

University of Groningen

Deciding upon a career within the medical field

Guntern, Sabine

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Guntern, S. (2016). *Deciding upon a career within the medical field*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

REFERENCES

- Ackerman, P. L., Chamorro-Premuzic, T., & Furnham, A. (2011). Trait complexes and academic achievement: Old and new ways of examining personality in educational contexts. *British Journal of Educational Psychology*, *81*, 27-40. doi: 10.1348/000709910X522564
- Adam, J., Bore, M., McKendree, J., Munro, D., & Powis, D. (2012). Can personal qualities of medical students predict in-course examination success and professional behavior? An exploratory prospective cohort study. *BMC Medical Education*, *12*, 69-76. doi:10.1186/1472-6920-12-69
- Antony, J. S. (1998). Personality-career fit and freshman medical career aspiration: A test of Holland's theory, *Research in Higher Education*, *39*, 679-698. doi: 10.1023/A:1018762008742
- Armstrong, P. I., & Anthony, S. F. (2009). Personality facets and RIASEC interests: An integrated model. *Journal of Vocational Behavior*, *75*, 346-359. doi: 10.1016/j.jvb.2009.05.004
- Artino, A. R., La Rochelle, J. S., & Durning, S. J. (2010). Second-year medical students' motivational beliefs, emotions, and achievement. *Medical Education*, *44*, 1203-1212. doi: 10.1111/j.1365-2923.2010.03712.x
- Arulampalam, W., Naylor, R. A., & Smith, J. P. (2007). Dropping out of medical school in the UK: Explaining the changes over ten years. *Medical education*, *41*, 385-394. doi: 10.1111/j.1365-2929.2007.02710.x
- Assouline, M., & Meir, E. I. (1987). Meta-analysis of the relationship between congruence and well-being measures. *Journal of Vocational Behavior*, *31*, 319-332. doi: 10.1016/0001-8791(87)90046-7
- Backhaus, K., Erichson, B., Plinke, W., & Weiber, R. (2011). *Multivariate Analysemethoden. Eine anwendungsorientierte Einführung (13. Auflage)*. Berlin: Springer Verlag. German.

REFERENCES

- Baker, R. W., McNeil, O. V., & Siryk, B. (1985). Expectation and reality in freshman adjustment to college. *Journal of Counselling, 32*, 94-103. doi: 10.1037/0022-0167.32.1.94
- Benbassat, J., & Baumal, R. (2007). Uncertainties in the selection of applicants for medical school. *Advances in Health Sciences Education, 12*, 509-521. doi: 10.1007/s10459-007-9076-0
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215. doi: 10.1037//0033-295X.84.2.191
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 2*, 122-147. doi: 10.1037/0003-066X.37.2.122
- Bandura, A. (2001). Social Cognitive Theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26. doi: 10.1146/annurev.psych.52.1.1
- Bericht des Bundesrats (2011). Strategie gegen Ärztemangel und zur Förderung der Hausarztmedizin. Schweizerische Eidgenossenschaft.
- Borges, N. J., & Savickas, M. L. (2002). Personality and medical specialty choice: A literature review and integration. *Journal of Career Assessment, 10*, 362-380. doi: 10.1177/10672702010003006
- Borges, N. J., & Savickas, S. (2014). Work style preferences among medical specialties. *Journal of Vocational Behavior, 84*, 303-306. doi: 10.1016/j.jvb.2014.02.004
- Borges, N. J., Savickas, M. L., & Jones, B. J. (2004). Holland's theory applied to medical specialty choice. *Journal of Career Assessment, 12*, 188-206. doi: 10.1177/1069072703257755
- Braxton, J. M., Vesper, N., & Hossler, D. (1995). Expectations for college and student persistence. *Research in Higher Education, 36*, 595-612. doi: 10.1007/BF02208833
- Bresó, E., Schaufeli, W. B., & Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education, 61*, 339-355. doi: 10.1007/s10734-010-9334-6
- Brinkworth, R., McCann, B., Matthews, C., & Nordström, K. (2009). First year expectations and experiences: Student and teacher perspectives. *Higher Education, 58*, 157-173. doi: 10.1007/s10734-008-9188-3

- Burgoon, J. M., Meece, J. L., & Granger, N. A. (2012). Self-efficacy's influence on student academic achievement in the medical anatomy curriculum. *Anatomical Sciences Education, 5*, 249-255. doi: 10.1002/ase.1283
- Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences, 29*, 1057-1068. doi: 10.1016/S0191-8869(99)00253-6
- Caspi, A., Roberts, B. W. & Shiner, R. L. (2005). Personality Development: Stability and Change. *Annual Review of Psychology, 56*, 453-484. doi: 10.1146/annurev.psych.55.090902.141913
- Chamberlain, T. C., Catano, V. M., & Cunningham, D. P. (2005). Personality as a predictor of professional behavior in dental school: Comparisons with dental practitioners. *Journal of Dental Education, 69*, 1222-1237.
- Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality, 17*, 237-250. doi: 10.1002/per.473
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93*, 55-64. doi: 10.1037//0022-0663.93.1.55
- Cohen, A. B., Cantor, J. C., Barker, D. C., & Hughes, R. G. (1990). Young physicians and the future of the medical profession. *Health Affairs, 9*, 138-148. doi: 10.1377/hlthaff.9.4.138
- Cohen-Schotanus, J., Muijtjens, A. M. M., Reinders, J. J., Agsteribbe, J., van Rossum, H. J. M., & van der Vleuten, C. P. M. (2006). The predictive validity of grade point average scores in a partial lottery medical school admission system. *Medical Education, 40*, 1012-1019. doi: 10.1111/j.1365-2929.2006.02561.x
- Conley, J. J. (1984). Longitudinal Consistency of Adult Personality: Self-Reported Psychological Characteristics Across 45 Years. *Journal of Personality and Social Psychology, 47*, 1325-1333. doi: 10.1037/0022-3514.47.6.1325
- Costa, P. T., McCrae, R. R., & Holland, J. L. (1984). Personality and vocational interests in an adult sample. *Journal of Applied Psychology, 69*, 390-400. doi: 10.1037//0021-9010.69.3.390

REFERENCES

- Creed, P. A., Searle, J., & Rogers, M. E. (2010). Medical specialty prestige and lifestyle preferences for medical students. *Social Science & Medicine*, *71*, 1084-1088. doi: 10.1016/j.socscimed.2010.06.027
- Dawis, R. V. (1987). Scale Construction. *Journal of Counseling Psychology*, *34*, 481-489. doi: 10.1037//0022-0167.34.4.481
- Deng, C.-P., Armstrong, P. I., & Rounds, J. (2007). The fit of Holland's RIASEC model to US occupations. *Journal of Vocational Behavior*, *71*, 1-22. doi: 10.1016/j.jvb.2007.04.002
- DeRaad, B., & Schouwenburg, H. C. (1996). Personality in learning and education: A review. *European Journal of Personality*, *10*, 303-336. doi: 10.1002/(SICI)1099-0984(199612)10:5<303::AID-PER262>3.0.CO;2-2
- Deutsch, T., Hönigschmid, P., Frese, T., & Sandholzer, H. (2013). Early community-based family practice elective positively influences medical students' career considerations – a pre-post-comparison. *BMC Family Practice*, *14*, 24. doi: 10.1186/1471-2296-14-24
- Doherty, E. M., & Nugent, E. (2011). Personality factors and medical training: A review of the literature. *Medical Education*, *45*, 132-140. doi: 10.1111/j.1365-2923.2010.03760.x
- Donohue, R. (2006). Person-environment congruence in relation to career change and career persistence. *Journal of Vocational Behavior*, *68*, 504-515. doi: 10.1016/j.jvb.2005.11.002
- Draper, C., & Louw, G. (2007). What is medicine and what is a doctor? Medical students' perceptions and expectations of their academic and professional career. *Medical Teacher*, *29*, E100-E107. doi: 10.1080/01421590701481359
- Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). A meta-analytic investigation of conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits. *Journal of Applied Psychology*, *91*, 40-57. doi: 10.1037/0021-9010.91.1.40
- Duffy, R. D., & Richard, G. V. (2006). Physician job satisfaction across six major specialties. *Journal of Vocational Behavior*, *68*, 548-559. doi: 10.1016/j.jvb.2005.12.001

- Duffy, R. D., Borges, N. J., & Hartung, P. J. (2009). Personality, vocational interests, and work values of medical students. *Journal of Career Assessment, 17*, 189-200. doi: 10.1177/1069072708329035
- Eggens, L., van der Werf, M. P. C., & Bosker, R. J. (2008). The influence of personal networks and social support on study attainment of students in university education. *Higher Education, 55*, 553-573. doi: 10.1007/s10734-007-9074-4
- Eggerth, D. E., Bowles, S. M., Tunick, R. H., & Andrew, M. E. (2005). Convergent validity of O*Net Holland code classifications. *Journal of Career Assessment, 13*, 150-168. doi: 10.1177/1069072704273124
- Elam, C. (1994). Application of Holland's theory of vocational personalities and work environment to medical student specialty selection. *Journal of Career Development, 21*, 37-48. doi: 10.1007/BF02107102
- Emling, R. C., Green, P. A., & Stevens, F. W. (1980). A comparison of interests of first year dental students and fellows of the academy of general dentistry on the Strong-Campbell Interest inventory. *Journal of Dental Research, 59*, 786-794. doi: 10.1177/00220345800590050701
- Eva, K. W., Reiter, H. I., Trinh, K., Wasi, P., Rosenfeld, J., & Norman, G. R. (2009). Predictive Validity of the Multiple Mini-Interview for Selection Medical Trainees. *Medical Education, 43*, 767-775. doi: 10.1111/j.1365-2923.2009.03407.x
- Farrokhi-Khajeh-Pasha, Y., Nedjat, S., Mohammadi, A., Rad, E. M., & Majdzadeh, R. (2014). Informed choice of entering medical school and academic success in Iranian medical students. *Medical Teacher, 36*, 978-982. doi: 10.3109/0142159X.2014.918256
- Feldman, K. A., Smart, J. C., & Ethington, C. A. (2004). What do college students have to lose? Exploring the outcomes of differences in person-environment fits. *The Journal of Higher Education, 75*, 528-555. doi: 10.1353/jhe.2004.0029
- Fenollar, P., Romàn, S., & Cuestas, P. J. (2007). University students' academic performance: An integrative conceptual framework and empirical analysis. *British Journal of Educational Psychology, 77*, 873-891. doi: 10.1348/000709907X189118
- Ferguson, E., James, D., O'Hehir, F., & Sanders, A. (2003). Pilot study of the roles of personality, references, and personal statements in relation to performance over

REFERENCES

- the five years of a medical degree. *BMJ*, 326, 429-431. doi: 10.1136/bmj.326.7386.429
- Fuqua, D. R., Seaworth, T. B., & Newman, J. L. (1987). The relationship of career indecision and anxiety: A multivariate examination. *Journal of Vocational Behavior*, 30, 175-786. doi: 10.1016/0001-8791(87)90017-0
- Furnham, A. (2001). Vocational preference and P-O fit: Reflections on Holland's theory of vocational choice. *Applied Psychology: An International Review*, 50, 5-29. doi: 10.1111/1464-0597.00046
- Furnham, A., Pendleton, D., & Manicom, C. (1981). The perception of different occupations within the medical professions. *Social Science & Medicine*, 15E, 289-300. doi: 10.1016/0271-5384(81)90005-3
- Furnham, A., & Schaeffer, R. (1984). Person-environment fit, job satisfaction and mental health. *Journal of Occupational Psychology*, 57, 295-307.
- Furnham, A., Chamorro-Premuzic, T., & McDougall, F. (2003). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and Individual Differences*, 14, 49-66. doi: 10.1016/j.lindif.2003.08.002
- Gardner, M. J., & Altman, D. G. (1986). Confidence intervals rather than P values: Estimation rather than hypothesis testing. *British Medical Journal*, 292, 746-750.
- Gąsiorowski, J., & Rudowicz, E. (2014). Expectations, experiences, and attitudes change during medical school: Through the eyes of Polish medical students. *Teaching and Learning in Medicine: An International Journal*, 26, 217-224. doi: 10.1080/10401334.2014.914942
- Goff, M., & Ackerman, P. L. (1992). Personality intelligence relations – Assessment of typical intellectual engagement. *Journal of Educational Psychology*, 84, 537-552. doi: 10.1037/0022-0663.84.4.537
- Gottfredson, G. D. (1996). Prestige in vocational interests. *Journal of Vocational Behavior*, 48, 68-72. doi: 10.1006/jvbe.1996.0006
- Gottfredson, G. D. (1999). John L. Holland's contributions to vocational psychology: A review and evaluation. *Journal of Vocational Behavior*, 55, 15-40. doi: 10.1006/jvbe.1999.1695

- Gottfredson, G. D., Jones, E. M., & Holland, J. L. (1993). Personality and vocational interests: The relation of Holland's six interest dimensions to five robust dimensions of personality. *Journal of Counseling Psychology, 40*, 518-524.
- Gottfredson, G. D., & Duffy, R. D. (2008). Using a theory of vocational personalities and work environments to explore subjective well-being. *Journal of Career Assessment, 16*, 44-59. doi: 10.1177/1069072707309609
- Green, L. A., Jones, S. M., Fetter, G., & Pugno, P. A. (2007). Preparing the personal physician for practice: Changing family medicine residency training to enable new model practice. *Academic Medicine, 82*, 1220-1227.
- Guntern, S., Korpershoek, H., & van der Werf, G. (2015). Prestige added to the vocational interest scales of Holland for the prediction of medical students' aspired work environment. *Journal of Career Assessment*. Advance online publication. doi: 10.1177/1069072715580418
- Hinze, S. W. (1999). Gender and the body of medicine or at least some body parts: (Re)constructing the prestige hierarchy of medical specialties. *Sociological Quarterly, 40*, 217-239. doi: 10.1111/j.1533-8525.1999.tb00546.x
- Herr, E. L. (1971). Student needs, college expectations, and reality perceptions. *The Journal of Educational Research, 65*, 51-56.
- Hogan, R., & Blake, R. (1999). John Holland's vocational typology and personality theory. *Journal of Vocational Behavior, 55*, 41-56. doi: 10.1006/jvbe.1999.1696
- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology, 6*, 35-45. doi: 10.1037/h0040767
- Holland, J. L. (1996). Exploring careers with a typology. What we have learned and some new directions. *American Psychologist, 51*, 397-406. doi: 10.1037/0003-066X.51.4.397
- Holland, J. L. (1997). *Making vocational choices. A Theory of vocational personalities and work environments*. Odessa, FL. Psychological Assessment Resources (third edition).
- Holland, J. L., & Gottfredson, G. D. (1976). Using a typology of persons and environments to explain careers: Some extensions and clarifications. *The Counseling Psychologist, 20*, 20-29. doi: 10.1177/001100007600600306

REFERENCES

- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55. doi: 10.1080/10705519909540118
- Iserson, K. V. (2003). Bioethics and graduate medical education: The great match. *Cambridge Quarterly of Healthcare Ethics, 12*, 61-65.
- Jackson, L. M., Pancer, S. M., Pratt, M. W., & Hunsberger, B. E. (2000). Great expectations: The relation between expectancies and adjustment during the transition to university. *Journal of Applied Social Psychology, 30*, 2100-2125. doi: 10.1111/j.1559-1816.2000.tb02427.x
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluation traits – self-esteem, generalized self-efficacy, locus of control, and emotional stability – with job satisfaction and job performance: A meta-analysis. *Journal of applied of applied psychology, 86*, 80-92. doi: 10.1037//0021-9010.86.1.80
- Kassamali, R., Gill, C., Murphy, A., Cheetham, L., & Ali, F. (2013). Finding Direction: What Influences Medical Students in Their Final Career Specialty Choices? *Medical Teacher, 35*, 339-339.
- Kassebaum, D. G., & Szenas, P. L. (1995). Medical students' career indecision and specialty rejection: Roads not taken. *Academic Medicine, 70*, 938-943. doi: 10.1097/00001888-199510000-00018
- Kiker, B. F., & Zeh, M. (1998). Relative income expectations, expected malpractice premium costs, and other determinants. *Journal of Health and Social Behavior, 39*, 152-167. doi: 10.2307/2676397
- Kim, K.-J., Park, J.-H., Lee, Y.-H., & Choi, K. (2013). What is different about medical students interested in non-clinical careers? *Medical Education, 13*, 2-7. doi: 10.1186/1472-6920-13-81
- Kuncel, N. R., Credé, M., & Thomas, L. L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of Educational Research, 75*, 63-82. doi: 10.3102/00346543075001063
- Kyllonen, P. C., Walters, A. M., & Kaufman, J. C. (2005). Noncognitive constructs and their assessment in graduate education: A review. *Educational Assessment, 10*, 153-184. doi: 10.1207/s15326977ea1003_2

- Lambe, P., & Bristow, D. (2011). Predicting medical student performance from attributes at entry: A latent class analysis. *Medical Education*, *45*, 308-316. doi: 10.1111/j.1365-2923.2010.03897.x
- Lent, E. B., & Lopez, F. G. (1996). Congruence from many angles: Relations of multiple congruence indices to job satisfaction among adult workers. *Journal of Vocational Behavior*, *49*, 24-37. doi: 10.1006/jvbe.1996.0031
- Lievens, F., Coetsier, P., De Fruyt, F., & De Maeseneer, J. (2002). Medical students' personality characteristics and academic performance: A five-factor model perspective. *Medical Education*, *36*, 1050-1056. doi: 10.1046/j.1365-2923.2002.01328.x
- Lievens, F., Ones, D., & Dilchert, S. (2009). Personality scale validities increase throughout medical school. *Journal of Applied Psychology*, *94*, 1514-1535. doi: 10.1037/a0016137
- Magidson, J., & Vermunt, J. K. (2002). Latent class models for clustering: A comparison with K-means. *Canadian Journal of Marketing Research*, *20*, 37-44.
- Marley, J., & Carman, I. (1999). Selecting medical students: A case report of the need for change. *Medical Education*, *33*, 455-459.
- Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. S. (2009). Classical latent profile analysis of academic self-concept dimension: Synergy person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling*, *16*, 191-225. doi: 10.1080/10705510902751010
- Maher, B. M., Hynes, H., Sweeney, C., Khashan, A. S., O'Rourke, M., Doran, K., Harris, A., & O'Flynn, S. (2013). Medical school attrition-beyond the statistics a then year retrospective study. *BMC Medical Education*, *13*, 13. doi: 10.1186/1472-6920-13-13
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, *52*, 509-516. doi: 10.1037/0003-066X.52.5.509
- McHugh, S. M., Corrigan, M. A., Sheikh, A., Lehane, E., Broe, P., & Hill, A. D. K. (2011). A study of the factors influencing school-going students considering medical careers. *The Surgeon*, *9*, 191-194. doi: 10.1016/j.surge.2010.09.005

REFERENCES

- McLarnon, M. J. W., Carswell, J. J., & Schneider, T. J. (2015). A case of mistaken identity? Latent profiles in vocational interests. *Journal of Career Assessment, 23*, 166-185. doi: 10.1177/1069072714523251
- McManus, I. C., Woolf, K., Dacre, J., Paice, E., & Dewberry, C. (2013). The academic backbone: Longitudinal continuities in educational achievement from secondary school and medical school to MRCP(UK) and the specialist register in UK medical students and doctors. *BMC Medicine, 11*, 242. doi: 10.1186/1741-7015-11-242
- Meir, E. I., & Yaari, Y. (1988). The relationship between congruent specialty choice within occupations and satisfaction. *Journal of Vocational Behavior, 33*, 99-117. doi: 10.1016/0001-8791(88)90036-X
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., Eisman, E. J., Kubiszyn, T. W., & Reed, G. M. (2001). Psychological Testing and Psychological Assessment. A Review of Evidence and Issues. *American Psychologist, 56*, 128-165. doi: 10.1037//0003-066X.56.2.128
- Miles, S., & Leinster, S. J. (2007). Medical students' perceptions of their educational environment: Expected versus actual perceptions. *Medical Education, 41*, 265-272. doi: 10.1111/j.1365-2929.2007.02686.x
- Monroe, A., Quinn, E., Samuelson, W., Dunleavy, D. M., & Dowd, K. W. (2013). An overview of the medical school admission process and use of applicant data in decision making: What has changed since the 1980s? *Academic Medicine, 88*, 672-681. doi: 10.1097/ACM.0b013e31828bf252
- Mount, M. K., Barrick, M. R., Scullen, S. M., & Rounds, J. (2005). Higher-order dimensions of the big five personality traits and the big six vocational interest types. *Personnel Psychology, 58*, 447-478. doi: 10.1111/j.1744-6570.2005.00468.x
- Norredam, M., & Album, D. (2007). Prestige and its significance for medical specialties and diseases. *Scandinavian Journal of Public Health, 35*, 655-661. doi: 10.1080/14034940701362137
- Nylund, K., Asparouhov, T., & Muthen, B. (2007). Deciding on the number of classes in latent class analysis and growth mixture modelling: A Monte Carlo simulation study. *Structural Equation Modelling: An Interdisciplinary Journal, 14*, 535-569.

- O'Connor, M. C., & Paunonen, S. V. (2007). Big five personality predictors of post-secondary academic performance. *Personality and Individual Differences, 43*, 971-990. doi: 10.1016/j.paid.2007.03.017
- O'Neill, L., Hartvigsen, J., Wallstedt, B., Korsholm, L., & Eika, B. (2011). Medical school dropout – testing at admission versus selection by highest grades as predictors. *Medical Education, 45*, 1111-1120. doi: 10.1111/j.1365-2923.2011.04057.x
- Osborn, E. H. S. (1993). Factors influencing students' choices of primary-care or other specialties. *Academic Medicine, 68*, 572-574. doi: 10.1097/00001888-199307000-00018
- Pancer, S. M., Hunsberger, B. Pratt, M. W., & Alisat, S. (2000). Cognitive complexity of expectations and adjustments to university in the first year. *Journal of Adolescent Research, 15*, 38-57. doi: 10.1177/0743558400151003
- Pastor, D. A., Barron, K. E., Miller, B. J., & Davis, S. L. (2007). A latent profile analysis of college students' achievement goal orientation. *Contemporary Educational Psychology, 32*, 8-47. doi: 10.1016/j.cedpsych.2006.10.003
- Peng, C.-Y. J., Lee, K. L., & Ingersoll, G. M. (2002). An introduction to logistic regression analysis and reporting. *The Journal of Educational Research, 96*, 3-14.
- Pike, G. R. (2006). Vocational preferences and college expectations: An extension of Holland's principle of self-selection. *Research in Higher Education, 47*, 591-612. doi: 10.1007/s11162-005-9008-x
- Pike, G. R., Smart, J. C., & Ethington, C. A. (2012). The mediating effects of student engagement on relationships between academic disciplines and learning outcomes: An extension of Holland's theory. *Research in Higher Education, 53*, 550-575. doi: 10.1007/s11162-011-9239-y
- Pinto, A. J., & Zeitz, H. J. (1997). Concept mapping: A strategy for promoting meaningful learning in medical education. *Medical Teacher, 19*, 114-121.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*, 33-40. doi: 10.1037/0022-0663.82.1.33
- Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire.

REFERENCES

- Educational and Psychological Measurement*, 53, 801-813. doi: 10.1177/0013164493053003024
- Powis, D. A. (1994). Selecting medical-students. *Medical Education*, 28, 443-469.
- Prediger, D. J. (1982). Dimensions underlying Holland's hexagon: Missing link between interests and occupations? *Journal of Vocational Behavior*, 21, 259-287. doi: 10.1016/0001-8791(82)90036-7
- Pullmann, H., Raudsepp, L., & Allik, J. (2006). Stability and Change in Adolescents' Personality: A Longitudinal Study. *European Journal of Personality*, 20, 447-459. doi: 10.1002/per.611
- Regan-Smith, M. G., Obenshain, S. S., Woodward, C., Richards, B., Zeitz, H. J., & Small, P. A. (1994). Rote learning in medical school. *Journal of the American Association*, 272, 1380-1381.
- Richardson, M., Bond, R., & Abraham, C. (2012). Psychological Correlates of University Students' Academic Performance: A Systematic Review and Meta-Analysis. *Psychological Bulletin*, 138, 353-387. doi: 10.1037/a0026838
- Rindskopf, D. (2003). Mixture or homogeneous? Comment on Bauer and Curran (2003). *Psychological Methods*, 8, 364-368. doi: 10.1037/1082-989X.8.3.364
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130, 261-288. doi: 10.1037/0033-2909.130.2.261
- Rosenthal, J., & Ogden, J. (1998). Changes in Medical education: The beliefs of medical students. *Medical Education*, 32, 127-132.
- Rosoff, S. M., & Leone, M. C. (1991). The public prestige of medical specialties: Overviews and undercurrents. *Social Science & Medicine*, 32, 321-326. doi: 10.1016/0277-9536(91)90110-X
- Sawyer, R. (2013). Beyond correlations: Usefulness of high school GPA and test scores in making college admission decisions. *Applied Measurement in Education*, 26, 89-112. doi: 10.1080/08957347.2013.765433
- Schmidt, F. L., & Hunter, J. E. (1977). Development of a general solution to the problem of validity generalization. *Journal of Applied Psychology*, 5, 529-540. doi: 10.1037//0021-9010.62.5.529

- Schripsema, N. R., van Trigt, A. M., Borleffs, J. C. C., & Cohen-Schotanus, J. (2014). Selection and Study Performance: Comparing Three Admission Processes within One Medical School. *Medical Education*, 48, 1201-1210. doi: 10.1111/medu.12537
- Searle, J., & McHarg, J. (2003). Selection for medical school: Just pick the right students and the rest is easy! *Medical Education*, 37, 458-463. doi: 10.1046/j.1365-2923.2003.01496.x
- Sherer, M., Maddux, J. E., Mercandante, B., Prenticedunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale – construction and validation. *Psychological Reports*, 51, 663-671.
- Shortell, S. M. (1974). Occupational prestige differences within the medical and applied health professions. *Social Science & Medicine*, 8, 1-9. doi: 10.1016/0037-7856(74)90003-1
- Simpson, L. A., & Grant, L. (1991). Sources and magnitude of job stress among physicians. *Journal of Behavioral Medicine*, 14, 27-42. doi: 10.1007/BF00844766
- Smith, H. M., & Betz, N. E. (2000). Development and validation of a scale of perceived social self-efficacy. *Journal of Career Assessment*, 8, 283-301. doi: 10.1177/106907270000800306
- Smithson, S. Hart, J., & Wass, V. (2010). Students' hopes and fears about early patient contact: Lessons to be learned about preparing and supporting students during the first year. *Medical Teacher*, 32, e24-e30. doi: 10.3109/01421590903199700
- Sodano, S. M., & Tracey, T. J. G. (2008). Prestige in interest activity assessment. *Journal of Vocational Behavior*, 73, 310-317. doi: 10.1016/j.jvb.2008.07.002
- Spokane, A. R. (1985). A review of research on person-environment congruence in Holland's theory of careers. *Journal of Vocational Behavior*, 26, 306-343. doi: 10.1016/0001-8791(85)90009-0
- Spokane, A. R., Meir, E. I., & Catalano, M. (2000). Person-Environment congruence and Holland's theory: A review and reconsideration. *Journal of Vocational Behavior*, 57, 137-187. doi: 10.1006/jvbe.2000.1771
- Stegers-Jager, K. M., Cohen-Schotanus, J., & Themmen, A. P. N. (2012). Motivation, learning strategies, participation and medical school performance. *Medical Education*, 46, 678-688. doi: 10.1111/j.1365-2923.2012.04284.x

REFERENCES

- Stewart, G. L. (1999). Trait bandwidth and stages of job performance: Assessing differential effects for conscientiousness and its subtraits. *Journal of Applied Psychology, 84*, 959-968. doi: 10.1037/0021-9010.84.6.959
- Stratton, T. D., Witzke, D. B., Elam, C. L., & Cheever, T. R. (2005). Learning and career specialty preferences of medical applicants. *Journal of Vocational Behavior, 67*, 35-50. doi: 10.1016/j.jvb.2003.06.001
- Su, R., Rounds, J., & Armstrong, P. I. (2009). Men and things, women and people: A meta-analysis of sex differences in interests. *Psychological Bulletin, 135*, 859-884. doi: 10.1037/a0017364
- Taber, B. J., Hartung, P. J., & Borges, N. J. (2011). Personality and values as predictors of medical specialty choice. *Journal of Vocational Behavior, 83*, 202-209. doi: 10.1016/j.jvb.2010.09.006
- Tassoni, C. J., Chen, B., & Chu, C. (2012). One-to-one matching of case/controls using SAS® software.
Retrieved from www2.sas.com/proceedings/sugi22/POSTERS/PAPER257.PDF
- Tiberius, R. G., Sackin, H. D., & McLean, A. (1989). Medical students' early expectations and later opinions of aspects of their first year. *Academic Medicine, 64*, 538-542. doi: 10.1097/00001888-198909000-00012
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*, 89-125. doi: 10.3102/00346543045001089
- Tipton, R. M., & Worthington, E. L. (1984). The measurement of generalized self-efficacy – A study of construct-validity. *Journal of Personality Assessment, 48*, 545-548.
- Tracey, T. J. G., & Rounds, J. (1996). The spherical representation of vocational interests. *Journal of Vocational Behavior, 48*, 3-41. doi: 10.1006/jvbe.1996.0002
- Tracey, T. J. G., & Robbins, S. B. (2006). The interest-major congruence and college success relation: A longitudinal study. *Journal of Vocational Behavior, 69*, 64-89. doi: 10.1016/j.jvb.2005.11.003
- Tranberg, M., Slane, S., & Ekeberg, S. E. (1993). The relation between interest congruence and satisfaction: A metaanalysis. *Journal of Vocational Behavior, 42*, 253-264. doi: 10.1006/jvbe.1993.1018

- Trapmann, S., Hell, B., Hirn, J. O. W., & Schuler, H. (2007). Meta-Analysis of the relationship between the big five and academic success at university. *Journal of Psychology, 215*, 132-151. doi: 10.1027/0044-3409.215.2.132
- Tyssen, R., Vaglum, P., Grønvold, N. T., & Ekeberg, Ø. (2005). The relative importance of individual and organizational factors for the prevention of job stress during internship: A nationwide and prospective study. *Medical Teacher, 27*, 726-731. doi: 10.1080/01421590500314561
- Tyssen, R., Dolatowski, F. C., Rovik, J. O., Thorkildsen, R. F., Ekeberg, O., Hem, E., Gude, T., Grønvold, N. T., & Vaglum, P. (2007). Personality traits and types predict medical school stress: A six-year longitudinal and nationwide study. *Medical Education, 41*, 781-787. doi: 10.1111/j.1365-2923.2007.02802.x
- Österreichische Universitätskonferenz (2014). *Frühe Studienabbrüche an Universitäten in Österreich*. Retrieved from http://uniko.ac.at/wissenswertes/uniko_pedia/drop_out/index.php?ID=4166#O6387
- Urlings-Strop, L. C., Stijnen, T., Themmen, A. P. N., & Splinter, T. A. W. (2009). Selection of medical students: A controlled experiment. *Medical Education, 43*, 175-183. doi: 10.1111/j.1365-2923.2008.03267.x
- Vermunt, J. K., & Magidson, J. (2005). *Latent GOLD 4.0 user's guide*. Belmont, Massachusetts: Statistical Innovation Inc.
- von Eye, A., Bogat, G. A., & Rhodes, J. E. (2006). Variable-oriented and person-oriented perspectives of analysis: The example of alcohol consumption in adolescence. *Journal of Adolescence, 29*, 981-1004. doi: 10.1016/j.adolescence.2006.06.007
- Wille, B., Tracey, T. J. G., Feys, M., & De Fruyt, F. (2014). A longitudinal and multi-method examination of interest-occupation congruence within and across time. *Journal of Vocational Behavior, 84*, 59-73. doi: 10.1016/j.jvb.2013.12.001
- Wright, B., Scott, I., Woloschuk, W., & Brenneis, F. (2004). Career choice of new medical students at three Canadian universities: Family medicine versus specialty medicine. *Canadian Medical Association Journal, 170*, 1920-1924. doi: 10.1503/cmaj.1031111

REFERENCES

- Yonge, G. D. (1968). Personality correlates of the college and university environment scales. *Educational and Psychological Measurement*, 28, 115-123. doi: 10.1177/001316446802800111
- Yufit, R. I., Pollock, G. H., & Wasserman, E. (1979). Medical specialty choice and personality. I. Initial results and predictions. *Archives of General Psychiatry*, 20, 89-99.