

cal education, Lloyd<sup>29</sup> observed that female students were more likely to develop psychiatric symptoms and tended to describe themselves as being less satisfied with life. Concisely, gender issues in medical education and practice have gained new momentum given the rapid increase in the numbers of women in medical schools, coupled with the findings that a variety of traits possessed by different genders may impact their medical training courses in different ways.<sup>10,28,30</sup>

Before a more-detailed discussion, it should be noted that the medical education system in Taiwan remarkably differs from those in other countries. In Taiwan, medical training (7 years in length) begins immediately upon graduation from high school, while medical school (4 years in length) in other countries such as the US is initiated after college education. Thus, one should be careful when comparing or evaluating medical curricula among countries, although preclinical and clinical stages may be alternatives for comparison. Different numbers of years exposed to a medical environment was thus observed to substantially impact personality patterns. In this study, the Lie scale scores were significantly higher for students in the 6<sup>th</sup> year, for they were clerks in the hospital and might have tended to emphasize a "good doctor" impression by responding in a "socially desirable" way.<sup>3</sup> Further, the odds of being categorized as a Black-list personality type was estimated to be 2.8 times higher for respondents in both the 3<sup>rd</sup> and 4<sup>th</sup> years. As is known, the course loads in medical education in Taiwan reach a peak in the 3<sup>rd</sup> and 4<sup>th</sup> years. Behavioral patterns of these students might be understandable because it has been reported that acting-out behaviors are a frequently adopted way of responding to experienced stress and distress.<sup>31</sup> Moreover, among preclinical students, personality variables of being enthusiastic, experimenting, and resourceful were positively correlated with performance.<sup>10</sup> As a result, the more impulsive and emotionally unstable personality pattern of the 3<sup>rd</sup>- and 4<sup>th</sup>-year participants in this study (the Black-list type) might reflect students' heavy course loads and unsatisfactory performance. Therefore, psychological counseling might be needed to prevent future psychological illness in these students. More em-

phasis might be placed upon the 3<sup>rd</sup>- and 4<sup>th</sup>-year medical training and course curriculum.

The importance of personality in the context of medical training and education can never be overemphasized.<sup>10</sup> The persistence and robustness of the personality profiles of medical students merit confirmation by more proliferate studies conducted elsewhere. In further research on the personality profile of medical students, Walton<sup>32</sup> stated that the challenge for medical student selection is to determine the best combination of personality, attitude, and performance for a future professional life in medicine. Thus, emphasis might be placed upon examining patterns that may predict success in medical school in order to save time, efforts, and resources in the selection of medical students. Potential predictive traits include: pre-medical grades, aptitude tests, intelligence tests, achievement tests, reading and writing tests, interest and study-habits assessment, personality exploration, interviews, and other background variables.<sup>14</sup> Moreover, traits in medical school that might predict post-graduate mental health problems are another important issue which should be scrutinized in future research.

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## REFERENCES

1. Allport GW. Personality: a psychological interpretation; Holt Publishing: New York, 1937.
2. Pietrofesa JJ. Career development: theory and research, 2<sup>nd</sup> ed., New York: Grune Stratton, 1975.
3. Shen H, Comery AL. Factorial validity of personality structure in medical school applicants. *Educ. Psychol. Measure.* 1995;55:1008-15.
4. Meit SS, Meit HT, Yasek V. Personality traits of incom-