

Knowledge on Type 2 Diabetes Risk Factors and Physical Activity Among UCSD College Students

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Background

- Type 2 diabetes (T2D) affects over 422 million people globally and prevalence of this disease continues to increase ¹
- College students' sedentary behaviors pose a significant problem, as low fitness habits developed in young adulthood are associated with greater lifetime risk of developing chronic conditions such as T2D ²
- Multiple studies demonstrate a lack of knowledge regarding T2D risk factors, resulting in a reluctance to prioritize preventative lifestyle behaviors into daily routines ³
- Studies have not yet measured the possible association between T2D knowledge and its impact on exercise. However, studies did reveal that students' personal perceived risk of developing T2D is low ^{4,5}

Objectives

- To assess knowledge on the impacts of exercise on T2D and perceived risk amongst college students to determine if this is associated with students' physical activity behaviors.

Methods

- An anonymous self-administered survey conducted online via Google Forms
- Survey was distributed to participants via platforms such as Instagram, Snapchat, Facebook, and Reddit
- Survey asked participants questions regarding basic demographics, knowledge of T2D, perceived risk, and lifestyle behaviors related to physical activity
- SPSS was used for data analyses, including Pearson's Correlation, linear regression and descriptive statistics

Results

Table 1: Participant Demographics (n=88)

Demographic	Percentage
Gender Identity	
Male	35.23% (31)
Female	61.36% (54)
Nonbinary	3.41% (3)
Ethnic Background	
White/Caucasian	12.50% (11)
Black/African/African American	2.27% (2)
Asian/Asian American	37.50% (33)
Hispanic or Latino	32.95% (29)
American Indian or Alaska Native	1.14% (1)
More than one ethnic background	13.64% (12)
Type 2 Diabetes Close One	
Yes	51.14% (45)
No	36.36% (32)
Not sure	12.50% (11)

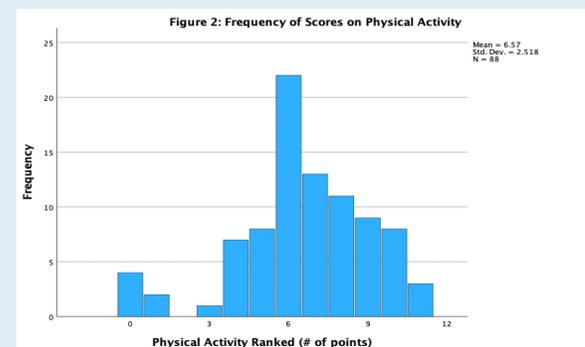
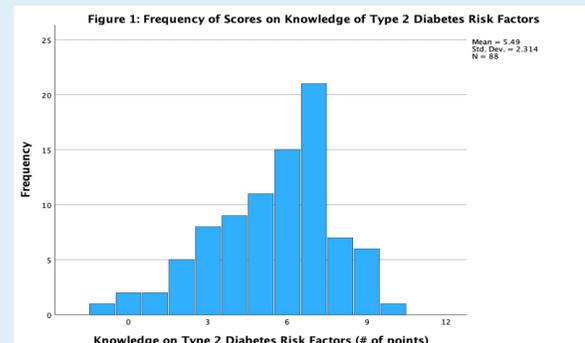
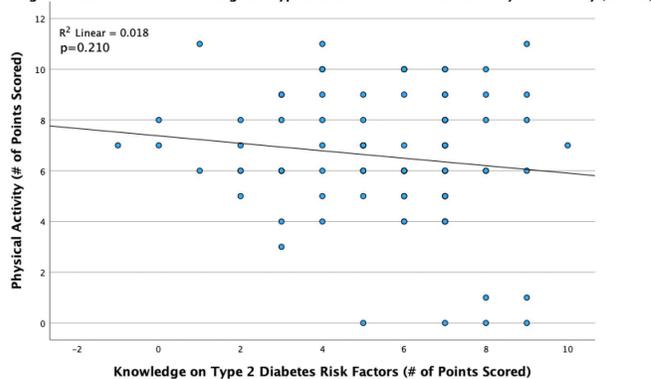
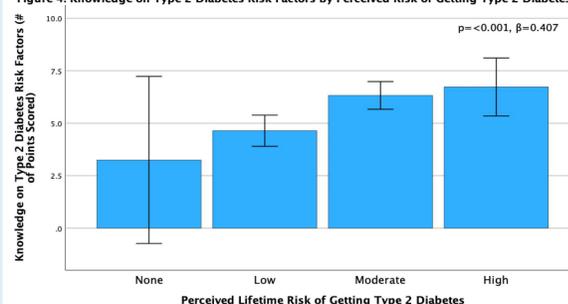


Figure 3: Correlation of Knowledge on Type 2 Diabetes Risk Factors and Physical Activity (Scored)



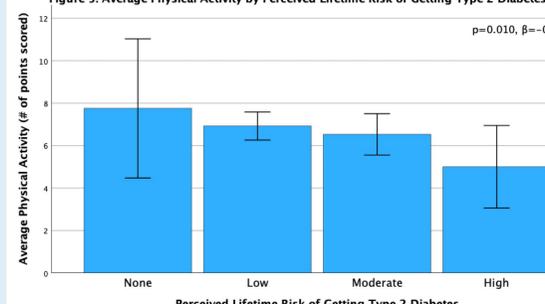
No association found between knowledge on T2D risk factors and PA. P-value derived from Pearson correlation.

Figure 4: Knowledge on Type 2 Diabetes Risk Factors by Perceived Risk of Getting Type 2 Diabetes



Greater knowledge on T2D risk factors is associated with higher perceived risk. P-value and beta-coefficients derived from linear regression. Error bars: 95% CI.

Figure 5: Average Physical Activity by Perceived Lifetime Risk of Getting Type 2 Diabetes



Less physical activity is associated with higher perceived risk. P-value and beta-coefficients derived from linear regression. Error bars: 95% CI.

Conclusions

- We found no association between student knowledge and physical activity behaviors
- Increased knowledge of T2D risk factors is associated with a higher perceived risk of obtaining T2D in one's lifetime
- Engaging in less physical activity is associated with higher perceived risk of T2D
- Limitations in sample size, study could be expanded to non-UCSD students

Policy Implications

- Raise funds for further research on how to turn type 2 diabetes knowledge into healthy behavior changes
- Research additional strategies to encourage college students to engage in more physical activity
- Develop programs that assist students in healthy lifestyle behaviors, with partnerships and incentives that promote education on type 2 diabetes

Acknowledgements & References

