Do Specific Characteristics of Residency Applicants Predict Board Certification in Psychiatry?

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OBJECTIVE

The purpose of this study was to evaluate if residency applicants in psychiatry could be studied in a systematic way that informs candidate selection.

Specifically, we were interested in identifying characteristics of applicants that predict future board certification. Other medical specialties have linked applicant characteristics with future board certification; psychiatry has not.

METHODS

- *Study design*: retrospective, cross-sectional

- *Data extraction*: personnel files and application materials of psychiatry residents

- *Cohort*: residents who entered the psychiatry program at the University of Kansas School of Medicine – Wichita

- *Sample size*: 106 residents from years 1972 to 2010

- *Outcome*: pass or fail on initial ABPN certification

- *Statistical plan*: descriptive statistics, Chi-square tests, data imputations for missing at random values, and binary regression with complementary log-log link; analyses were conducted in IBM SPSS Statistics version 23
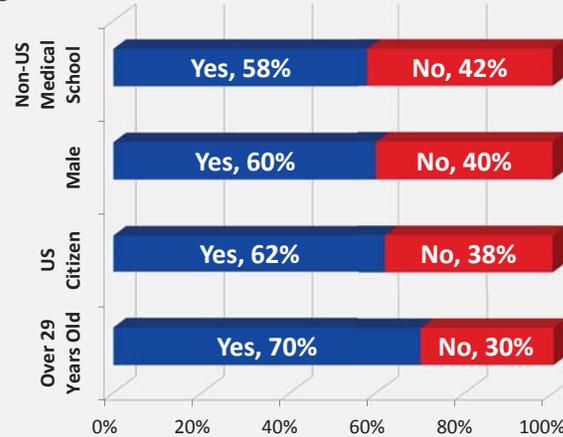
Figure 1. Resident Characteristics

Figure 2. Predicting ABPN certification

Description	Original data		Imputed
	N	RR$_{adj}$	p (pooled*)
Age > 29 years of age	101	0.2	0.168
Experience (number)			
Volunteer (3 to 4)	92	1.3	0.040
Work (1 to 2)	92	5.3	0.092
Research (1 to 2)	106	7.9	0.006

* p-values were derived from 5 imputations of missing data
Regression model included: US Medical School, p > 0.7; USMLE scores, p > 0.4; delay entering medical school, p > 0.2

RESULTS

Factors predictive of ABPN certification (Table 2)

- **Prior experience volunteering; p < 0.040**

- **Prior experience in research; p < 0.006**

DISCUSSION

Interpreting the regression model:
- **When compared to residents without experience during medical school, those with:**
  - **3-4 volunteer experiences were 1.3 times more likely to achieve ABPN certification**
  - **1-2 prior research experiences were almost 8 times more likely to achieve ABPN certification**

Compared to other medical specialties:
- **Our sample lacked an association between performance on USMLE/COMLEX examinations and board certification**

Study limitations:
- **Small sample size, sparse data, and a focus on one training program**

Future studies should explore the nature of volunteer and research experience that are most predictive of ABPN certification.

CONCLUSION

This pilot study demonstrates that residency applicants in psychiatry can be studied in a systematic way that can be used to predict outcomes. Evaluating the extent to which residency applicants had experience with volunteering and/or research during medical school may inform candidate selection in psychiatry.

DISCLOSURE

The authors have no financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation. There was no direct source of project funding.

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