

Predictive Differences of Medical Student Emotional Intelligence on Perspective-Taking at Three-Year Medical Degree Programs

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Purpose

- > Conceptual perspective-taking (PT) is the empathic ability to take on the viewpoint of another person's thoughts, feelings and attitudes which is essential for successful social interactions. As future healthcare providers, medical students need high levels of PT for understanding their patients feelings, which can be assisted by high levels of emotional intelligence (EI).² Limitations in available student time can compromise EI and therefore PT. Threeyear medical degree programs are excellent locations for comparing student PT under severe restrictions in time.³ Three-year programs with distinctive institutional cultures may encourage students to use varying facets of EI to impact PT.
- The <u>purpose</u> of this study is to analyze the predictive relationship of emotional intelligence on perspective-taking between students at two different three-year medical degree programs.

Methods

- In 2017/18, 205/500 M-1/M-2 medical students voluntarily completed self-reported surveys using the following validated instruments:
 - 28-Item Interpersonal Reactivity Index to measure Perspective Taking
 - o 30-Item Trait El Questionnaire
- ➤ IBM® SPSS® 24.0 generated statistical analysis. This research approved by the institution's IRB.



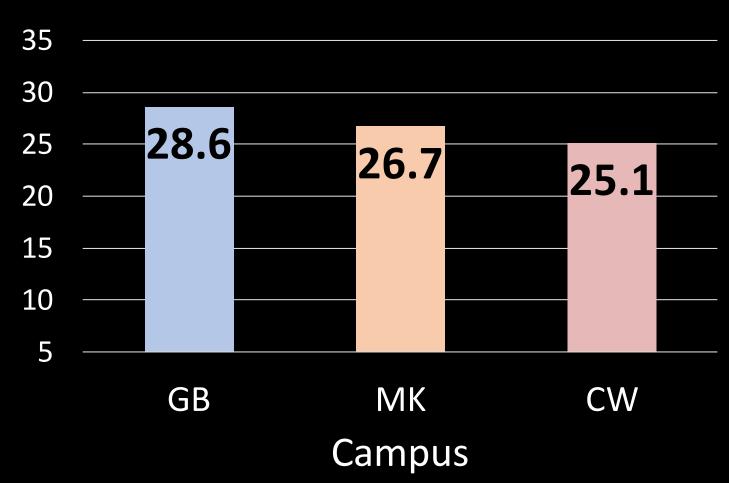


Fig 1: Perspective Taking Mean Scores by Campus

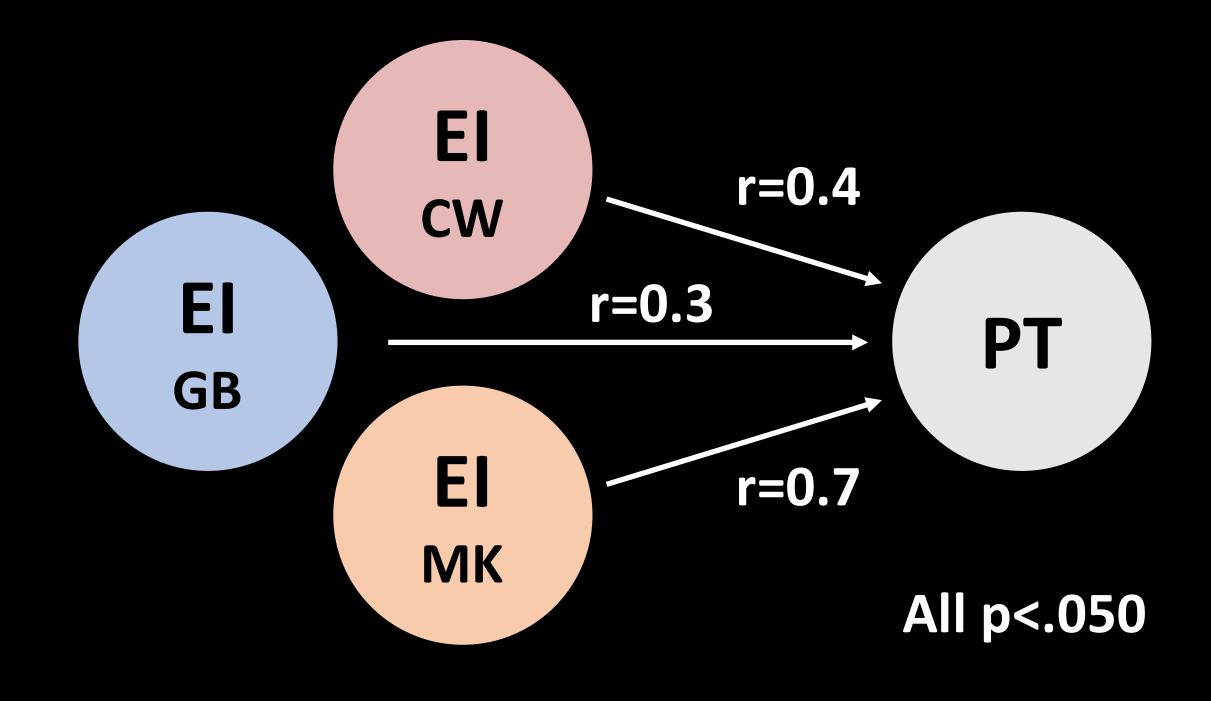


Fig 2: Pearson Correlations (r) of PT and El

Table 1: Linear Regression of CW Perspective Taking on El			
Value	Coefficients		
	Beta	Sig (p)	
Optimism	0.5	.001	
Motivation	0.3	.018	
<u>Assertiveness</u>	-0.6	.001	

lable 2: Linear Regression of GB				
Perspective Taking on El				
Value	Coefficients			
	Beta	Sig (p)		
Soc Awareness	0.5	.001		
Emotion Reg	0.3	.033		

Table 3: Linear Regression of MK			
Perspective Taking on El			
Value	Coefficients		
	Beta	Sig (p)	
Self-Esteem	0.4	.001	
<u>Relationships</u>	0.4	.001	

Intra-personal EI facet Inter-personal EI facet

- Perspective-taking (alpha=0.7) mean scores were significantly different between (d=0.8, p<.001) the two three-year medical degree programs (mean(sd)=28.6(4.3) vs. 25.1(4.8)), but not compared to a single four-year program (26.7(4.6)). (Fig 1)
- ➤ Linear regression results for the three-year program with higher PT scores was predicted (R²=0.60, p<.001) by optimism (beta=0.5), motivation (beta=0.3) and assertiveness (beta=-0.6). The second three-year program PT was predicted (R²=0.35, p<.001) by social awareness (beta=0.5) and emotion-regulation (beta=0.3). At a four-year program PT was predicted (R²=0.40, p<.001) by self-esteem (beta=0.4) and relationships (beta=0.4). (Tables 1-3)

Conclusions

- Four-year MK medical students EI had more overall impact on PT. Students in one three-year program use "more positive" EI facets such as optimism and motivation, but all use one *intra*-personal and one <u>inter</u>-personal EI facet to impact PT.
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- 2. Schroder-Abe M, Schutz A, Walking in Each Other's Shoes: Perspective Taking Mediates Effects of Emotional Intelligence on Relationship Quality, European Journal of Personality 2011;25(2):155-169.
- 3. Raymond JR, Kerschner JE, Hueston WJ, Maurana CA, The Merits and Challenges of Three-year Medical School Curricula: Time for an Evidence-based Discussion, *Academic Medicine* 2015;90(10):1318-