

Changes in Dental Students' Emotional Empathy Levels

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Abstract:

Affective, or emotional, empathy is the capacity to vicariously share the same sentiments with other individuals. Within dentistry, emotional empathy can help to build personal connections between patients and providers. However, it may also put providers at risk of experiencing distress and burnout, as they become affected by the negative experiences of their patients.

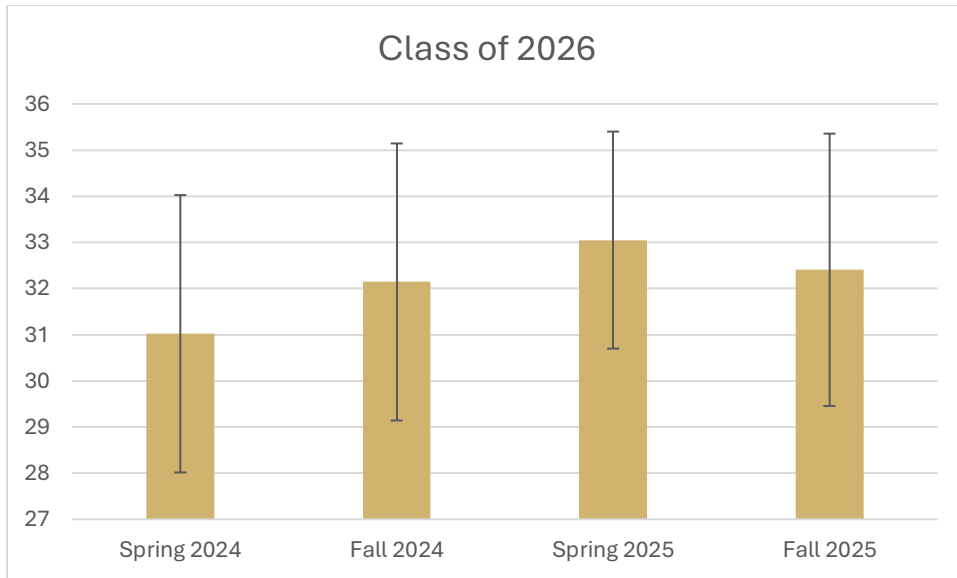
Objectives: This study seeks to evaluate changes in empathy levels among dental students as they progress through their graduate education.

Methods: The Toronto Empathy Questionnaire (TEQ) is administered to dental students to provide numerical data on empathy levels. The TEQ is administered to each cohort every fall and spring semester for longitudinal analysis of empathy scores.

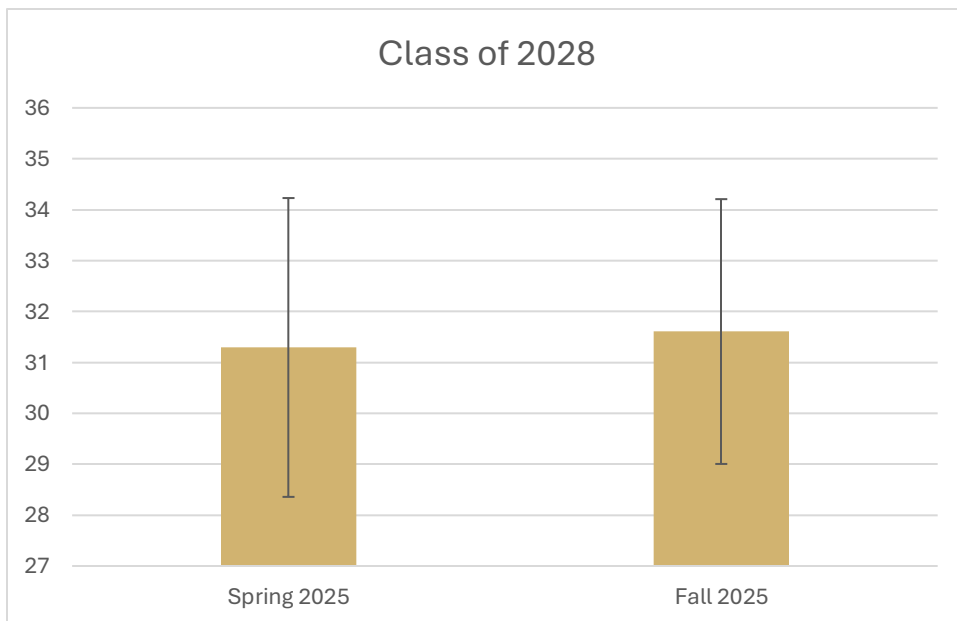
Results: The Class of 2026 had significantly higher average empathy scores in November ($M=32.1$, $SD=3.0$, $n=42$) and March ($M=33.1$, $SD=3.0$, $n=20$) than in January ($M=31.0$, $SD=3.0$, $n=102$), $F(2, 161)=5.1$, $p=0.007$. There was no significant difference between the Class of 2027's average empathy scores in November ($M=31.8$, $SD=3.7$, $n=69$) and March ($M=32.3$, $SD=3.1$, $n=52$), $t(117)=-0.8$, $p=0.22$.

Conclusion: As students progress through their dental school education, empathy levels may change significantly over time. Efforts are being made by the research team to maintain honest, high response rates. Continued data collection is taking place every fall and spring semester with each dental school cohort for further longitudinal analysis. Additionally, we began a related study to obtain situational-based data regarding students' empathy and burnout.

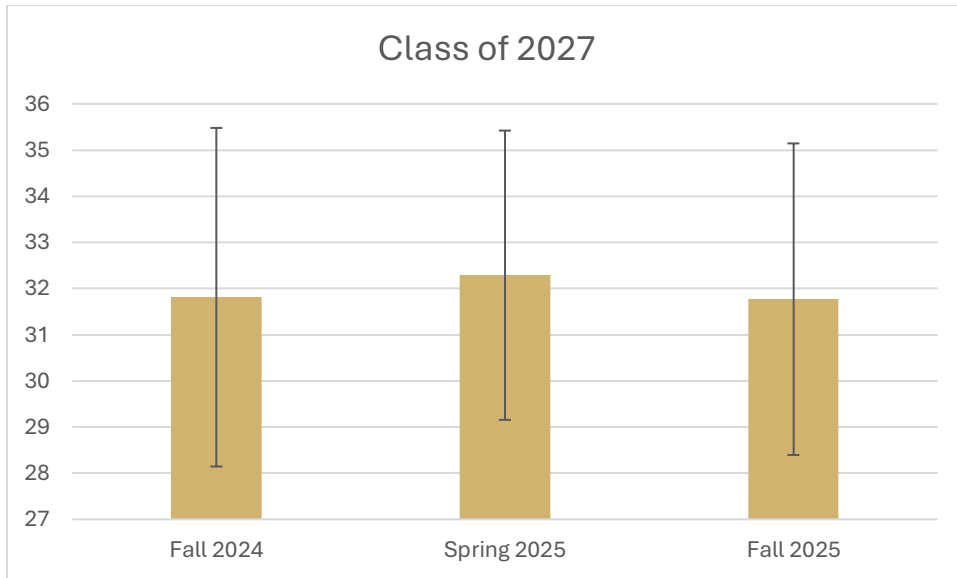
Institutional Review Board Number (COMIRB#): 23-1885



The Class of 2026 had significantly higher average empathy scores in Fall 2024 (M=32.1, SD=3.0, n=42) and Spring 2025 (M=33.1, SD=3, n=20) than in Spring 2024 (M=31.0, SD=3.0, n=102) and in Fall 2025 (M=32.4, SD=2.9, n=32), $F(3,192) = 4.17, p=0.007$.



There was no significant difference between the Class of 2028's average empathy scores in Spring 2025 (M=31.3, SD=2.9, n=75) and Fall 2025 (M=31.6, SD=2.6, n=66), $t(139)=-0.67, p=0.25$.



There was no significant difference between the Class of 2027's average empathy scores in Fall 2024 ($M=31.8$, $SD=3.7$, $n=69$), Spring 2025 ($M=32.3$, $SD=3.1$, $n=52$), and Fall 2025 ($M=31.8$, $SD=3.4$, $n=39$), $F(2, 157) = 0.36$, $p=0.696$.