun & Ture (2019) revealed that extraverted personality is negatively correlated with perceived stress, while there is a positive correlation between introverted personality and perceived stress. Consistent with personality trait research using the Five Factor Model, Yang's (2019) study indicates that DISC personality types are related to perceived stress.

The topic of spirituality has been increasingly researched in the field of positive psychology. Spirituality is also associated with the mental and psychological health of individuals and is considered one of the ways to cope with stress. Research by Bhatnagar (2020) found that spirituality negatively correlates with stress, meaning that higher levels of spirituality are associated with lower stress levels. However, the strength of this relationship is weak. Hashemi & Eyni (2020), who conducted their study with a sample of elderly, stated that perceived stress has a significant negative relationship with spiritual intelligence.

Spiritual intelligence is a relatively new concept that encompasses various intelligences in the cognitive, moral, emotional, and interpersonal domains, helping individuals achieve internal and external integration. According to Zohar & Marshall (2004), individual exercises can build and develop spiritual intelligence. Spiritual intelligence is the ability to make life harmonious, be aware of higher spiritual thoughts, and practice humility, gratitude, and empathy (Mayer, 2000 in Seifi et al., 2018).

According to some studies, certain personalities are related to spiritual intelligence. Using the Five Factor Model, Amrai et al. (2011) stated that conscientiousness, agreeableness, and extraversion have a positive relationship with spiritual intelligence, while neuroticism has a negative relationship. Seifi et al. (2018) reported slightly different results, with only extraversion having a positive relationship with spiritual intelligence, while openness to experience, agreeableness, and conscientiousness have a negative relationship.

In a study, Skrzypińska (2021) mentioned that personality is crucial in creating intrinsic motivation that triggers the innate tendency of humans to seek meaning in life. At this stage, personality involves its spiritual dimension to build meaning and life purpose. Subsequently, spirituality activates existential intelligence in developing belief and value systems or the capacity to answer profound questions about human existence useful in finding meaning in life. In the final stage, spiritual intelligence is used in actualizing the owned goals.

In this research, we have a different study on personality based on DISC to see how spiritual intelligence and perceived stress are. As a psychometric tool, DISC can measure personality, especially in terms of work behavior and how individuals interact, as well as how they behave in stressful conditions. The reason for using the DISC model is that it is linked to the context of stress felt by students and their spiritual intelligence.

This research aims to investigate (1) the description of medical students' personality types based on the DISC model; (2) the description of the level of spiritual intelligence and perceived stress among medical students; (3) the differences in spiritual intelligence based on the DISC personality types; and (4) the differences in perceived stress based on the DISC personality types.

II. LITERATURE REVIEW

A. Perceived Stress

Stress is a condition in which the perceived burden on an individual exceeds their ability to cope with it. Stress can arise due to life pressures, conflicts in needs, or conflicting goals (Markam, 2003). Stress is also defined as a negative emotional experience accompanied by predictable biochemical, physiological, cognitive, and behavioral changes aimed at either altering the stressful event or adapting to its effects (Taylor, 2015). According to Lazarus & Folkman (1984), psychological stress is a specific relationship between an individual and the environment that the individual evaluates as taxing or exceeding their resources and endangering their well-being.

Perceived stress is a term related to how an individual feels about stress in general in their lives and their ability to handle that stress. According to Taylor (2015), perceived stress is the perception that an event is stressful regardless of its objective characteristics. From various definitions provided by experts, perceived stress can be interpreted as an individual's perception, thoughts, or feelings about a condition that is deemed burdensome or jeopardizing their well-being, occurring within a specific timeframe.

Perceived stress, as defined by Cohen, Kamarck, & Mermelstein (1983), is the extent to which situations in a person's life are appraised as stressful. Meanwhile, according to Spada et al. (2008), perceived stress is the result of a state reflecting a global

evaluation of the significance and difficulty of facing personal and environmental challenges. The definition of perceived stress by Phillips (2013) in the Encyclopedia of Behavioral Medicine is the feelings or thoughts an individual has about the extent of stress they experience at a specific point in time or over a specific period.

The Perceived Stress Scale (PSS) is a psychological instrument used to measure the perception of stress. This scale was developed by Cohen, Kamarck, & Mermelstein in 1983. The PSS is utilized to gauge the extent to which situations in a person's life are appraised as stressful. The scale items are designed to explore how respondents, facing unpredictability, lack of control, and an overwhelming burden, perceive their lives. The scale also includes a number of direct questions about the current level of stress experienced. Questions in the PSS inquire about feelings and thoughts over the past month, and respondents are also asked how often they have experienced certain things.

B. Spiritual Intelligence

Spirituality, like emotions, has varying levels of depth and expression. It may be conscious or unconscious, evolving or stagnant, healthy or pathological, naive or sophisticated, beneficial or dangerously distorted. Wilber summarizes the definitions of spirituality as follows: (a) Spirituality involves the highest level of each developmental line, such as cognitive, moral, emotional, and interpersonal; (b) spirituality itself is a separate developmental line; (c) spirituality is an attitude at any stage; and (d) spirituality involves peak experiences, not stages Vaughan (2002).

According to Kadkhoda, spiritual intelligence combines the structure of spirituality and intelligence into a new framework. When spirituality is associated with the seeking and experiencing of sacred elements, peak experiences, excellence, and essence, spiritual intelligence requires the ability to use these spiritual issues to create obedience and effective actions in producing valuable products or outcomes. Generally, the development of spiritual intelligence structures can be considered by utilizing spiritual capacities and resources in practical situations (Esmaili, Zareh, & Golverdi, 2014).

The principles of spiritual intelligence, according to Santos (Esmaili, Zareh, & Golverdi, 2014), include: (1) Recognizing and affirming spiritual intelligence, meaning the belief that we are spiritual beings and physical life in this world is temporary. (2) Acknowledgment and belief in a higher spiritual being (meaning God). (3) If there is a creator and we are creations, there must be a guide. (4) There is a need to discover the purpose of life and accept the reality that some skills are genetically encoded. (5) Knowing our position in relation to God (personality reflects our understanding of God). (6) Understanding the principles of life and realizing that having a successful life requires a lifestyle and decisions built in accordance with these principles.

C. Personality

Personality is a complex hypothetical construct that has been defined in various ways (Weiten, 2017). It is a part of the soul that builds human existence into a unity, not fragmented into various parts or functions. Understanding personality means understanding 'the self' or understanding a person in its entirety (Alwisol, 2009). Personality can be defined as a pattern of specific traits and characteristics that are relatively permanent in an individual's behaviour (Feist & Feist, 2010). According to Allport, personality is something within the individual that guides and directs all the behavior of that individual. Personality is a tendency in behavior that arises from within the individual in response to their environment (Alwisol, 2009).

DISC

The theoretical basis of the DISC is the Biaxial Model or the two-axis behavior model, involving the movement of one axis against the other. The two opposing axes in the DISC theory are assertiveness and receptiveness, as well as openness and control. Marston (1928) created four basic human types symbolized by four crucial factors in measuring personality: Dominance (dominant/powerful nature), Influence (influencing), Steadiness (steady), and Compliance (thinker/critical).

a) Dominance

Individuals with dominant traits enjoy achieving results quickly, are drawn to challenges and new areas, and assume authority. They feel comfortable in environments full of power and authority with opportunities to enhance individual achievement. Dominant individuals like to take responsibility and do not want to be under the control of others, feeling most comfortable when they can control the environment. They work well when free from control and supervision. Dominant individuals often bring up big ideas, take control, and make quick decisions. However, they may overlook details, lack commitment, and often disregard the judgments and feelings of others. Therefore, those with strong dominant traits need others as advisors, calculating risks and researching facts. Typically, individuals with dominant tendencies are capable of taking on leadership roles.

b) Influence

Individuals with influential traits tend to have fast-paced behavior. They prefer to be and work with others when completing a task. Additionally, they enjoy entertaining, influencing, and winning people's hearts. They like to be famous

and praised by many. They delight in socializing with a community or group to expand their relationships. Influential individuals enjoy interacting with others and making a positive and enthusiastic impression. Individuals with influential traits are more inclined towards coaching and counseling. They have delicate feelings and are not focused on the current task at hand. They are more suitable as advisors, requiring others to seek facts, communicate comprehensively, respect sincerity, appreciate small things, and approach things logically.

c) Steadiness

Someone with steadiness is consistent in carrying out tasks until successful, not oriented towards speed but consistency. They excel in creating harmony in the workplace. Their most positive contributions are being true listeners, patient, helpful, and adept at controlling situations. Individuals with steadiness always focus on cooperating with others to complete their tasks. Their weakness lies in not having strong self-motivation, making them prone to quick changes and easily influenced by others, as well as being reluctant to make decisions. This type needs someone who can push them and help prioritize tasks, work, and possess high flexibility in their procedures. For optimal effectiveness, individuals with steadiness need to be informed in-depth about upcoming changes as soon as possible to adjust. They feel comfortable in a conflict-free environment, are task-oriented in groups, value sincere appreciation, and trust in others' abilities.

d) Compliance

Compliance produces diligent workers who focus on quality and accuracy. Characteristics of individuals with strong compliance include being very meticulous and enjoying complex thinking. They are comfortable in environments with clear performance expectations. They enjoy doing anything that has a positive impact. Compliant individuals are usually steadfast in their opinions and choices. Positive traits of compliance include being meticulous, critical thinking, using a subtle and analytical approach, having well-thought-out plans, solving problems well, being professional, diplomatic, and having high loyalty. Their weakness lies in tending to doubt and appearing slow in decision-making due to being too meticulous. Thus, work done by very meticulous individuals will be processed slowly, vindictive, and overly critical. Extremely meticulous individuals will need others to compromise and make quick decisions. Therefore, compliant individuals usually work under the command of dominant individuals.

III. RESEARCH DESIGN

This research adopts a quantitative approach, employing a cross-sectional study design to investigate the designated subject matter thoroughly. Data collection involved gathering responses online from participants using carefully selected research instruments, consisted of DISC personality test, spiritual intelligence test, and the perceived stress scale. The personality type variable was measured using the DISC test (Marston, 1928) in the standardized Indonesian version. To measure spiritual intelligence, the Spiritual Intelligence Self-Report Inventory (King & DeCicco, 2009) was used, and perceived stress was assessed using The Perceived Stress Scale (PSS) by Cohen, Kamarck, & Mermelstein (1983). Before data collection, transliteration to Indonesian was conducted for the spiritual intelligence and perceived stress instruments through a process that included (1) translating the scale items by the researcher, (2) assessment by three experts (expert judgment), (3) making corrections based on expert suggestions; (4) readability test; and (5) validity and reliability testing of the measurement instruments. The validity and reliability tests revealed that the Spiritual Intelligence Self-Report Inventory had 18 valid items out of 24, with a reliability value of Cronbach's Alpha = 0.850. For the Perceived Stress Scale, 12 out of 14 items were found to be valid, with a reliability value of Cronbach's Alpha = 0.829.

The research sample consisted of 71 people, out of the 90 who originally agreed to participate and filled the online form. These participants met specific criteria as medical students in the pre-clinical phase who are registered and not on leave. The demographic characteristics of the research respondents, including age and gender, are presented in table 1:

Respondents'	Category	f	%
Age	16 – 17 years old	1	1.41
	18 – 19 years old	38	53.52
	20 - 21 years old	25	35.21
	above 21 years old	7	9.86
Sex	Male	21	29.58
	Female	50	70.42
	Ν	71	100

Table 1 describes the total sample of 71 respondents. It was found that the majority of respondents, based on age groups (M= 19.58, SD= 1.37) were students aged 18-19 years (53.52%). Additionally, female respondents were more prevalent (70.42%) compared to male respondents (29.58%).

The research data were analysed using descriptive statistics. To examine the differences in perceived stress and spiritual intelligence based on personality types (DISC), the Kruskal-Wallis test was employed. The statistical tool used for these tests was the IBM SPSS[®] 25 application.

IV. RESULTS AND DISCUSSION

Distribution of Personality Type, Spiritual Intelligence, and Perceived Stress Data

The frequency distribution of each personality type, level of spiritual intelligence, and level of perceived stress is summarized in the following table.

Variable	Category	f	%	
	Dominance (D)	2	2.82	
	Influence (I)	8	11.27	
Dama a litera Tama	Steadiness (S)	28	39.44	
Personality Type	Compliance (C)	29	40.84	
	Steadiness-Compliance (SC)	3	4.22	
	Dominance-Compliance (DC)	1	1.41	
	Low	17	23.94	
Spiritual Intelligence	Average	42	59.16	
	High	12	16.90	
	Low	10	14.09	
Perceived Stress	Average	44	61.97	
	High	17	23.94	

As indicated in Table 2, the study's participants fall into six personality types. The most common personality types are Compliance (C) at 40.84% and Steadiness (S) at 39.44%, followed by Influence (I) at 11.27%. Less common types include Steadiness-Compliance (SC) at 4.22%, Dominance (D) at 2.82%, and Dominance-Compliance (DC) at 1.41%. These findings align with Alshehri et al. (2018), who found that C and S were the most common DISC personality types among medical students. Similarly, Milne et al. (2019) observed that physiotherapy students predominantly exhibited C, S, I, and D types, respectively. Conversely, Wali et al. (2021) found that the most common personality types among dental students were D (56.2%) and I (27.4%). Yang (2019) also noted that nearly half of the students in their sample had type D personalities.

Individuals with a type C personality, as described by Marston (1928), are diligent, focused on quality and accuracy, and characterized by traits such as meticulousness, critical thinking, and high loyalty. These traits, comparable to the conscientiousness type in the Five Factor Model, can predict academic performance in medical students. Type S individuals are consistent, fear change, and excel in creating harmony and collaboration. This type is similar to the empathy qualities measured by the Jefferson Scale of Empathy, essential for medical practice. Type D and I personalities, and sub-types SC and DC, are less common but exhibit unique traits such as creativity, sociability, and influence. Eley et al. (2016) found two dominant profiles among medical students: Profile 1, characterized by resilience and versatility, and Profile 2, characterized by meticulousness and a higher level of anxiety. Both profiles are more mature and responsible than the general population.

Regarding spiritual intelligence (M = 35.15; SD = 10.45), the majority of respondents have an average level (59.16%), with a smaller proportion having low (23.94%) and high (16.90%) levels of spiritual intelligence. This suggests that most respondents perceive themselves to have a moderate degree of spiritual intelligence.

According to Zohar & Marshall (2004), Spiritual Intelligence is the intelligence that defines one's humanity, enabling individuals to make moral choices and find deeper meanings in situations and existence. Spiritual Intelligence is linked to transformative intelligence, allowing for the creation of new paradigms by broadening perspectives on problems and situations. It eliminates old motivations and drives individuals toward higher ones, forming the basis for strategic thinking. Abdulwahid (2021) highlights that social factors, such as involvement in social groups or social media, influence Spiritual Intelligence. These connections foster deeper spiritual perceptions and motivations beyond mere material benefits. Most respondents in this study

had average Spiritual Intelligence levels, while only 16.90% having high Spiritual Intelligence. Wantiyah, Ulansari, & Deviantony (2020) explain that individuals with high Spiritual Intelligence understand their deepest motives, have high awareness, and are responsive to themselves. They are adept at overcoming difficulties, facing challenges with courage, and differ from the majority by avoiding harm to others.

In terms of Perceived Stress (PS) variable (M= 24.03; SD= 6.18), most respondents experience an average level of stress (61.97%), while 23.94% report high levels of stress, and 14.09% report low levels. This indicates that a significant portion of respondents are dealing with moderate to high levels of perceived stress. These results align with several studies, such as Wang et al. (2021), which found that 82.3% of participants, who were medical students, experienced moderate to high stress levels; Gazzaz et al. (2018) reported that over half of the study participants felt stressed; and Heinen, Bullinger, & Kocalevent (2017), which found that 83.8% had average stress levels. Although the questions in this study did not specifically target the academic environment, it is likely a significant source of student stress. Wang et al. (2021) identified that academic stress among medical students primarily came from exam and practical performance, peer competition, and the extensive curriculum. Psychosocial stressors included concerns about the future, family financial instability, and high parental expectations.

Spiritual Intelligence based on personality type

The distribution of spiritual intelligence (SI) levels for each personality type is summarized in table 3 below:

	Level of SI								
Personality Type	Low			Average			High		
	f	% total	% w/in SI	f	% total	% w/in SI	f	% total	% w/in S
Dominance (D)	0	0%	0%	2	2.8%	4.8%	0	0%	0%
Influence (I)	0	0%	0%	7	9.9%	16.7%	1	1.4%	8.3%
Steadiness (S)	7	9.9%	41.2%	17	23.9%	40.5%	4	5.6%	33.3%
Compliance (C)	9	12.7%	52.9%	15	21.1%	35.7%	5	7%	41.7%
Steadiness- Compliance (SC)	1	1.4%	5.9%	1	1.4%	2.4%	1	1.4%	8.3%
Dominance- Compliance (DC)	0	0%	0%	0	0%	0%	1	1.4%	8.3%

Table 3: Frequency dis	stribution of SI levels based	on DISC personality type
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The table illustrates the distribution of personality types across varying levels of Spiritual Intelligence (SI). Within the low SI category, Steadiness (S) and Compliance (C) are prominent, with Steadiness accounting for 9.9% of respondents and Compliance for 12.7%. In the average SI group, Steadiness remains prevalent at 23.9%, while Compliance leads with 21.1%. Similarly, in the high SI bracket, Compliance maintains prominence at 7%, and Steadiness at 5.6%. Influence (I) exhibits significance primarily in the average SI level, representing 9.9% of respondents. Other personality types like Steadiness-Compliance (SC) and Dominance-Compliance (DC) demonstrate minimal representation across all SI levels. The statistical analysis results to examine the difference in spiritual intelligence based on personality types indicate that there is no difference in spiritual intelligence based on the respondents' personality types.

The levels of spiritual intelligence do not show significant differences when examined based on DISC personality types. In several studies using the Big Five Personality/ Five Factor Model (Amrai et al., 2011; Mahasneh et al., 2015; Madalaimuthu & Kadhiravan, 2016; and Seifi et al., 2018), certain personality traits were found to correlate positively or negatively with overall spiritual intelligence or its dimensions (critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion) or predict spiritual intelligence.

Spiritual intelligence, which includes skills in developing and maintaining relationships with a higher power, finding life's meaning, externalizing feelings, and adhering to guiding morals and ethics, is essentially a skill that can be developed through various means, including education. The quantity of spiritual intelligence among the respondents in this study is generally at an average level across different DISC personality types. Within the DISC personality types, no single type is inherently better or worse than another, which may explain the lack of significant differences in spiritual intelligence levels based on DISC personality types.

Perceived Stress based on personality type

The distribution of perceived stress (PS) levels based on DISC personality types is summarized in table 4 below:

	Lev	el of PS							
Personality Type	Low			Average			High		
	f	% total	% w/in PS	f	% total	% w/in PS	f	% total	% w/in PS
Dominance (D)	0	0%	0%	1	1.4%	2.3%	1	1.4%	5.9%
Influence (I)	2	2.8%	20%	6	8.5%	13.6%	0	0%	0%
Steadiness (S)	4	5.6%	40%	16	22.5%	36.4%	8	11.3%	47.1%
Compliance (C)	3	4.2%	30%	20	28.2%	45.5%	6	8.5%	35.3%
Steadiness- Compliance (SC)	0	0%	0%	1	1.4%	2.3%	2	2.8%	11.8%
Dominance- Compliance (DC)	1	1.4%	10%	0	0%	0%	0	0%	0%

Table 4: Frequency	distribution of	perceived stress	levels based	on DISC personality type
		percented ou coo		

The table shows that Steadiness (S) and Compliance (C) are the most common personality types across all PS levels. Steadiness (S) is highest in the low PS group (40%), while Compliance (C) accounts for 30%. In the average PS group, Compliance (C) leads with 45.5%, followed by Steadiness (S) at 36.4%. For high PS, Steadiness (S) predominates at 47.1%, with Compliance (C) at 35.3%. Influence (I) is more common in the average PS group (13.6%), and Dominance-Compliance (DC) is minimally present, with only one occurrence in the low PS group (10%). Dominance (D) and Steadiness-Compliance (SC) are less represented across all PS levels.

Based on the comparative test of perceived stress levels based on personality types, significant differences were found among students with Dominance (D) personality type compared to Influence (I) personality type (p = 0.036); and among students with Influence (I) personality type compared to Steadiness-Compliance (SC) personality type (p = 0.014). The characteristics of type I individuals, who tend to enjoy social interaction, have good verbal communication skills, like participating in groups, and often rely on social skills to solve problems, as well as being emotionally expressive, enable individuals with this personality type to not perceive everything stressful and manage stress or problems more easily. On the other hand, type D individuals enjoy competition, relish challenges even when they are difficult, enjoy problem-solving, and set high standards, but they also tend to be impatient and dislike routine tasks. Losing control over others and being taken advantage of can be fearful for type D individuals. Besides type D, type I also significantly differs from type SC in perceived stress. The combination of steady quality characteristics of type S with the meticulous and accurate nature of type C highlights individuals with accommodating attitudes, calmness, honesty, detail-orientedness, critical thinking, fact-focused, systematic, rule-abiding, but tend to avoid problems or conflicts, defensively react to criticism, and tend to be slow and inflexible, making them very resilient individuals who manage conflicts structurally (Permana, 2017). This combination allows them to perceive pressure differently from type I individuals. The more patient type SC perceives or evaluates pressures systematically and manages them steadily.

V. CONCLUSIONS

Based on the results of this research, it can be concluded that:

- 1. The majority of students' personality types are Compliance (C) (40.84%) and Steadiness (S) (39.44%). This personality type are beneficial for academic performance and creating a collaborative environment in medical practice.
- 2. Most respondents had an average level of spiritual intelligence (59.16%), and a small number had a low (23.94%) and high (16.90%) level of spiritual intelligence. A moderate level in students' spiritual intelligence indicates a general ability in moral reasoning and strategic thinking among students.
- 3. The majority of respondents reported experiencing moderate levels of perceived stress (61.97%), while a significant proportion indicated high (23.94%) and low (14.09%) levels of stress. Academic and psychosocial stressors, possibly including test performance, peer competition, and family expectations, are major contributors to the stress students experience.
- 4. Statistical analysis shows there is no significant difference in spiritual intelligence based on the respondent's DISC personality type.

- 5. At all levels of Perceived stress, Steadiness (S) and Compliance (C) are the most common personality types, while Dominance (D) and Steadiness-Compliance (SC) are less represented across all PS levels.
- 6. Significant differences in perceived stress levels were found between students with the Dominance (D) and Influence (I) personality types, as well as between those with the Influence (I) and Steadiness-Compliance (SC) personality types.

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REFERENCES

- 1) Abdulwahid, K. S. (2021). Social factor effects on linguistic performance, emotional and spiritual intelligence. *International Journal of Islamic Educational Psychology*, 2(1), 15–35.
- 2) Abouammah N., Irfan, F., Marwa, I., Zakria, N. & AlFaris, E. (2020). Stress among medical students and its consequences on health: A qualitative study. *Biomedical Research*, *31*(1).
- ACHA. (2021). American College Health Association-National College Health Assessment III. Undergraduate Student Reference Group. Data Report. Fall 2020. https://www.acha.org/NCHA/ACHA-NCHA_Data/Publications_and_Reports/ NCHA/Data/Reports_ACHA-NCHAIII.aspx
- 4) Akgun, A.I. & Ture, N. (2019). The Relationship between Personality Type and Perceived Stress Level: Evidence from Independent Public Accountants. *Business and Economics Research Journal*, *10*(4), 903–913.
- 5) Al Sunni, A. & Latif, R. (2014). Perceived stress among medical students in preclinical years: A Saudi Arabian perspective. *Saudi J Health Sci*, *3*, 155–159.
- Alshehri, K. A., Alshamrani, H. M., Alharbi, A. A., Alshehri, H. Z., Enani, M. Z., T. Alghamdi, M., Alqulyti, W. M., & Hassanien, M. A. (2018). The relationship between personality type and the academic achievement of medical students in a Saudi medical school. *International Journal Of Community Medicine And Public Health*, *5*(8), 3205–3211.
- 7) Alwisol. (2009). Psikologi Kepribadian. Malang: UMM Press.
- 8) Amrai, K., Farahani, A., Ebrahimi, M., & Bagherian, V. (2011). Relationship between personality traits and spiritual intelligence among university students. *Procedia Social and Behavioral Sciences*, *15*(2011), 609–612.
- 9) Anitei, M., Stoica, I., & Samsonescu, M. (2013). Particularities of personality traits and perceived stress at workplace for the young workers in Romania. *Procedia Social and Behavioral Sciences*, *84*(2013), 1010 1014.
- Bhatnagar, A. (2020). An Assessment of Spirituality and its Relationship to Stress with Special Reference to Post Graduation Diploma in Hospital and Health Management Student. *Journal of Research in Medical and Dental Science*, 8(1), 86–95.
- 11) Bouchrika, I. (2020). *50 Current Student Stress Statistics: 2019/2020 Data, Analysis & Predictions.* https://www.guide2research.com/research/student-stress-statistics#4
- 12) Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, 24(December), 385–396.
- 13) Eley, D.S, Leung, J., Hong, B.A, Cloninger, K.M, Cloninger, C. R. (2016). Identifying the Dominant Personality Profiles in Medical Students: Implications for Their Well-Being and Resilience. *PLoS ONE*, *11*(8).
- 14) Elias, H. Ping, W.S. & Abdullah, M. C. (2011). Stress and Academic Achievement among Undergraduate Students in Universiti Putra Malaysia. *Procedia Social and Behavioral Sciences*, 29(2011), 646 655.
- 15) Esmaili, M., Zareh, H., & Golverdi, M. (2014). Spiritual Intelligence: Aspects, Components and Guidelines to Promote It. *International Journal of Management, Accounting and Economics*, 1(2).
- 16) Feist. J & Feist, G. J. (2010). Theories of Personality. Teori Kepribadian. Jakarta: Salemba.
- Gazzaz, Z. J., Baig, M., Al Alhendi, B. S. M., Al Suliman, M. M. O., Al Alhendi, A. S., Al-Grad, M. S. H., & Qurayshah, M. A. A. (2018). Perceived stress, reasons for and sources of stress among medical students at Rabigh Medical College, King Abdulaziz University, Jeddah, Saudi Arabia. *BMC Medical Education*, 18(1), 29.
- 18) Hashemi, Z & Eyni, S. (2020). Perceived Stress in the Elderly: The Role of Spiritual Intelligence, Self-Compassion, and Psychological Hardiness. *Journal of Aging Psychology*, *5*(4), 289–299.
- 19) Heinen, I., Bullinger, M., & Kocalevent, R. . (2017). Perceived stress in first year medical students associations with personal resources and emotional distress. *BMC Med Educ*, *17*(4).
- 20) Jafri, S.A.M., Zaidi, E., Aamir, I.S., Aziz, H.W., Imad-ud-Din, & Shah, M. A. H. (2017). Stress Level Comparison of Medical

and Non-medical Students: A Cross Sectonal Study done at Various Professional Colleges in Karachi, Pakistan. Acta Psychopathologica, Vol.3(2), 8.

- 21) King, D.B., & DeCicco, T. L. (2009). A viable model and self-report measure of spiritual intelligence. *International Journal of Transpersonal Studies*, *28*(1), 68–85.
- 22) Lazarus, R.S. & Folkman, S. (1984). Stress, Appraisal and Coping. New York: Springer.
- 23) Lee, J.E., Kim, E.Y. & Wachholtz, A. (2016). The effect of perceived stress on life satisfaction: The mediating effect of selfefficacy. *Chongsonyonhak Yongu*, 23(10), 29–47.
- 24) Leonelli, L. B., Andreoni, S., Martins, P., Kozasa, E. H., Salvo, V. L., Sopezki, D., Montero-Marin, J., Garcia-Campayo, J., & Demarzo, M. M. P. (2017). Perceived stress among Primary Health Care Professionals in Brazil. *Rev Bras Epidemiol*, 20(2), 286–298.
- 25) Madalaimuthu, A. & Kadhiravan, S. (2016). Influence of Spiritual Intelligence on Personality Factors Among College Students. *International Journal of Education and Psychological Research (IJEPR)*, *5*(2).
- 26) Mahasneh, A.M., Shammout, N.A, Alkhazaleh,Z.M., Al-alwan, A.F., & A. J. D. (2015). The relationship between spiritual intelligence and personality traits among Jordanian university students. *Psychology Research and Behavior Management*, 2015(8), 89–97.
- 27) Markam, S. S. (2003). Psikologi Klinis. Jakarta: UI Press.
- 28) Marston, W. M. (1928). *Emotions Of Normal People*. New York: Harcourt, Brace and Company.
- 29) Melaku, L., Mossie, A. & Negash, A. (2015). Stress among Medical Students and Its Association with Substance Use and Academic Performance. *Journal of Biomedical Education*, 2015.
- 30) Michaud, P.A. & Fombonne, E. (2005). Common mental health problems:. doi: *BMJ*, *330*(7495), 835–838. https://doi.org/10.1136/bmj.330.7495.835
- 31) Milne, N. Louwen, C., Reidlinger, D., Bishop, J., Dalton, M., & and C. L. (2019). Physiotherapy students' DiSC behavior styles can be used to predict the likelihood of success in clinical placements. *BMC Medical Education*, 2019(19), 379.
- 32) Mirhaghi, M. & Sarabian, S. (2016). Relationship between perceived stress and personality traits in emergency medical personnel. *Journal of Fundamentals of Mental Health*, 2016 Sep-O(5), 265–271.
- 33) Permana, M. Z. (2017). Panduan Praktis Personality Assessment. Jakarta: Raih Asa Sukses.
- 34) Phillips, A. C. (2013). Perceived Stress. In Encyclopedia of Behavioral Medicine. New York: Springer.
- 35) Rahmayani, R.D., Liza, R.G., & Syah, N. A. (2019). Gambaran Tingkat Stres Berdasarkan Stressor pada Mahasiswa Kedokteran Tahun Pertama Program Studi Profesi Dokter Fakultas Kedokteran Universitas Andalas Angkatan 2017. Jurnal Kesehatan Andalas, 8(1).
- 36) Seedhom, A.E., Kamel, E.G., Mohammed, E.S. & Raouf, N. . (2019). Predictors of Perceived Stress among Medical and Nonmedical College Students, Minia, Egypt. *Int J Prev Med*, *10*(107).
- 37) Seifi, S., Ramyani, M.B., Faramarzi, M, & Sum, S. (2018). Personality Traits are Associated with Spiritual Intelligence in Medical and Dental Students: A Study in a Medical Sciences University in Iran. *J Med Sci*, *38*(4), 144 149.
- 38) Seo, E.J., Ahn, J.A., Hayman, L.L. & Kim, C. . (2018). The Association Between Perceived Stress and Quality of Life in University Students: The Parallel Mediating Role of Depressive Symptoms and Health-Promoting Behaviors. *Asian Nursing Research*, 12(2019), 190–196.
- 39) Skrzypińska, K. (2021). Does Spiritual Intelligence (SI) Exist? A Theoretical Investigation of a Tool Useful for Finding the Meaning of Life. *Journal of Religion and Health, 60*, 500–516.
- 40) Spada, M.M., Mikcevic, A.V., Moneta, G.B., & Wells, A. (2008). Metacognition, perceived stress, and negative emotion. *Personality and Individual Differences*, 44(2008), 1172–1181.
- 41) Taylor, S. E. (2015). *Helath Psychology* (Ninth Edit). New York: McGraw-Hill Education.
- 42) Vaughan, F. (2002). What is Spiritual Intelligence? Journal of Humanistic Psychology, 42(16).
- 43) Wali, O., Vanka, A., Jan, A.S, Chahda, A., Aljahdali, R., Vanka, S. (2021). Associaton between the DISC Personality Index and Academic Performance (GPA) of Dental Students in a Private Saudi Dental School. *Ann Med Health Sci Res*, 2021(11), 1290–1292.
- 44) Wang, J., Liu, W., Zhang, Y., Xie, S., & Yang, B. (2021). Perceived Stress Among Chinese Medical Students Engaging in Online Learning in Light of COVID-19. *Psychology Research and Behavior Management*, *2021*(14), 549–562.
- 45) Wantiyah, Ulansari, W., & Deviantony, F. (2020). Correlation Between Spiritual Intelligence and Self-efcacy Patients with Coronary Artery Disease. Jurnal Keperawatan Padjadjaran, 8(3).
- 46) Weiten, W. (2017). Psychology: Themes and Variations (Tenth Edit). Boston: Cengage Learning.

- 47) Yang, S. H. (2019). A Study on the Perceived Stress, Coping, and Personal Satisfaction according to DISC Behavioral Style of College Students. http://www.stressresearch.or.kr/
- 48) Zohar, D. & Marshall, I. (2004). Spiritual Capital. San Fransisco, California: Berrett-Koehler Publishers.



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