Assessing Academic Self-Efficacy, Knowledge and Attitude of Undergraduate Dental Students

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ABSTRACT:

Introduction: According to psychologist Albert Bandura who originally proposed the concept, it is "how well one can execute courses of action required to deal with prospective situations. In simple words, it can be said as the belief or the ability to solve a complex problem or complete a task in time and achieve the goal you had set. A good example , A student feels confident that he will be able to do well in the test , this is a great example of self-efficacy. **Materials and Methods**: The questions were prepared and distributed through an online survey planet link the participants well explained about the study and the results were collected and statistically analysed. **Result and Discussion**: The From the analysed results we can see that the majority are self sufficient in academics, knowledge and attitude.the results were obtained and was carefully analyzed. **Conclusion**: From the survey, it was evident that majority of the dental students are self-efficacy in academic, knowledge and attitude

Keywords: psychologist; statistically; online survey planet; majority

INTRODUCTION:

According to psychologist Albert Bandura who originally proposed the concept, it is "how well one can execute courses of action required to deal with prospective situations. In simple words, it can be said as the belief or the ability to solve a complex problem or complete a task in time and achieve the goal you had set. The purpose of this study was to investigate the mediating role of self-efficacy in the development of students' intentions(1) .This core belief is the foundation of human motivation, performance accomplishments, and emotional well-being (2). A good example , A student feels confident that he will be able to do well in the test , this is a great example of self-efficacy. There are different types of self-efficacy and they are, Mastery experiences, Vicarious experiences,Verbal experiences, Emotional and physiological experiences. Self-Efficacy is very important to a student because it gives him the confidence that he is capable and can do any task. Further, it is suggested that individual differences in past experiences and attribution of success to skill or chance result in different levels of generalized self-efficacy expectations (3) . Self-efficacy is central to health behaviour theories due to its robust predictive capabilities (4) .Perceived self-efficacy helps to account for such diverse phenomena as changes in coping behavior produced by different modes of influence, level of physiological stress reactions, self-regulation of refractory behavior, resignation and despondency to failure experiences, self-debilitating effects of proxy control and illusory inefficaciousness, achievement strivings, growth of intrinsic interest, and career pursuits (5). Beginning with a review of Bandura's self-efficacy theory, recent work in which parallel measures of interests and self-efficacy (or confidence) are used to improve the prediction of vocational choice behavior and the comprehensiveness of career assessment and counseling is examined(6) .There are many ways to improve self-efficacy by motivation, positive feedback, encouragement.

Self-Efficacy is all about one's beliefs ,capabilities to learn, and execute an action. it also refers to the strength of the person's belief and confidence that they are able to produce a given behaviour, and operationally.The core belief is the foundation of the human motivation, performance accomplishment and emotion well being (Bandura, 1997,2006). Some results show that the self-efficacy is compared to one's loci of concentration and control ,attribution and self-worth. Self-efficacy beliefs have been found to be sensitive to subtle changes in students' performance context, to interact with self-regulated learning processes, and to mediate students'

academic achievement (7) .Students self-efficacy beliefs affect the academic performances in several ways and it also affects the stress and anxiety level of the students . Regardless of the domain, researches show that self-efficacy helps in improving motivation and performance in one's academics. Converging evidence from diverse methodological and analytic strategies verifies that perceived self-efficacy and personal goals enhance motivation and performance attainments (8). According to this chapter, self-efficacy has been shown to play an important role in achievement contexts, and much research supports the idea that it can influence the instigation, direction, persistence, and outcomes of achievement-related actions (9). These task-engagement variables include models/social comparative information, goal setting, attributional and performance feedback, strategy instruction, cognitive processing, and reward contingencies (10) . Its more delimited focus is on perceptions and assessments of self with regard to competence, effectiveness, and causal agency(11) . Threat is a relational property reflecting the match between perceived coping capabilities and potentially hurtful aspects of the environment (12)(13). In this article, it discusses the self-efficacy of knowledge and attitude among undergraduate dental students . This research will assess the students self-efficacy, attitude , confidence and motivation of the students through this research .

MATERIALS AND METHODS:

The questions were disturbed through an online survey planet link, the study population included 100 undergraduate dental college students belonging to the age category 17-25. The participants were well explained about the purpose of the study in detail. The questions were carefully studied and the corresponding answers were marked by the participants. The data was collected and statically analysed.

RESULTS AND DISCUSSION
In fig.(1) about 96% of the participants are around 17-19 of age and the rest comprises age category 20-25. In fig.(2), the question was about the age and about 47.37% of them are male and the rest 52.63% of them are female .In fig.(3), the question asked was whether do you like dentistry 76.3 % of the participants said yes that is they like dentistry and the rest of the participants said no that is 23.6 2% of the participants do not like dentistry. In fig.(4) when asked the participants If they have regretted they couldn't join MBBS 39.4 7% of the participants said yes they regret that they couldn't join MBBS and the rest of the participant that is 60.53% did not regret that they couldn't join MBBS. in fig.(5) when asked the participants if they think dentistry as a profession is good, majority of the participants that is 92.11% of the participants said yes that dentistry as a profession is good and the rest of the participants that is 7.89% said it is not good as a profession. In fig.(6) when asked the participants why choose dentistry majority that is 42.11% of the participants said they choose dentistry as profession because of the own interest , 31.58% said they choose dentistry because they missed out MBBS, 17.11% chose dentistry because they could make easy money and the rest of the participants that is 9.21% said they chose dentistry because of parents influence. In fig.(7) when asked the participants what they need to be successful in dentistry majority of the participants that is 61.84% said they need good practice to be successful in dentistry and the rest of the participant that is 38.16% said they need ethics and morality to be successful in dentistry. In fig.(8) when asked the participants how a good dentist should be 34.21% said that they should have a sound mind to be a good dentist, 34.21% participants said that they should be hygienic to be a good dentist and the rest of the

participants that is 31.58% said they should be empathetic to be a good dentist. In fig.(9) when asked the participants do you think dentistry has a good future, majority of the participants that is 97.37% said yes that dentistry as a profession has a good future and the rest of the participants that is 2.63% said that dentistry as a profession does not have a good future.

In fig.(10) when asked the participants what would they have chosen if not dentistry as a career 25% of the participants said they would have joined Arts and Science, 15.79% of the participants said they would have opted Engineering, 6.58% of the participants said they would have joined Law and the rest of the participants that is 52.63% said that they would have joined other other profession. In fig.(11) when asked the participants that dental students are self- efficacy in academics 81.58% of the participants said that they are self efficient in academics whereas the rest of the participants that is 18.42% of the participants are not self- efficacy in academics.

When compared with previous similar study questions asked about choosing dentistry carrier 53.91% opted own interest and in our study and 42.11% opted due to own interest when compared to other study which shows that our study is more similar when compared to the previous similar study (14). In another similar study on liking dentistry 30.6 % opted yes and in a study 76.32% opted yes when compared with the previous study, looks similar when compared to previous study (15). In another study, dentistry having a good scope 81.74% opted good future scope and in a study only 97.37% of the participants opted good future scope in both the study majority of the people/participants has chosen good future scope so when compared this study is similar (15,16). In another study, regret not joining MBBS 40.56% said yes and in our study 39.47% said yes, when we compare the study with ours it is similar study.

The limitations of the study is that it is done in a small population, among a homogeneous population and the result or bias could have been done in a large population with heterogeneous population and the study is not in depth. Self-efficacy judgments generally may reflect a small set of highly available personal and situational factors; focusing on particular aspects of an activity heightens the availability of these features, biasing efficacy judgments, which, in turn, regulate subsequent behavior(17)(18) .These are the limitations of the study.A foundation in self-efficacy theory and general self-efficacy research is offered initially, followed by an exploration of the empirical findings relevant to students self-efficacy.(19)

In this future study can be done in depth and analysed and also can be done between men and women reasons due to different perspectives and also can be done in large and heterogeneous populations.Implications for future research include the need to conduct longitudinal studies and research that integrates quantitative and qualitative methods to elucidate further the nature and importance of future education orientation for dental students(20). Future research should consider incorporating content of communication to determine if high and low self-efficacy individuals receive or react differently to different types of communication content (21)
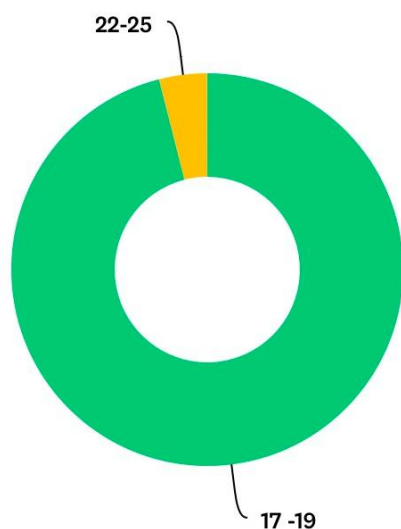
Figure 1: The pie chart represents the distribution of participants based on age . 96.05% are between the age 17-19 (green) and 3.95% are between the age 22-25 (yellow)
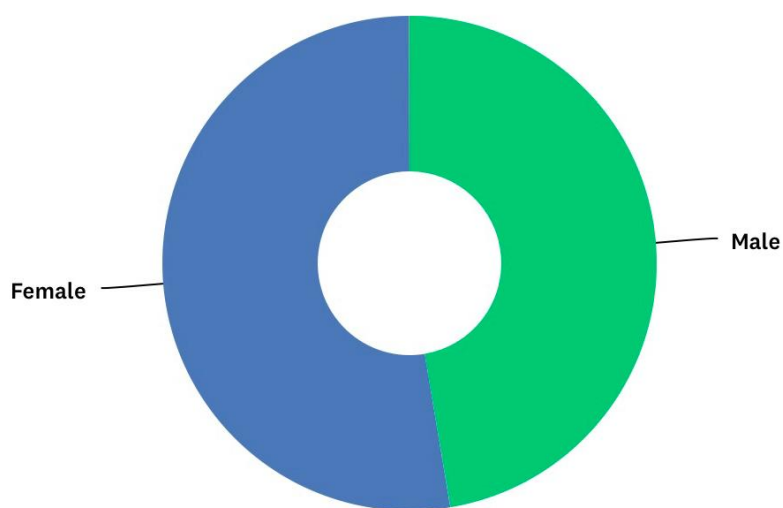

Figure 2 : The pie chart represents the distribution of participants based on gender. 47.37% are male (green) and 52.63% are female (blue)
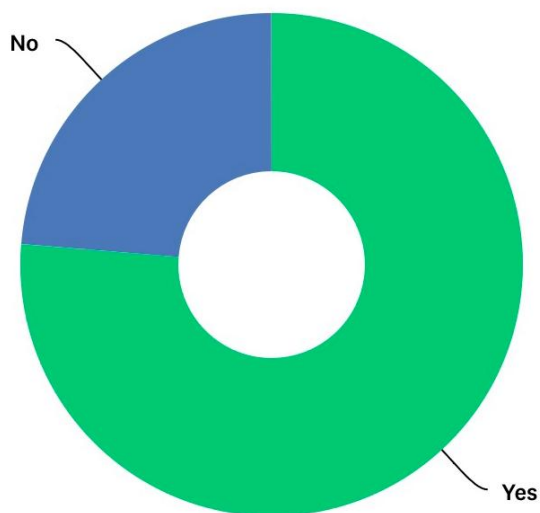
Figure 3:The pie chart represents the distribution of participants based on liking dentistry. 76.32% liked dentistry (green) and 23.68% did not like dentistry (blue).
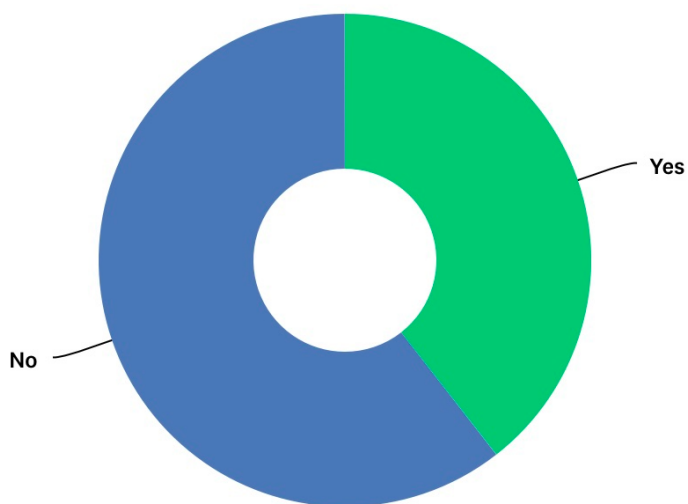

Figure 4: The pie chart represents the distribution of participants based regret couldn't join MBBS. 39.46% said yes (green) and 60.53% said no (blue)
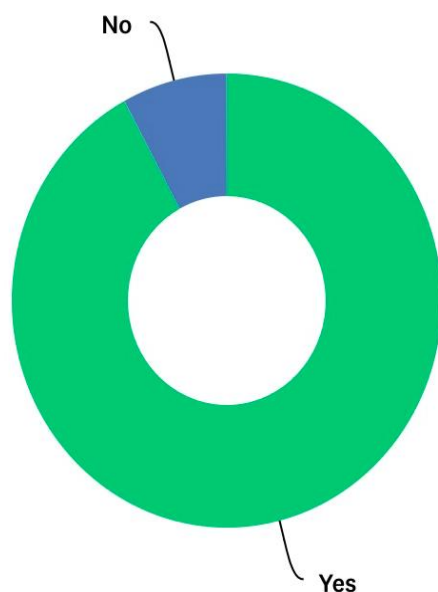
Figure 5: The pie chart represents the distribution of participants based on dentistry as a good profession. 92.11% said yes (green) and 7.89% said no (blue)
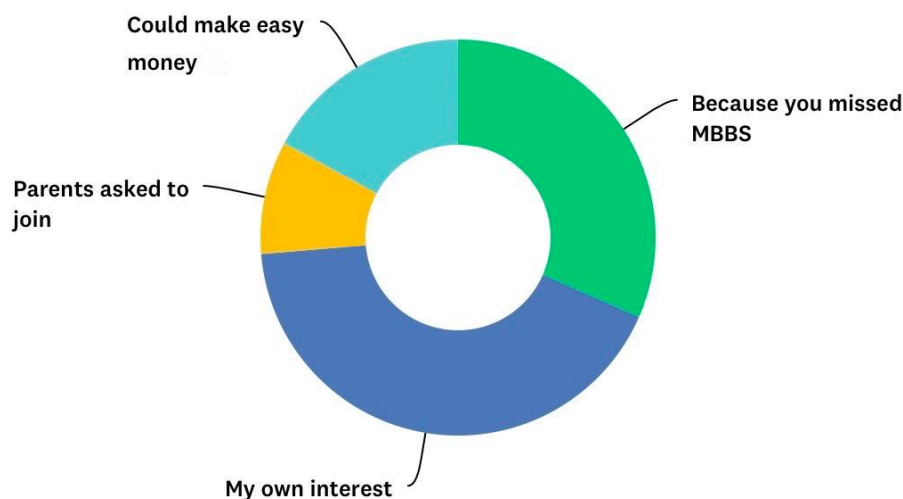

Figure 6: The pie chart represents the   distribution of participants based why choose dentistry. 31.58% said because missed MBBS (green), 42.11% said due to own interest (blue), 9.21% said parents influence (yellow), 17.11% said easy money (light blue)
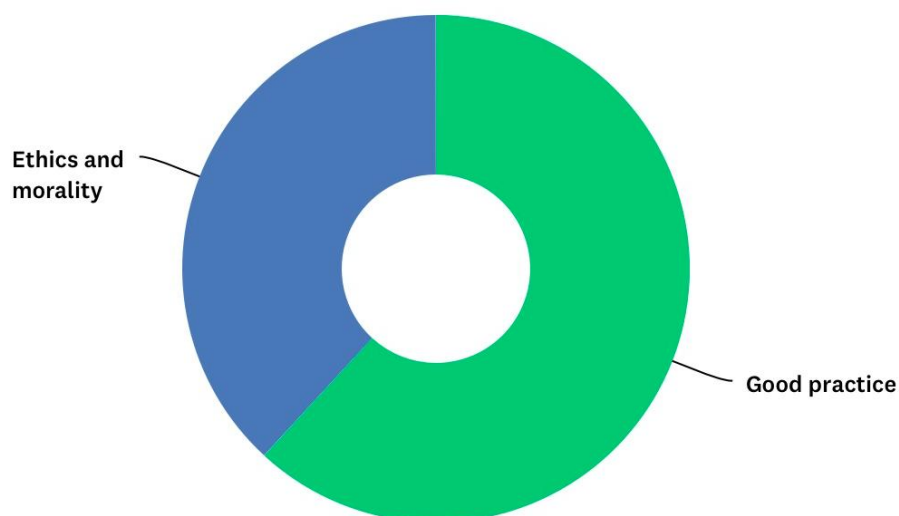
Figure 7: The pie chart represents the distribution of participants based on being successful in dentistry. 61.84% said good practice (green) and 38.16% said ethics and morality (blue).
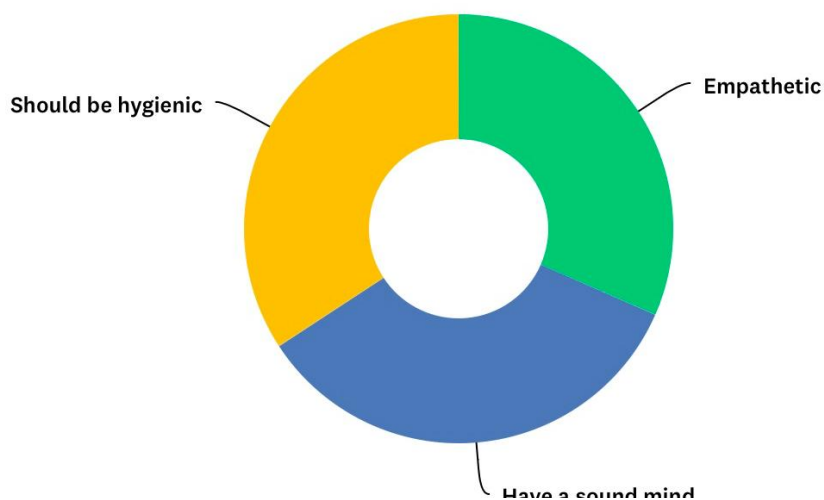

Figure 8: The pie chart represents the distribution of participants based on the perspective of a good dentist. 31.58% said empathetic (green), 34.21% said sound mind (blue), 34.21% said should be hygienic (yellow).
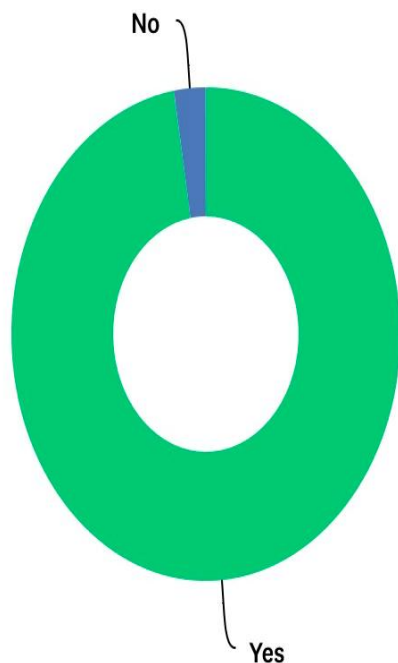
Figure 9: The pie chart represents the distribution of participants based dentistry as a profession having a good future. 97.37% said yes (green) and 2.63% said no (blue)
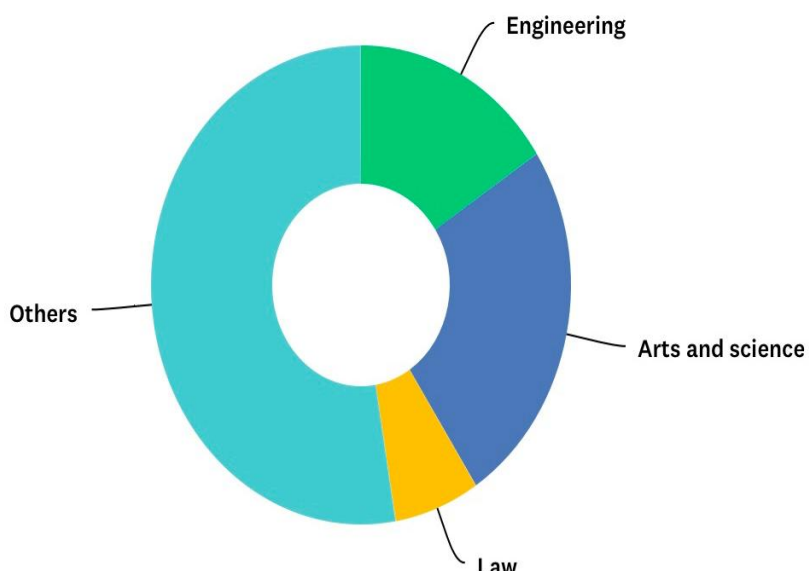

Figure 10: The pie chart represents the distribution of participants based on alternative career option. 15.97% said engineering (green), 25.00% said arts and science (blue), 6.58% said law (yellow) and the rest 52.63% said other career option (light blue)
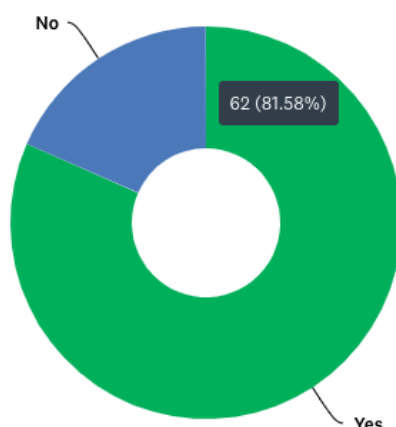
Figure 11: The pie chart represents the distribution of participants based dental students' self efficacy in academics. 81.58% said yes (green) and the rest 18.42% said no (blue)

CONCLUSION:

From the survey we can assess that the majority of the first-year undergraduate dental students are self efficacy in academics, knowledge and attitude. From this research survey we can conclude that most dental students are self-efficacy in knowledge, academics and attitude.

REFERENCE:

1. Zhao H, Seibert SE, Hills GE. The mediating role of self-efficacy in the development of entrepreneurial intentions. J Appl Psychol [Internet]. 2005 Nov;90(6):1265–72. Available from: http://dx.doi.org/10.1037/0021-9010.90.6.1265

2. Schunk D. Self-Efficacy and Academic Motivation [Internet]. Vol. 26, Educational Psychologist. 1991. p. 207–31. Available from: http://dx.doi.org/10.1207/s15326985ep2603&4_2

3. Rodrigues RM, Pimentel CE, Ribeiro MGC. Construction and Validation of the Unifactorial Scale of Academic Self-Efficacy [Internet]. Revista Psicologia da Educação. 2017. Available from: http://dx.doi.org/10.5935/2175-3520.20170002

4. Williams DM, Rhodes RE. The confounded self-efficacy construct: conceptual analysis and recommendations for future research [Internet]. Vol. 10, Health Psychology Review. 2016. p. 113–28. Available from: http://dx.doi.org/10.1080/17437199.2014.941998

5. Bandura A. Self-efficacy mechanism in human agency [Internet]. Vol. 37, American Psychologist. 1982. p. 122–47. Available from: http://dx.doi.org/10.1037/0003-066x.37.2.122

6. Betz NE, Borgen FH. The Future of Career Assessment: Integrating Vocational Interests with Self-Efficacy and Personal Styles [Internet]. Vol. 8, Journal of Career Assessment. 2000. p. 329–38. Available from: http://dx.doi.org/10.1177/106907270000800402

7. Zimmerman BJ. Self-Efficacy: An Essential Motive to Learn [Internet]. Vol. 25, Contemporary Educational Psychology. 2000. p. 82–91. Available from: http://dx.doi.org/10.1006/ceps.1999.1016

8. Bandura A, Locke EA. Negative self-efficacy and goal effects revisited. J Appl Psychol [Internet]. 2003 Feb;88(1):87–99. Available from: http://dx.doi.org/10.1037/0021-9010.88.1.87

9. Schunk DH, Pajares F. The Development of Academic Self-Efficacy [Internet]. Development of Achievement Motivation. 2002. p. 15–31. Available from: http://dx.doi.org/10.1016/b978-012750053-9/50003-6

10. Schunk DH. Self-efficacy and achievement behaviors [Internet]. Vol. 1, Educational Psychology Review. 1989. p. 173–208. Available from: http://dx.doi.org/10.1007/bf01320134

11. Oei TPS, Hasking P, Phillips L. A comparison of general self-efficacy and drinking refusal self-efficacy in predicting drinking behavior. Am J Drug Alcohol Abuse [Internet]. 2007;33(6):833–41. Available from: http://dx.doi.org/10.1080/00952990701653818

12. Bandura A. Self-efficacy conception of anxiety [Internet]. Vol. 1, Anxiety Research. 1988. p. 77–98. Available from: http://dx.doi.org/10.1080/10615808808248222

13. Self-Efficacy and Adolescents' Health [Internet]. SpringerReference. Available from: http://dx.doi.org/10.1007/springerreference_223341

14. Ahmed D, Singh UP. Letter to editor regarding the article by Saraogi et al [Internet]. Vol. 1, Biomedicine & Aging Pathology. 2011. p. 196. Available from: http://dx.doi.org/10.1016/j.biomag.2011.09.003

15. Garla BK. CAREER ASPIRATIONS AND REASONS FOR CHOOSING DENTISTRY AS A CAREER – A SURVEY OF DENTAL STUDENTS IN GANDHI DENTAL COLLEGE AND HOSPITAL, BHUBANESWAR [Internet]. Vol. 3, annals and essences of dentistry. 2011. p. 108–10. Available from: http://dx.doi.org/10.5368/aedj.2011.3.2.5.1

16. Karibe H, Kawakami T, Suzuki A, Warita S, Ogata K, Aoyagi K, et al. Career choice and attitudes towards dental education amongst dental students in Japan and Sweden. Eur J Dent Educ [Internet]. 2009 May;13(2):80–6. Available from: http://dx.doi.org/10.1111/j.1600-0579.2008.00543.x

17. Cervone D. Effects of envisioning future activities on self-efficacy judgments and motivation: An availability heuristic interpretation [Internet]. Vol. 13, Cognitive Therapy and Research. 1989. p. 247–61. Available from: http://dx.doi.org/10.1007/bf01173406

18. Milstein T. Transformation abroad: Sojourning and the perceived enhancement of self-efficacy [Internet]. Vol. 29, International Journal of Intercultural Relations. 2005. p. 217–

38. Available from: http://dx.doi.org/10.1016/j.ijintrel.2005.05.005

19. Coleman PK, Karraker KH. Self-Efficacy and Parenting Quality: Findings and Future Applications [Internet]. Vol. 18, Developmental Review. 1998. p. 47–85. Available from: http://dx.doi.org/10.1006/drev.1997.0448

20. Sirois FM. Procrastination and intentions to perform health behaviors: The role of self-efficacy and the consideration of future consequences [Internet]. Vol. 37, Personality and Individual Differences. 2004. p. 115–28. Available from: http://dx.doi.org/10.1016/j.paid.2003.08.005

21. Stetz TA, Stetz MC, Bliese PD. The importance of self-efficacy in the moderating effects of social support on stressor–strain relationships [Internet]. Vol. 20, Work & Stress. 2006. p. 49–59. Available from: http://dx.doi.org/10.1080/02678370600624039