



drieharingstraat 26
postbus 1568
3500 bn utrecht
telefoon: 030 319946

LITERATUURLIJST

SELECTIE MEDISCHE
BEROEPSOPLEIDING

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Samenstelling: R. Willemsen
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De literatuurlijst "Selectie medische beroepsopleiding" is een uitgave van de afdeling Bibliotheek en Documentatie van het Nederlands instituut voor onderzoek van de eerstelijnsgezondheidszorg (NIVEL), Drieharingstraat 26, Postbus 1568, 3500 BN Utrecht, telefoon 030-319946.

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INLEIDING

In de meeste landen vindt selectie van medische studenten plaats. Ook in Nederland. Zij het dat bij de hier gehanteerde selectiewijze de voorafgaande studieresultaten en de uitkomst van een lotingsprocedure een rol speelt. In andere landen zoals de Verenigde Staten van Amerika, Engeland en Israël worden ook andere methoden toegepast, zoals:

- resultaten bij een toelatingsonderzoek
- beoordeling na een sollicitatieprocedure
- resultaten bij voorafgaande 'maatschappelijke' ervaring.

Prof. Wijnen (zie nr. 64) stelt dat elk van de genoemde mogelijkheden voorzien kan worden van argumenten pro en argumenten contra. Hierdoor is het nauwelijks mogelijk op basis van rationele overwegingen tot een afgewogen keuze te komen. De blijvende onzekerheden en twijfels, rondom welke selectiemethode dan ook, zijn belangrijk, omdat ze zo gemakkelijk worden vergeten wanneer selectie eenmaal is ingevoerd. Deze vergeetachtigheid wordt ondersteund door het feit dat studenten die niet zijn toegelaten nimmer in de gelegenheid worden gesteld aan te tonen dat zij de medische studie met succes zouden hebben kunnen volgen. Het zou voor de hand moeten liggen dat men allereerst onderzoekt hoe groot de foutenmarge bij selectiebeslissingen naar alle waarschijnlijkheid is, voordat men tot invoering besluit.

Nederlandse literatuur over selectieprocedures voor studenten is er nauwelijks. Het KNMG heeft in 1970 een rapport uitgebracht over selectieproblematiek en het CITO laat in 1982 een rapport verschijnen onder de titel "Gewikt en gewogen": studietoetsen voor studierichtingen met een numerus clausus.* Van Lin en Vrij besteden in hun studieverslag over de eerstelijns in Israël (zie nr. 35) onder andere aandacht aan de daar toegepaste selectiemethode. Zij concludeerden dat voor de grote middengroep de methode te weinig discrimine-

rend is en de spreidingsmarge te klein om echt wezenlijke verschillen op te kunnen sporen.

Ondanks alle twijfel en scepsis wordt er toch verder gewerkt aan selectie van medische studenten. Binnen het KNMG circuleert een intern rapport met de titel "Selectie medische beroepsopleiding" en het Rotterdams Universitair Huisartseninstituut start dit najaar met een proefonderzoek naar toelatingscriteria voor studenten tot de opleiding huisartsgeneeskunde. Van de resultaten zal ondermeer afhangen wat er in de toekomst met betrekking tot de selectie zal gaan gebeuren.

* Kuijpers, H.L.M.

Gewikt en gewogen. Eindverslag CITO project "Studietoetsen met een numerus clausus"/H.L.M. Kuijpers.-
Arnhem: CITO, 1982

GEBRUIKSAANWIJZING BIJ DE LITERATUURLIJST

Onder de titelbeschrijvingen staan afkortingen van namen van instellingen. Dit betekent dat het boek, rapport of tijdschrift in het bezit is van onder andere deze instellin(en). Achterin vindt u de volledige naam en adressering.

De organisatie die onderstreept is heeft zorg gedragen voor het referaat. Staat er ~~en~~ naam onder de titelbeschrijving dan wil dit zeggen dat de betreffende instelling zowel in het bezit is van de literatuur en het referaat heeft verzorgd.

Om het zoeken op auteur te vergemakkelijken is een alfabetische auteursindex samengesteld met daarachter de publicatienummers. Naast schrijvers zijn hierin opgenomen: geïnterviewden, sprekers van bijvoorbeeld symposia en instellingen.

1

Acceptability

Acceptability of the international baccalaureate in British universities.- Geneva: International baccalaureate office, 1980.- 14 p.: tabn.; 29 cm. (C. 58 C 28) nivel

Weergave van gedeelte van Report on the Exploratory Study into the Extension of the International Baccalaureate within the United Kingdom door D. Wilkinson aan International Baccalaureate Office te Geneve, over onderzoek naar mogelijkheid tot invoering van diploma International Baccalaureate (IB) in onderwijs van Verenigd Koninkrijk; lijst van universiteiten en colleges in het Verenigd Koninkrijk, die studieplaatsen aan bezitters van IB diploma hebben aangeboden; IB en toelating tot Medical Schools; toelating tot universitair onderwijs door IB.

2

Annual

Annual report on medical education in the United States.- Journal of the American Medical Association; jrg. 248, no. 24, 1982; jrg. 250, no. 12, 1983; jrg. 254, no. 12, 1985

3

Babapulle, C.J.

General intellectual ability of university entrants in Sri Lanka/C.J. Babapulle en A.L.S. Mendis.- Medical Education; jrg. 18, no. 3, 1984, p. 142-146 nivel

The General Certificate of Education-Advanced Level (GCE-A/L) examination performance is the main criterion used in the admission of students to university in Sri Lanka. Students sitting this examination in the biology stream offer physics, chemistry, zoology and botany as the four required subjects. Students are admitted to university in Sri Lanka on the basis of aggregate marks above a

certain cut-off point obtained at the GCE (advanced level) examination. On this criterion and on a district-quota basis operative for the whole island, high performers are admitted to the medical faculties. Those with lower aggregate marks are admitted to the other life science faculties. High performance at the GCE (advanced level) examination is considered to reflect high general intellectual ability and vice versa. A group of students who failed to obtain university admission on their relatively poor GCE (advanced level) examination performance was used for a preliminary study. This study revealed that several students were of high general intellectual ability. A similar study carried out on groups of new entrants to the life science courses at the University of Peradeniya (which included medical students) showed that the groups did not differ significantly in general intellectual ability from the non-University group. Students of high general intellectual ability were found distributed evenly in all the groups studied.

4

Barro, A.R.

Survey and evaluation of approaches to physician performance measurement/A.R. Barro.- Journal of Medical Education; jrg. 48, no. 11, 1973, p. 1048-1093
nível

This survey and evaluation of approaches to performance measurement was undertaken by dr. Arlene R. Barro as research associate for the Association of American Medical Colleges Longitudinal Study Project. The purpose of the survey is to provide background information for the selection of performance measurement instruments to be used in connection with the projected follow-up of the longitudinal study of medical students of the class of 1960. The preliminary version of this monograph was prepared for a workshop entitled, "Following Up the Performance of Physicians in the AAMC Longitudinal Study", which was held June 1972. This final ver-

sion incorporates some comments and suggestions received from the workshop consultants and from the review done by the National Center for Health Services Research and Development.

5

Bartnick, L.W.

The value of the California Psychological Inventory in predicting medical students' career choice/L.W. Bartnick, M.M. Kappelman, J.H. Berger e.a.--Medical Education; jrg. 19, no. 2, 1985, p. 143-147
nivel

Much of the research in medical education has focused on the prediction of medical students' future career choices. This longitudinal study evaluates the effectiveness of the California Psychological Inventory (CPI) in predicting career choices of students attending the University of Maryland School of Medicine. While results did reveal some significant and consistent differences between career choice groups, these differences were not of the magnitude to allow discrimination among all specialty groups. There is no evidence to support the hypothesis that career choice can be predicted from CPI data. It was concluded that future research into career choice prediction should focus on variables other than personality characteristics as measured by the CPI or similar tests.

6

Benor, D.E.

Moral reasoning as a criterion for admission to medical schools/D.E. Benor, N. Notzer, T.J. Sheehan e.a.--Medical Education; jrg. 18, no. 6, 1984, p. 423-428, grafn., lit.opgn., tabn.
nivel

To determine whether admission interviews could differentiate applicants on their personal qualities (such as integrity, empathy and commitment) 456 applicants from two medical schools were tested

on the Defining Issues Test (DIT), which measures the amount of principled or post-conventional moral reasoning. No difference was found between the DIT scores of the accepted and the rejected applicants of the school in which the admission criteria are the traditional scholastic ones. On the other hand, a great difference was shown in the school which admits students for their personal characteristics as assessed by interviews. Yet only moderate correlation was shown between the DIT and the interview scores. Since moral reasoning is a key concept in medical professional behaviour and is correlated with clinical performance, the findings deserve special attention. A possible use of the DIT in the student selection process is discussed.

7

Best, W.R.

Multivariate predictors in selecting medical students/W.R. Best, A.J. Diekema, L.A. Fisher e.a..-
Journal of Medical Education; jrg. 46, no. 1, 1971, p.
42-50
nivel

After various preliminary studies, prediction equations were derived through stepwise multiple regression using 10 criterion variables of medical school performance and 14 features of an application as predictor variables.

It was found that additional predictor variables generally prove of little or no further value over the most robust three to five. Precision of prediction is in no case very great. The potentiality for prediction with premedical credentials tends to decrease with progression through medical school. Performance in multiple-choice examinations is more closely predictable than on patient-management problems or ratings of clerkship performance. A recommended prediction equation is based on overall performance throughout the four years, a combination of various types of ratings. It gives approximately equal weight to premedical grade-point a-

verage, type of college attended, quantitative MCAT score, and science MCAT.

8

Boeters, B.

Wachtlijst voor huisartsenopleiding neemt buitensporige vormen aan: drastische vermindering van plaatsen bij overige specialisties/B. Boeters.- Marge; jrg. 7, no. 12, 1983, p. 7, afb.

nivel

Visie van prof. dr. J.D. Mulder Dzn. van de Leidse Vakgroep huisartsgeneeskunde op de problematiek van de aanzienlijke stijging van basisartsen die zich aanmelden voor huisartsgeneeskunde en als gevolg hiervan de lange wachttijd, veroorzaakt doordat de belangenorganisaties van specialisten besloten hebben het aantal arts-assistenten in opleiding drastisch terug te brengen.

9

Bollag, U.

Continuous assessment of students during clinical clerkship - experiments at Maastricht/U. Bollag.- Medical Education; jrg. 18, no. 4, 1984, p. 232-235

nivel

A method of continuous assessment of students in a clinical setting (paediatrics) was adopted at the Medical Faculty of the Rijksuniversiteit Limburg, Maastricht, the Netherlands. One out-patient department student/patient encounter per week was written by the clinical tutor. Criteria for assessment were predetermined, and a 4-point scale was used for rating. Score consistency was improved by asking one clinician to observe and mark the same students throughout the attachment. The coordinator's task was to establish the learning profile for each student on a chart, to give assistance to clinical tutors and to provide remedial education for students. Acceptability to all the parties involved was established. If this method

were used with more than one student/patient encounter per week and if student/patient encounters were rated on the ward, in the emergency room, etc., continuous assessment and monitoring of students' learning would be achieved. This approach, therefore, warrants development and application in all clinical disciplines.

10

Buckley-Sharp, M.D.

A linear educational study on the intake of a single year into medical school/M.D. Buckley-Sharp, F.T.C. Harris en J.B. Jepson.- British Journal of Medical Education; jrg. 4, no. 2, 1970, p. 89-96
nível

The assessment of students is just as important as the assessment of the product of an industrial process. Both fall broadly into the category of 'quality control'. In a medical school, many disciplines are integrated to produce qualified doctors and, since alterations and innovations in curricula and teaching are continually being introduced, it is vital that adequate quality control be maintained. Such control should also suggest ways of improving the various courses. We believe that this is best done by a technique of continuous assessment. However, the traditional view of this form of assessment is entirely orientated towards categorizing students. The corollary to this situation -the control of the course material- is not fully appreciated, or exploited. The proper use of a suitable assessment procedure to monitor a course entails planning and automation if such monitoring is to be practicable.

We have conducted a linear study of the year's intake to the Middlesex Hospital Medical School (October, 1966), by considering the A level results, the second MB results, and the results obtained in four pathology course examinations for that intake. The last four examinations were of the multiple-choice type. Advantage has been taken of this pro-

cedure to assess part of the general pathology course.

11

Burkett, G.L.

Characteristics of students preferring family practice/primary care careers/G.L. Burkett en M.H. Gellula.- Journal of Family Practice; jrg. 15, no. 3, 1982, p. 505-512

nivel

Survey data from a large national sample of junior medical students were used to make several comparisons between students indicating a preference for family practice and students selecting other specialties. Comparisons were also made between students on the basis of their interest in primary care vs nonprimary care fields. On the basis of measures of premedical school academic performance (undergraduate grade point average and Medical College Admission Test scores), students choosing family practice and those indicating a general preference for primary care were similar to students choosing other specialties of nonprimary care fields. Subjectively, students selecting primary care ranked themselves lower than other students in medical school academic performance. Students with a career interest in primary care also gave greater weight to the desire to help people as a career motivation, were more oriented toward considering the sociopsychological context of patients' problems, and were more likely to perceive a need for change to improve health care in the United States.

12

Clemente, M.

The Dean's letter of recommendation and internship performance/M. Clemente en W.M. Michener.- Journal of Medical Education; jrg. 51, no. 7, 1976, p. 590-592

nivel

Recommendations are seen as important qualitative information balancing and augmenting quantitative credentials. There was no significant correlation between the staff's evaluations and the deans' letters. This lack of significance indicates their value as a projective device to be highly questionable.

Deans's letters were similar in content. They did not present individual descriptions but vague generalizations, important information was absent. Only 16 percent of all the letters had a negative comment about a candidate. This suggests that pertinent characteristics were omitted "to give the student the benefit of the doubt".

Since a dean's letter heavily depends upon evaluations of clerkships, it appears that the manner in which clerkships are assessed and reported must be greatly improved. Without this change, the dean's letter is of minimal value. A remedy would be the formulation of a standard scale by which the student is assessed. This scale should consist of those qualities determined to be central for good "physicianship" and predictive of future performance. Perhaps then, selection committees could better evaluate applicants for their particular graduate education programs.

13

Cullen, T.J.

Predicting first-quarter test scores from the New Medical College Admission Test/T.J. Cullen, C.W. Dohner, P.D. Peckham e.a.- Journal of Medical Education; jrg. 55, no. 5, 1980, p. 393-398
nível

The predictive validity of the new Medical College Admission Test as it relates to end-of-quarter examinations in anatomy, histology, physiology, biochemistry, and "ages of man" is presented. It is recognized that the maximum predictive power is attenuated by the reliability of the criterion variables. To determine the value of attempting to

increase the reliability in the criteria, the authors corrected the validity coefficients for attenuation. Regression analyses were also undertaken to examine the extent to which the new MCAT subtests can predict scores on end-of-quarter examinations. Results indicate that the Science Knowledge assessment areas of chemistry and physics and the Science Problems subtest were the most useful in predicting student performance, followed by the Skills Analysis: Quantitative and Skills Analysis: Reading subtests and the biology area of the Science Knowledge subtest.

14

Delk, J.L.

A practical method to enhance fairness of clerkship ratings/J.L. Delk, G.J. Cason en W.G. Reese.- Journal of Medical Education; jrg. 60, no. 12, 1985, p. 944-945

nivel

The results obtained in the study reported here were consistent with the authors' expectation that adjusted ratings would be fairer than unadjusted ones. Handicapping should be routinely applied to ward, clinic, and other performance ratings of medical students, residents, and physicians. However, its application is appropriate when trainees are randomly assigned to raters, as the students were in the program described here. The extent to which handicapping can improve fairness in a particular case depends upon the magnitude of the systematic differences in raters' standards. In educational evaluation, the appearance of fairness is as important as fairness in the actual practice. Both the appearance of fairness and the actual fairness of grades earned in clinical clerkships can be improved with only modest effort by the course director or the faculty. Handicapping of raters may not be all that is needed, however, improving rating scales, training perceptors to rate students consistently, and preparing more reliable written

tests may also be needed to ensure overall fairness in awarding clerkship grades.

15

Donnelly, M.

A model for predicting performance on the NBME part I examination/M. Donnelly, K. Yindra, S.Y. Long e.a..- Journal of Medical Education; jrg. 61, no. 2, 1986, p. 123-131

nivel

Multiple regression analyses were employed to determine the relationships between achievement variables as predictors of the performance on Part I of the National Board of Medical Examiners examinations (NBME-I) of 366 medical students. The students' examination score averages in first- and second-year basic science courses were sequentially added to a composite Medical College Admission Test (MCAT) score to investigate the increases in prediction accuracy. Four prediction equations were cross validated on two subsequent medical school classes. While the multiple correlation between the predicted NBME-I score and the actual score significantly increased as first- and second-year course examination scores were added to the equations, the overall accuracy in predicting passing or failing did not substantially increase. The most useful equation employed a combination of the MCAT score and the first semester anatomy course examination score. The NBME-I predictions were given by letter to the 1984 and 1985 students approximately a year before they were to take the NBME-I examination so that students at risk of failure could undertake remedial study.

16

Donnelly, M.B.

Simply adding versus differential weighting of MCAT subtest scores/M.B. Donnelly, D.S. Fleisher, S.Y. Long e.a..- Journal of Medical Education; jrg. 58, no. 7, 1983, p. 581-583

nivel

The New Medical College Admission Test Interpretive Manual states, "Simple arithmetic score averaging automatically weights the six scores equally when in fact they may not equally predict performance". The theoretical correctness of this admonition was corroborated by subsequent research which showed that Medical College Admission Test (MCAT) subtests were differentially predictive. In this communication the authors attempt to compare the utility of a simple versus a multiple regression approach in predicting scores on the Part I examination of the National Board of Medical Examiners (NBME).

Method:

The subjects were the first students at the Medical College of Wisconsin to have taken the new MCAT. Data were available for 170 students in the class of 1982 and for 182 students in the class of 1983. MCAT and the NBME Part I scores were related both by simple regression equations using simple arithmetic averaging of MCAT subtests and by multiple regression equations using differentially weighted MCAT subtests. The simple and multiple regression equations derived from each class were cross-validated on the other class. It should be noted that MCAT Science Problems subtest scores were not used in this study since these scores are derived from other subtests and, consequently, are not independent.

As expected, the magnitude of the uncross-validated correlations slightly favored the multiple over the simple regression approach. However, since the optimal combination of variables in multiple regression equations can change from year to year, this approach is less attractive. At present, therefore, the weight of evidence is not overwhelmingly in favor of using the multiple regression approach.

The cross-validation data bear on the ultimate utility of the two approaches. Mainly owing to the greater losses in accuracy of prediction after

cross-validation, the multiple regression approach is slightly less useful than the simple regression method. Usefulness was judged by accuracy of predictions after cross-validation and ease of application.

Under the conditions described in this article, simple averaging of MCAT subtest scores is at least as useful as, if not more useful than, differentially weighting these subtest scores in predicting NBME Part I total scores. Finally, the authors have obtained similar results using basic science course examination scores as the criterion variable.

17

Feletti, G.I.

Evaluating a new approach to selecting medical students/G.I. Feletti, R.W. Sanson-Fisher, M. Vidler and the Admissions Committee of the Faculty of Medicine, University of Newcastle, New South Wales.- Medical Education; jrg. 19, no. 4, 1985, p. 276-284
nivel

Dissatisfaction with the traditional methods of selecting Australian medical students, which use only secondary school achievement, led to an innovative alternative method at the Newcastle Medical School. This multistage approach uses tests of problemsolving ability, empathy, creativity and more dilemmas to screen applicants otherwise suitable on academic achievement. In the 5-year trial since its inception, this process appears reasonably reliable and valid. There is some merit in using a composite score for ranking applicants, based on weighted contributions from the psychological tests used in its multifactorial battery. However, the ultimate effectiveness of individual tests of a composite score will depend on their predictive validity, which is yet unmeasured.

Conclusion:

This analysis has concentrated on the psychometric features of a multifactorial aptitude test battery, which is used as an intermediate (stage 2) scree-

ning device for some applicants to the Newcastle Medical School. The strong screening (of approximately half the original number) of applicants at stage 1 suggests that many of those now accepted for testing at stage 2 have sufficient academic ability to be successful in the course. This puts strong emphasis on the multifactorial battery to screen applicants on other criteria, since any further testing of academic skills is unwarranted. The Dilemmas, Empathy and Creativity tests have each demonstrated sufficient validity and reliability to warrant their retention in this test battery but, as suggested, their contribution may be enhanced.

There are some measurement problems inherent in this selection process. For example, it was obvious that applicants re-tested in subsequent years showed general dramatic improvement in their HMA scores (see Table 4) on the second occasion. If that test had retained its relatively high weight on composite scores this would have been an obvious way of improving one's chances of selection - particularly since the time-limit on the HMA test was rather influential on applicants' performance. However, the use of transformed scores on all tests, and the relatively small variances and negligible raw score gains when re-sitting the other three tests, does not suggest any automatic or dramatic improvement in chances of selection from re-applying.

Whether or not the distortion of original test weights on the composite score is acceptable will partly depend on their respective reliability and validity estimates. Since these data have not been high for the Creativity, Empathy and Dilemmas tests, it may be beneficial to review their respective item score weights and concurrent validity. These two steps should result in more accurate measurement of real differences between applicants on each test.

The ultimate decision on the value of such composite score (and its test weights) must depend on

the predictive validity of the multifactorial battery. This can be estimated once criteria for success in the 5-year course have been identified. Although students in the first cohort have recently graduated, it is as yet too early to make or evaluate confidently any predictions about clinical competence based on a composite selection score, or individual tests.

18

Franssen, A.M.J.

Verschillen in attitude tussen medische studenten: een vergelijking tussen vierde- en zesdejaard medische studenten in Maastricht en Nijmegen/A.M.J. Franssen, J.M.G. Persoon, S. Veling.- Medisch Contact; jrg. 37, no. 32, 1982, p. 970-974

nivel

Medische studenten verwerven niet alleen medische kennis, technieken en inhouden, maar ook een bepaalde manier van denken over zichzelf, de patiënten en hun beroep. Vorm en inhoud van het onderwijs hebben met andere woorden invloed op de attitudevorming.

De nieuwe opleiding aan de achtste medische faculteit te Maastricht op dit punt vergeleken met die aan de Nijmeegse medische faculteit. Geconcludeerd wordt dat 'Maastricht', dat zich met name kenmerkt door een geheel eigen opzet van de eerste studiejaren, sterker bijdraagt aan de ontwikkeling van attitudes die nodig zijn om bijvoorbeeld mensen met klachten van psychische en sociale oorsprong te helpen. In het zesde studiejaar bleken de verschillen in attitudevorming volgens verwachting vrijwel geheel verdwenen: de coschappen zijn aan beide universiteiten bijna identiek geregeld; overigens presenteerden de zesdejaars in Maastricht zich in bepaalde opzichten slechter dan de vierdejaars ter plaatse. Voor Nijmegen zouden deze bevindingen kunnen betekenen dat een curriculumwijziging voor de eerste studiejaren is geïndiceerd, voor Maastricht

dat de co-schappen er enigszins anders zouden moeten worden opgezet.

19

Friedman, C.P.

Incremental validity of the new MCAT/C.P. Friedman en W.E. Bakewell.- Journal of Medical Education; jrg. 55, no. 5, 1980, p. 399-404

nivel

The authors investigated the power of the New Medical College Admission Test (MCAT) to predict performance of first-year medical students at the University of North Carolina. The approach was to compute the additional variance in performance explainable by the New MCAT after the effects of other routinely available admissions variables were taken into account. This incremental validity of the New MCAT was found to be substantial, with performance prediction improved by 23 to 38 percent, and was higher in this range when nationally standardized performance measures were employed as the outcome variable. Also several predictor variables -including two New MCAT subtests- were found to have significant polynomial relationships to the outcome measures. Use of polynomials in the regression procedure increased the overall accuracy of the prediction but did not affect the incremental validity of the New MCAT.

20

Gordon, M.J.

Selecting a few residents from many applicants: a new way to be fair and efficient/M.J. Gordon en J.A. Lincoln.- Journal of Medical Education; jrg. 51, no. 6, 1976, p. 454-460

nivel

Selection of residents from among the large number of qualified applicants is an annual task requiring a significant commitment of resources by teaching hospitals. A method based on sound principles of

decision-making and utilizing a computer analysis for initial ranking of applicants was developed to improve the selection process. The result was satisfactory selection with significant savings of time and effort for the residency program faculty.

21

Graettinger, J.S.

First-year graduate medical education positions obtained by U.S. graduates in 1977/J.S. Graettinger.- Journal of Medical Education; jrg. 53, no. 7, 1978, p. 547-555
nivel

When the 2,308 residencies obtained by U.S. medical school graduates outside of the National Intern and Resident Matching Program were added to those of the 11,172 students who matched, the distribution of all 1977 graduates among specialties was found to be essentially the same as for those who matched, but regional differences were marked. A regional comparison of the location of the residencies obtained by the graduates with the location of the schools attended by students suggested that recruitment of graduates from other regions was as important in determining the number of first-year residents as was retention of graduates in a given region.

22

Harden, R.M.G.

Assessment of clinical competence using objective structured examinations/R.M.G. Harden, M. Stevenson, W.W. Downie e.a.- British Medical Journal; jrg. 1, no. 5955, 1975, p. 447-451
nivel

To avoid many of the disadvantages of the traditional clinical examination we have introduced the structured clinical examination. In this students rotate round a series of stations in the hospital ward. At one station they are asked to carry out a

procedure, such as take a history, undertake one aspect of physical examination, or interpret laboratory investigations in the light of a patient's problem, and at the next station they have to answer questions on the findings at the previous station and their interpretation. As they cannot go back to check on omissions multiple-choice questions have a minimal cueing effect. The students may be observed and scored at some stations by examiners using a check list.

In the structured clinical examination the variables and complexity of the examination are more easily controlled, its aims can be more clearly defined, and more of the student's knowledge can be tested. The examination is more objective and a marking strategy can be decided in advance. The examination results in improved feedback to students and staff.

23

Harden, R.M.G.

Assessment of clinical competence using an objective structured clinical examination (OSCE)/R.M.G. Harden en F.A. Gleeson.- Medical Education; jrg. 13, no. 1, 1979, p. 39-45
nivel

Assessment of students is a matter of continuing concern for medical teachers. Numerous attempts have been made to improve the reliability and validity of written examinations, and recent ASME booklets have described multiple choice questions of the one from five type (Lennox, 1974) and the modified essay question (Knox, 1975). The clinical examination is regarded by many examiners as of key importance in the assessment of a student's competence to practice medicine and the cornerstone in qualifying examinations. While deficiencies in the conventional or traditional clinical examination have been clearly identified (Stokes, 1974; Wilson e.a., 1969), few attempts have been made to improve the assessment of a student's clinical skills.

Indeed, in the USA the tendency has been to move away from examinations at the bedside and towards patient management problems (Hubbard, 1971; Newble, 1976).

This booklet describes a procedure -the objective structured clinical examination (OSCE)- designed to assess clinical competence at the bedside, and suggests that there are many advantages if this approach is incorporated into examinations aimed at testing clinical skills. Guidelines for the organization of such an examination are described. A preliminary report describing the OSCE has been published (Harden e.a., 1975).

24

Hobfoll, S.E.

Prediction of student clinical performance/S.E. Hobfoll en D.E. Benor.- Medical Education; jrg. 15, no. 4, 1981, p. 231-236

nivel

The predictive validity of 'traditional' tools utilized in the selection of medical students was evaluated in a 'non-traditional' selection paradigm, where a wide range of previous-academic ability was represented. The validity of the use of pre-academic grades and examination scores in the prediction of success in clinical performance was examined in a medical school which de-emphasizes these indicators and emphasizes personal characteristics assessed via interview ratings in student selection. Grades and examination scores were found to have no relation to clinical ratings which have an added interpersonal and community emphasis during the fourth-sixth years of medical school. A positive trend was found for interview ratings with clinical performance, but the skewed nature of interview scores was seen as limiting investigation of this variable. The meaning of these results vis-à-vis the continued use of academic and examination related selection criteria was discussed.

25

Hochschulzugang

Hochschulzugang; ein tragfähiger Kompromiss.- Akademischer Dienst; jrg. 25, no. 42, 1983, p. 478-485

Min. O&W

Themanummer over situatie en problematiek rond toelating tot het hoger onderwijs in de BRD. Standpunten en aanbevelingen van diverse Landesregierungen, politieke partijen, wetenschappelijke en onderwijsinstellingen. Besluiten van de Kultusministerkonferenz inzake toelatingsprocedure m.b.t. studierichting geneeskunde.

26

Hoefnagels, K.L.J.

Manpowerplanning kan niet zonder instroomregulering/K.L.J. Hoefnagels.- Medisch Contact; jrg. 37, no. 43, 1982, p. 1369-1370

nivel

Health manpowerplanning dient te zijn gericht op de toekomstige arbeidsmarkt van alle werkers in de gezondheidszorg. Ook al mogen wij ons als medici beperken tot onze eigen beroepsgroep op grond van onze speciale verantwoordelijkheid in dit opzicht, toch is het niet juist dat de problemen van ~~een~~ artsencategorie worden overbelicht met voorbijgaan aan andere categorieën waarvan de oplossing van de arbeidsplaatsenproblematiek wellicht nog meer onze belangstelling vereist.

Het is de taak van de professie een integraal manpowerbeleid te ontwikkelen. Dit moet er op de eerste plaats op zijn gericht het instromen van de afgestudeerde artsen in de diverse vervolgopleidingen in de vereiste kwantiteiten, rekening houdend met de communicerende samenhang, op een adequate wijze te reguleren. Vervolgens is het aan de overheid om op basis van de aldus geplande benodigde mankracht geëigende maatregelen te treffen die de instroom van studenten in de medische faculteiten op de toekomstige behoefte afstemmen.

27

Hojat, M.

Predictive validity of the MCAT for students with two sets of scores/M. Hojat, J.J. Veloski en C. Zelenik.- Journal of Medical Education; jrg. 60, no. 12, 1985, p. 911-918
nivel

Addressed in the study reported here is the question of which set of scores for those students who retake the Medical College Admission Test (MCAT) yields a better predictive validity. The sample was comprised of 304 students who retook the MCAT prior to entering Jefferson Medical College between 1978 and 1981. Five sets of MCAT scores were considered as predictors in the study: earlier, later, higher, and lower sets of MCAT scores and the average of the earlier and later scores for each MCAT subtest. Twenty-five criteria were used, including grades earned in the freshman and sophomore years and scores on the subtests of Part I and Part II of the examinations of the National Board of Medical Examiners. Correlational techniques, such as bivariate and multiple correlation analyses and canonical correlation followed by redundancy analysis were utilized. The magnitude of redundancy indices indicated that the set of MCAT scores in which the earlier and later scores were averaged was the best predictor, followed by the earlier, lower, higher, and later sets of MCAT scores. The implications of these findings for the admissions process and for validity studies are discussed.

28

Jones, R.F.

Validity of the MCAT in predicting performance in the first two years of medical school/R.F. Jones en M. Thomas-Forgues.- Journal of Medical Education; jrg. 59, no. 6, 1984, p. 455-464
nivel

In this paper, the authors present the first syste-

matic summary of predictive validity research on the new Medical College Admission Test (MCAT) since its introduction in 1977. Data are drawn primarily from the MCAT Interpretive Studies Program, a cooperative effort between the Association of American Medical Colleges and 30 of its member schools to conduct research that will both facilitate local use of the test scores and contribute to a national perspective on their value in medical school admissions. The results show that MCAT scores by themselves have significant predictive validity with respect to first- and second-year medical school course grades and National Board of Medical Examiners Part I examination scores and that they complement the predictive validity of undergraduate college grades. The MCAT Science Knowledge areas of assessment, particularly Biology and Chemistry, and the Science Problems subtest tend to have higher correlations than the Skills Analysis subtests with initial performance in medical school; however, the Skills Analysis: Reading subtest may retain its predictive value best over time. Correlation values are discussed in terms of methodological factors which constrain their size. They are also compared with those found for other professional and graduate school admission tests. Further directions for MCAT validity research are described.

29

Kappelman, M.M.

The impact of external examinations on medical education programs and students/M.M. Kappelman.- Journal of Medical Education; jrg. 58, no. 4, 1983, p. 300-308
nivel

The use of externally produced comprehensive examinations by medical schools as assessment instruments for promotion and as mechanisms for curricular evaluation is discussed and assessed for validity in this article. The pros and cons of the development of a single route to licensure by an externally produced series of comprehensive exami-

nations are examined, and potential effects that emphasis on external examinations may have on students' psychological and ethical behavior are discussed. Recommendations for development of a national library test bank are proposed as alternatives to the current dependency on the externally produced comprehensive examinations. The necessity for each individual medical school to validate any external examination being used as an evaluation tool of the school's specific curriculum is stressed. The author recommends criterion-referencing as an appropriate mechanism for test construction and grading and that "passing" an externally produced comprehensive examination be defined in terms of basic minimal competency levels.

30

Karatzas, N.

Medical education and health care: proceedings of the 1979 conference of the association for medical education in Europe/N. Karatzas en H. Walton (eds.).- Medical Education; jrg. 14, no. 5, 1980, p. 1-76, supplement
nivel

Conferentie verslag van de associatie van medische opleidingen in Europa gehouden in Athene van 17 tot 20 september 1979. Bijdragen worden onder andere geleverd door: D.E. Benor, K.M. Parry, M. Nilsson, H.G. Pauli, A. Segal.

31

Kegel-Flom, P.

Predicting supervisor, peer and self ratings of intern performance/P. Kegel-Flom.- Journal of Medical Education; jrg. 50, no. 8, 1975, p. 812-815
nivel

The findings of this study support the contention that the medical intern's performance is viewed somewhat differently by his supervisor, by his intern peers, and by the intern himself and that

these differences may often be greater than differences between various aspects of work. When admission data, personality inventory measures, and medical school performance were considered together, it was found that supervisors' ratings of interns were best forecast by earlier medical school faculty ratings, self ratings were forecast best by a combination of personality inventory measures and medical school grades, and peer ratings were best predicted by a unique combination of personality inventory measures.

The fact that premedical grades, MCAT scores, and admission interview ratings failed to predict ratings of intern performance is entirely consistent with earlier studies of medical interns, psychiatric residents and physicians in practice. The performance of medical interns, like that of physicians in general, is apparently associated more with personal qualities and medical training than with relative levels of aptitude and undergraduate achievement.

32

Leeds, M.P.

Competition and cost in graduate medical education: should we train unsalaried resident and fellows?/M.P. Leeds, S.N. Cohen en G. Purcell.- Journal of the American Medical Association; jrg. 254, no. 19, 1985, p. 2787-2789

nivel

In 1985, a total of 6.080 applicants to the National Resident Matching Program (Match) were unable to match with residency positions. The majority of unmatched applicants were graduates of foreign medical schools. In addition, many US and foreign medical graduate applicants did not find positions in their preferred choice of specialities. As a result, teaching hospitals are increasingly receiving offers from would-be residents who are willing to work without financial support to gain the experience and credentials required for medical licen-

sure. Teaching hospitals that consider accepting unsalaried house staaf must begin to develop policies and guidelines that ensure fair and equitable treatment of all residents and fellows and that standards of quality are not compromised.

33

Leonard, A.

An approach for defining selection criteria of applicants for medical residency training/A. Leonard en I. Harris.- Journal of Medical Education; jrg. 55, no. 1, 1980, p. 57-59
nivel

The purpose of this communication has been to describe a potentially generalizable approach for assessing, eliciting, and ultimately codifying criteria to select candidates for residency positions. The approach involves administration to the faculty of a questionnaire designed to examine the importance of various types of evidence and criteria for resident selection, communication of the results to the faculty, and use of the results by a selection committee as a basis for codifying criteria.

This approach has several benefits. It motivates faculty to reflect on criteria appropriate for resident selection. The results yield an assessment of the importnace faculty actually attribute to some commonly used criteria for selection; they also make possible a codification of many desired but unwritten criteria. Thus, faculty members can subject their preferences to conscious scrutiny. Finally, the results can be used by selection committees as a basis for coditying criteria and developing rating scales that reflect the input and preferences of all faculty members.

It is unlikely that any two programs would derive the same criteria, since each program is likely to have somewhat different training emphases; also, each program's faculty probably has somewhat different concerns and interests. Rather, the purpose of

this approach is to help residency selection committees make their task of selecting residents who will fit into their program more equitable, valid, reliable, and expeditious.

34

Lewis, G.L.

Academic origins of medical school applicants and entrants, 1980-1982/G.L. Lewis.- Journal of Medical Education; jrg. 59, no. 10, 1984, p. 825-828

Min. O&W

Bijdrage over de vooropleiding van ingeschreven en beginnende studenten geneeskunde in de VS (1980-1982) en over de relatie tussen het type instelling waar de vooropleiding werd gevolgd en succesvolle inschrijving en toelating. Gebaseerd op gegevens van de Association of American medical colleges en het National institute of independant colleges and universities. Resultaten over de praktijk van toelating en selectie.

35

Lin, P.M.H.M. van

Eerstelijnsgezondheidszorg in Israël. Impressies van een studiereis/P.M.H.M. van Lin en A. Vrij.- Leidschendam: Geneeskundige Hoofdinspectie van de Volksgezondheid, 1984

nivel

Tijdens dit studiebezoek wordt onder andere informatie ingewonnen over de wijze waarop met name aan de Ben Gurion Universiteit te Beersheva de selectie van medische studenten geschiedt.

Na een eerste algemene screening blijven 300 kandidaten voor de medische studie over. Uit deze 300 worden er vervolgens in een eerste interview-ronde 100 geselecteerd, waarvan er na de tweede interview-ronde dan 50 overblijven, die toegelaten worden.

De interviews worden afgenomen door 20 koppels, elk bestaande uit een arts en een willekeurige andere

academicus. Onafhankelijk van elkaar geven zij een beoordeling op een 5-puntenschaal (1 is het hoogst). De 100 hoogst-scorenden krijgen een tweede interview. Uit de 200 afvallers worden nog 15 & 20 (at random) voor de tweede ronde uitgenodigd, om als een soort controlegroep, met reële toelatingskansen, mee te doen. Na de tweede ronde is het uiteindelijk de toelatingscommissie die over de toelating beslist.

Over de voorspellende waarde van de selectiecriteria durft nog niemand een eindoordeel te geven. Voor de allerbesten en de allerslechtsten biedt het voldoende discriminerend vermogen. Voor de grote middengroep is de spreidingsmarge te klein om met de gevolgde procedure echt wezenlijke verschillen op te kunnen sporen. Bovenal is er twijfel over de predictieve betekenis van deze selectie, zowel met betrekking tot de studieresultaten als met betrekking tot het functioneren als arts. De invloed van de curriculum, van de hele 'instelling' van de faculteit, kortom het opleidingsgebeuren als geheel lijkt veel meer bepalend voor de uiteindelijke resultaten.

36

Lipton, A.

Predictors of success in a cohort of medical students/A. Lipton, G.J. Huxham en D. Hamilton.- Medical Education; jrg. 18, no. 4, 1984, p. 203-210.
niveel

Secondary school results were compared with personality test scores as predictors of achievement in medical school in a study of a cohort of students, using simple correlation and multiple linear regression. The cohort of 151 students completed 28 courses in the 6 years. We have previously reported that the scores obtained could be reduced to five independent factors: 'physical science'; 'biological science'; 'paraclinical science'; 'basis clinical science'; and 'clinical science'. Both secondary school scores and personality test scores corre-

lated with medical school achievement factors, but school scores correlated best with 'physical' and 'biological' science. Considering secondary school scores, English was the best predictor of 'clinical science', physics was the best predictor of 'basic clinical science' and scores obtained in physics and languages were better predictors of medical school 'biological science' than was school biology. Personality factors were better predictors of 'biological', 'paraclinical' and 'clinical science' than secondary school scores and the combined secondary school score (CSS) was the best predictor of 'physical science' and of 'overall achievement'. We conclude that incorporation of personality measurement with school academic achievement could be of value in selection procedures for applicants for medical school.

37

Littlefield, J.H.

A description and four-year analysis of a clinical clerkship evaluation system/J.H. Littlefield, J.T. Harrington, N.E. Anthracite e.a..- Journal of Medical Education; jrg. 56, no. 4, 1981, p. 334-340
nível

Major issues related to evaluating student performance in clinical clerkships are reviewed, and the development of a clerkship evaluation system which attempts to deal with each issue is described. Three evaluation methods are utilized: multiple choice examination, oral examination, and ward ratings. Scores from each evaluation method for the classes of 1977-80 were analyzed to determine dependability and validity. Results indicate that the multiple choice and oral exam scores were highly dependable each year; however, the ward ratings were not dependable during the first year of use. Over the four-year period, the ward rating criteria were kept the same, annual feedback to individual faculty was provided, and residents were added as raters. The cumulative effect appears to have been

a pronounced improvement in the dependability of the ward rating scores. As a result, ward rating scores now receive greater emphasis in evaluating student clerkship performance.

38

Littlemeyer, M.H.

The new MCAT Student Manual (2nd edition)/M.H. Littlemeyer en A.C. Mauney (eds.).- Washington: Association of American Medical Colleges, 1977

nivel

The Student Manual is directed primarily to examinees and their advisers. It is equally important, however, for anyone engaged in the admission process since it provides details about test content and sample tests. The specific areas of science covered on the New MCAT are outlined, and examples of the analytical skills being tested are described and related to the practice test questions. General suggestions for taking the New MCAT and guidelines for analyzing the test questions are provided. In addition to sample questions, this edition also contains a four-hour test, illustrative of the New MCAT, with scoring sheets and answer keys.

39

McGuire, F.L.

Fifteen years of predicting medical student performance/F.L. McGuire.- Journal of Medical Education; jrg. 52, no. 5, 1977, p. 416-417

nivel

Our current ability to apply empirical measures to medical student selection is essentially limited to the prediction of grades. Arguments are often given against the use of grades as an adequate measure of total student performance (not defined), but the fact remains that grades are still our only method of systematically evaluating student performance. The question is not whether we measure students' "grade-getting" potential but whether we do it to

the best of our ability and then apply the results in an appropriate and intelligent fashion as one of the selection criteria used. The purpose of this article is to make a contribution toward refining this ability by reporting upon 15 years of development and application of this particular aspect of the total selection process.

The prediction of gradegetting does not constitute the total selection procedure. Perhaps the most popular use of an index is in the handling of an otherwise impossible work load. For several years the admissions committee at UCI has been focusing its attention upon those few hundred applications with the higher index numbers, thus conserving its clerical and professional resources for carefully considering a reasonable number of applicants who should at least be able to handle the curriculum. This also allows time for more careful study of affirmative action, "late bloomers", students with personality problems, and the often-neglected issues of admissions policy and educational goals and philosophy.

40

McGuire, F.L.

The new MCAT and medical student performance/F.L. McGuire.- Journal of Medical Education; jrg. 55, no. 5, 1980, p. 405-408
nivel

The "old" Medical College Admission Test (MCAT) has been replaced by the "New" MCAT. For many years the University of California, Irvine, has included the old MCAT in a prediction index as part of its admissions procedure. The use of the New MCAT is unknown, it has been necessary to wait until the first class admitted completed its freshman year. This paper is an analysis of the New MCAT and its relationship to the criterion of class standing achieved in the school year ending in the spring of 1979.

Marienfeld, R.D.

Six-year documentation of the easy grader in the medical clerkship setting/R.D. Marienfeld en J.C. Reid.-
Journal of Medical Education; jrg. 59, no. 7, 1984, p. 589-591

nivel

Since students were assigned toward teams on an alphabetical basis, it is possible that an attending physician may have been assigned, on occasion, a group of clearly outstanding students. It is extremely unlikely, however, that such a situation would occur every year during the six years studied. The grading patterns of physicians A and B clearly document the phenomenon of the easy grader in the clerkship setting. The magnitude of the problem becomes even more apparent by noting that physicians A and B over six years evaluated 29 and 49 students respectively. Since a rating of 1.7 or less in the Missouri-Columbia system qualifies a student for a grade of honors, any student who happened to be assigned to physician A or B would automatically have had an excellent chance of receiving honors. Although the department also uses objective measures of student performance, including the National Board of Medical Examiners medicine subtest and essay-type patient management problems, the results of those tests usually fail to negate the impact of the easy grader. With the growing competition for residency positions placing increasing importance upon students' evaluations during major third-year clerkships, no students should have a significant portion of their grade determined simply on the basis of assignment to a particular attending physician.

Markert, R.J.

Pre-admission academic predictors of the goals of a primary care-oriented medical school/R.J. Markert.-
Medical Education; jrg. 19, no. 1, 1985, p. 9-12

nivel

This study investigated the relationship of two widely-used pre-admission academic predictors (undergraduate grade point average and the Medical College Admission Test) to a sequence of four goals for a primary care-oriented medical school. Graduates from the first four classes of a new medical school (n=237) were used in the study. Correlation and multiple regression analysis were performed. It was concluded that pre-admission academic variables (undergraduate GPA and MCAT) are useful in screening for academic success in medical school (especially for preclinical courses) and licensability (especially NBME Part 1 and 2). Furthermore, no useful predictor or residency performance or choice of a primary care specialty was identified. Provisos related to the conclusions and future research directions are discussed.

43

Milstein, R.M.

Predicting of interview ratings in a medical school admission process/R.M. Milstein, G.N. Burrow, L. Wilkinson e.a.- Journal of Medical Education; jrg. 55, no. 5, 1980, p. 451-453

nivel

Analyses using objectively coded data on the backgrounds of applicants and interviewers demonstrate that interviewers' ratings of applicants are not simply a reflection of the applicants' characteristics. Rather, there are additional contributions of the interviewer's general rating tendencies and of the dissimilarity between the interviewer and the applicant. Both of these latter contributions to the interviewer's ratings are aspects of the admission procedure which affect the applicant's chances for acceptance but are beyond his control.

Newble, D.I.

The selection and training of examiners for clinical examinations/D.I. Newble, J. Hoare en P.F. Sheldrake.- Medical Education; jrg. 14, no. 5, 1980, p. 345-349
nível

The inconsistency of the marking in clinical examinations is a well documented problem. This project identified some of the factors responsible for this inconsistency.

A standardized rating situation was devised. Five students were videotaped as they performed part of a physical examination on simulated patients. Eighteen experienced medical and surgical examiners rated their performances using an objective checklist type of rating form. No differences were evident between physicians and surgeons. The group of examiners was divided into three subgroups, one receiving no training, one limited training and one moer extensive training. Examiners re-rated the same students 2 months after the first rating.

Inter-rater reliability was satisfactory for the first ratings and training produced no significant improvement. A substantial improvement was achieved by identifying the most inconsistent raters and removing them form the analysis. Training was shown to be unnecessary for consistent examiners and ineffective for examiners who were less consistent. On the basis of these results, only consistent examiners were selected to take part in the inter-active component of the objective structured final year examinations. The ratings in these examinations achieved high levels of inter-rater reliability.

It was concluded that the combination of an objective check-list rating form, a controlled test situation and the selection of inherently consistent examiners could solve the problem of inconsistent marking in clinical examinations.

Newble, D.I.

The validity and reliability of a new examination of the clinical competence of medical students/D.I. Newble, J. Hoare en R.G. Elmslie.- Medical Education; jrg. 15, no. 1, 1981, p. 46-52
nível

In a previous study we described a problem-based criterion-referenced test of the clinical competence of medical students which was felt to offer advantages over the traditional final-year examination. This paper reports the validity and reliability studies on which it is possible to judge the value of this new test when compared to the traditional approach.

The results demonstrate a high level of content validity and provide evidence of the construct validity of the test. Efforts to obtain measures of concurrent and predictive validity were thwarted by a failure to attain reliable assessments of ward performance from resident and consultant staff. Satisfactory levels of internal consistency were established for the whole test. Marker reliability was satisfactory in all sections of the test except for those requiring examiners to rate practical clinical skills. This was so despite the use of simulated patients, behavioural check-lists and rater training. Possible solutions to this problem are discussed.

It is concluded that this new approach overcomes many of the measurement problems inherent in the traditional final examination. It has been shown to be feasible to construct and administer in the medical school setting without the need for the allocation of additional resources.

O'Donnell, M.J.

NBME Part I examination: possible explanations for performance based on personality type/M.J. O'Donnell.- Journal of Medical Education; jrg. 57, no. 11, 1982,

p. 868-870
nivel

Investigators have utilized various cognitive and noncognitive measures in an attempt to demonstrate that it is possible to predict success in medical school and determine future practice preferences. Researchers have examined areas such as cognitive style (1), teacher understanding of student learning style (2), personality, attitude, and practice preference (3), personality and curricular design preference (4), and various other interrelated factors.

However, with all the accumulated data, there remains one serious problem. Namely, how is it possible for a student to survive two or more years of medical school precisely in the manner predicted and yet be unable to pass Part I of the examinations of the National Board of Medical Examiners (NBME)?

Although many variables may affect NBME test performance, the construction of the test would seem to favor students with a learning style that leads them to prefer factual memory learning over students who prefer to focus on theory of possibilities in a broader sense and to categorize "things" rather than concentrating on the "things" themselves.

The study reported here was conducted to investigate whether it is possible to relate performance on the NBME examinations to personality type and thus to identify students who because of learning style may have difficulty with this kind of testing.

47

Parry, K.M.

Medical education in France, Germany, Italy and the United Kingdom compared/K.M. Parry.- Medical Education; jrg. 10, no. 1, 1976, p. 59-66
nivel

This report is a personal account of a visit recently sponsored under the Council of Europe's Medical Fellowships Programme. The purpose of the visit to France, Germany and Italy was to study at first hand the system of medical education, togh undergraduate and postgraduate, in these countries so as to obtain a better understanding of the differences with those of the United Kingdom, and to look for common ground on which some progress might be made towards the objectives of the Treaty of Rome.

48

Pool, J.

Instroombeperking schijnoplossing?/J. Pool.- Medisch Contact; jrg. 36, no. 17, 1981. p. 501-504
niveau

Dat op grond van de kostenontwikkeling in de gezondheidszorg de instroom van studenten in de geneeskunde zou moeten worden beperkt, is een onjuiste stelling. Even onjuist is het, tot zo'n instroom te besluiten op grond van de te verwachten werkloosheid onder artsen: die zal onder hen veel lager zijn dan onder andere universitair opgeleiden. Een tijdelijke regulatie van de uitstroom is mogelijk door een beperkte toelating tot de tweede doctorale fase. Parallel daarmee zou het doctoraalexamen meer keuzemogelijkheden moeten gaan bieden.

49

Rezler, A.G.

Interprofessional education in medical school/A.G. Rezler en G. Giannini.- Medical Education; jrg. 15, no. 4, 1981, p. 237-241
niveau

The opinions of entering medical students regarding interprofessional education (IPE), and their reasons, are described in this article. More female than male students favour IPE, 49 as compared to 25%. Students who endorse IPE give different rea-

sons for their position than students who oppose it. The former group refer to increased communication and respect among health professionals, increased knowledge about mutual roles and function, greater equality among members of the health team and improved patient care. The opposing group fear that IPE would lower the quality of education by increasing class size and slow the pace of instruction to accommodate students with limited scientific backgrounds. Students also protest against having to study irrelevant subjects and acquire irrelevant skills. The opposing group is concerned primarily with IPE's effect on medical students; the group in favour is concerned more with the effect on patients and interprofessional relations. It seems that opinions about IPE are part of a basic attitudinal structure that medical students bring with them when they enter medical school. The implications for IPE in medical school are discussed.

50

Rezler, A.G.

Affect and research in medical education/A.G. Rezler en J. ten Haken.- Medical Education; jrg. 18, no. 5, 1984, p. 331-338

nivel

All studies addressing affective issues were identified from a review of the Proceedings of Research in Medical Education (RIME) volumes between 1970 and 1982. A total of seventy-seven papers were sorted into the following seven categories according to the major issues addressed: (1) descriptive studies of personality, values and attitudes; (2) changes in attitudes; (3) interviewing skills; (4) personality and admission; (5) personality and career choice; (6) stress and coping style; and (7) miscellaneous. Several trends emerged from 13 years of research with implications for medical education. This review clarifies findings which could contribute to a better understanding of student

affect and how it may be influenced by teachers. The potency of role models and informal learning in shaping student affect is particularly noteworthy. The authors suggest that studies involving role models need to go beyond observation and description and incorporate feedback to the subjects of the study.

51

Sarnacki, R.E.

The predictive value of the premedical grade-point average/R.E. Sarnacki.- Journal of Medical Education; jrg. 57, no. 3, 1982, p. 163-169
nivel

The study reported here assessed the relative utility of premedical gradepoint average (GPA) in distinguishing among prospective medical students and in predicting the medical school performance of accepted applicants. Students from each of two medical classes were grouped into one of four categories depending on the "selectivity" rating of their premedical, undergraduate institution. Group differences were assessed according to premedical GPAs, Science subtest scores of the Medical College Admission Test, medical school course work, and scores on the Part I and Part II examinations of the National Board of Medical Examiners. Results indicated that although the groups differed significantly on premedical GPA (with mean scores from the less competitive undergraduate colleges exceeding those of the most selective schools), on all other dependent measures no significant differences resulted. It was concluded that "raw" premedical GPA is susceptible to a number of extraneous sources of variance that, unless identified and eliminated, negate its effectiveness in assessing individual differences in past academic achievement and in predicting future medical school performance.

52

Selection

The selection of students for medical education. Report of a working group, Berne, 1971 (EURO 6203).- Copenhagen: World Health Organisation, 1973

53

Sheldrake, P.F.

How should we select? - a sociologist's view/P.F. Sheldrake.- British Journal of Medical Education; jrg. 9, no. 2, 1975, p. 91-97
nivel

The research done in Edinburgh, and in many other places, gives little support to the belief that there is an 'ideal' selection framework. The implications of recent studies of the selection process for entry to medical school are discussed. It is argued that there are two types of factors that need to be considered in selection; first, those that are essentially concerned with policy decisions in relation to entry, e.g. sex or nationality; and, second, those that are to do with individual characteristics. In relation to this second group, once minimal criteria are satisfied, random choice seems as fair as any method of selection, as a means of choosing among applicants: none appears to be sufficiently predictive of performance to be suitable as a means for selection in themselves.

54

Stefanu, C.

The differential predictive validity of science MCAT in the admission process/C. Stefanu en T.A. Farmer.- Journal of Medical Education; jrg. 46, no. 5, 1971, p. 461-463
nivel

Science MCAT scores have been found to be a significant factor in the selection of medical students for two consecutive years at the University of Alabama School of Medicine. A very high correlation

between science Medical College Admission Test scores and first-year medical school performance has been demonstrated in students with high overall college credit point average (CPA), whereas absolutely no correlation was found in students with relatively low overall CPA. This study suggests that there may be inappropriate use of science MCAT scores in the selection process for entrance into medical school.

55

Stimmel, B.

The use of pass/fail grades to assess academic achievement and house staff performance/B. Stimmel.-
Journal of Medical Education; jrg. 50, no. 7, 1975, p. 657-661

nivel

The advantages of a formal grading system in assessing a student's capability to practice medicine remain controversial. Students prefer the pass/fail method, while faculty lean toward the traditional approach. The efficacy of a modified pass/fail grading system in detecting superior academic achievement, as well as in predicting house staff performance, was evaluated. Mean scores on the examinations of the National Board of Medical Examiners of students selected for Alpha Omega Alpha were significantly higher than those of other students, although the faculty was unaware of these results when selecting candidates. Chairmen in institutions where 125 students had served their first graduate year of training felt that 85 percent of the dean's letters summarizing the students' academic performance over a three-year period accurately indicated subsequent performance on the house staff. These results suggest that a modified pass/fail grading system can detect superior students as well as provide relevant information with respect to subsequent performance as a physician.

56

Tidball, M.E.

Baccalaureate origins of entrants into American medical schools/M.E. Tidball.- Journal of Higher Education; jrg. 56, no. 4, 1985, p. 385-402
Min. O&W

Onderzoek naar de achtergronden van toegelaten baccalaureaat-studenten op medische scholen in Amerika. Het onderzoek toont aan welk instituut de meeste studenten aflevert aan de medische scholen en de verschillen in institutionele achtergrond van vrouwelijke en mannelijke medische studenten.

57

Toelating

Toelating niet-Nederlanders tot studierichting geneeskunde, tandheelkunde en dierengeneeskunde. Beschikking minister van onderwijs en wetenschappen, HW/AS/T 421028-I, 12 juli 1983.- Staatscourant; no. 144, 1983
Min. O&W

58

Ushiba, D.

Trends of medical education in Japan/D. Ushiba.- Medical Education; jrg. 19, no. 4, 1985, p. 258-265
niveel

This article introduces recent trends in medical education in Japan, from undergraduate education through continuing education, and explains changes in the number of medical schools and in the content of the curriculum. Some obstacles to the implementation of changes, particularly in undergraduate medical education, are discussed. Now that Japan has become relatively developed in the quantity of its health manpower and also socioeconomically, a change must be directed towards qualitative reorganization and re arrangement in medical education in line with the objectives posed for the new century. The establishment of something new is difficult; to change something old and established, however, is

much more difficult, In Japan, while some new designs in the curriculum are found in almost all the new schools, any fundamental change in the established curriculum in the old schools can be found only rarely, and attempts at changing the established curriculum frequently encountered resistance in the old schools.

59

Wachttijd

Wachttijd voor huisartsenopleiding (Wallage, 3 december 1982). Aanhangsel Handelingen II 1982-1983, nr. 472

Min. O&W

60

Wagoner, N.E.

Report on a survey of program directors regarding selection factors in graduate medical education/N.E. Wagoner en G.T. Gray.- Journal of Medical Education; jrg. 54, no. 6, 1979, p. 445-452
nível

A national random sample of 25 percent of the graduate education program directors in internal medicine, family medicine, surgery, and pediatrics was sent a questionnaire; subjects were asked to judge the importance of 31 variables in the selection of house staff. A rank-ordering of variables for all respondents placed interpersonal skills demonstrated in the interview as number one. When rank order correlations were calculated for all possible pairs of program specializations, strong positive relationships were revealed. A two-way analysis of covariance was also undertaken to assess how selected program characteristics, such as size of program, type of program, and affiliation or nonaffiliation with a medical school, affected the judgment of the importance of the variables. The results have implications for further studies in several areas.

An analysis of self-descriptive essays by applicants who successfully gained entry to medical school shows that five sub-types of entrant can be differentiated. Medical schools have not yet deliberated on the sort, or sorts, of person most needed in the medical profession, but doubtless individual selectors exercise personal if undeclared preferences.

More elaborate inspection of the differences among entrants discloses six main groups who got into medical school.

Selection is one of the most potent means for influencing the outcome of medical education (World Health Organization, 1973). Little attention has as yet been paid by medical schools to the qualities they require in the entrants they select, corresponding to the initiative, reasonableness, humanity, industry and scholarliness which may be required of practising doctors.

This investigation identified five different types of applicant that gained admission. Medicine is a protean discipline, clearly needing various different sorts of entrant, each with a range of abilities and qualities. The narrative essays, not used in the selection process itself at Edinburgh, disclose the range of individual types gaining entry when the entrance criterion is purely scholastic.

The more detailed analysis reported shows the distinct grouping in the entering classes admitted on the strength of their scholastic performance at school. There are entrants who want contact with patients as people from their practice of medicine; another group seek a secure career; a third group consider the medical profession will give them a chance to do good; there are then the independent spirits, who want autonomy; another group sees medicine as a calling; finally, there are those who are motivated by family example or encouragement. What is unknown is the weight selectors would accord -or do accord, at schools where applicants are interviewed- to each group's main career aspiration. Further considerations are the extent to which each

medicine as a calling; finally, there are those who are motivated by family example or encouragement. What is unknown is the weight selectors would accord -or do accord, at schools where applicants are interviewed- to each group's main career aspiration. Further considerations are the extent to which each of these groups of students will retain their perspectives, under the impact of a medical training, and the effectiveness they will bring to their later professional careers (Walton, 1968).

62

Weschler, H.

Medical school admissions; a strategy for success/H. Weschler en B. Gale.- Cambridge (Mass.): Ballinger, 1982, 251 p.

Min. O&W

63

Willer, B.

Survey of US. and Canadian medical schools on admissions and psychiatrically at-risk students/B. Willer, S. Keill en C. Isada.- Journal of Medical Education; jrg. 59, no. 12, 1984, p. 928-936, lit.opgn.

Min. O&W

Onderzoek, uitgevoerd aan de medische faculteiten in Canada, de Verenigde Staten en Puerto Rico, naar de problematiek van het vaststellen of aspirant-studenten problemen van psychische aard hebben, en naar de rol die de leden van de psychiatrische faculteit in de toelatingscommissie vervullen.

64

Wijnen, W.H.F.W.

Is selectie van medische studenten wel mogelijk?/W.H.F.W. Wijnen.- Medisch Contact; jrg. 38, no. 16, 1983, p. 477-479

nivel

Alvorens een bepaalde selectiemethode voor de medische studie in te voeren zou de foutenmarge van die

methode zo goed als het kan moeten worden bepaald. Uitgelegd wordt hoe aankomende artsen thans worden geselecteerd en welke haken en ogen er aan welke selectiemethode dan ook zijn.

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Stichting Nederlands instituut voor onderzoek van de
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Drieharingstraat 6-26

Postbus 1568

3500 BN UTRECHT

Tel. 030 - 319946

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Centrale directie Documentatie Ministerie van Onder-
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