Virtual Reality and Its effects on Psychological disorders in Latinx Communities

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RESEARCH QUESTION

How can Virtual Reality be used to treat Post-Traumatic Stress Disorders in Latinx Communities?

BACKGROUND

- Virtual reality is a computer-generated simulation that can be interacted with in a real or physical way by using electronic equipment.
- VR has been around since mid 90's and has been used mainly for gaming and now medical treatment

- Post-traumatic stress disorder (PTSD) is a mental health condition that's triggered by a terrifying event — either experiencing it or witnessing it.
- Symptoms may include flashbacks, nightmares and severe anxiety, as well as uncontrollable thoughts about the event.

METHOD OF INQUIRY

- Did background research on scholarly articles about PTSD and how it impacts people today because people hear PTSD and think about military Veterans but there are more people who are affected by it.
- Also did background research on Virtual Reality and how it has progressed in the past few years.
- After doing research on these to contextualize the main research was done on using current VR technology to treat PTSD on people have been affected by crime in Mexican populations.

RESULTS

- Victims of violent crimes in Cd. Juarez, Mexico that were diagnosed with PTSD were given treatment through VR.
- 90-minute sessions, twice a week of reliving triggering situations through VR.

TABLE 1. TYPICAL AVERAGES AND DEVIATIONS OF EACH GROUP AT ANY TIME FOR PTSD, DEPRESSION AND ANXIETY MEASURES

	Pre M (DT)	Post M (DT)	1 mes M (DT)	3 meses M (DT)	Pre M (DT)	Post M (DT)	1 mes M (DT)	3 meses M (DT)
EDTEPT:								
Escala global	79,2 (30)	7,9 (6,1)	0,6 (1,3)	2,2 (2,5)	76,9 (17)	15,6 (6,9)	6,9 (5,9)	3,5 (7,2)
SR	24,1 (9,3)	2,8 (3,1)	0,2 (0,6)	0,6 (0,9)	24,4 (7,3)	1,9 (1,9)	1,9 (2,9)	1,2 (2,3)
SE	32,2 (13)	2,3 (1,8)	0,4 (1,2)	0,8 (1,7)	28,4 (6,6)	7,9 (2,8)	2,8 (2,7)	0,9 (2,8)
SH	24,1 (9,2)	2,8 (2,3)	0,0 (0,0)	0,6 (1,4)	24,4 (7,3)	5,8 (5,3)	2,2 (2,5)	1,4 (2,9)
ESTEPT	32,5 (9,3)	5,7 (3,4)	1,4 (1,7)	1,2 (1,1)	30,9 (6,3)	6,1 (4,4)	4 (3,8)	4,2 (7,0)
IDB	21 (12,3)	6,3 (6,3)	4,7 (4)	4,6 (5,2)	23,1 (11)	7,6 (8)	5,9 (7,4)	4,8 (4,6)
IDARE (EE)	53,6 (14)	32,4 (11)	26,7 (7)	26 (9,5)	56,9 (10)	31,4 (5)	24 (8,6)	24 (8,9)
IDARE (ER)	52,1 (11)	36,7 (11)	32 (10,3)	30,8 (9)	54,2 (7,3)	35,1 (7)	33,3 (6)	30,3(9)

- This picture represents what the people going through the treatment would see.
- This could cause a traumatic scene for people who have had a gun pulled to their face.

Homicides in Mexico
Yearly breakdown

Source: National Institute of Statistics and Geography (Inegi)

CONCLUSION

- Virtual reality therapy is a promising tool that can make living with traumatic expressions or mental issues more bearable in Latinx communities.
- This is significant because lots of people are affected by PTSD or other physiological problems and if it can help reduce the problems in Latinx communities it should be used more.
- This research made me realize that technology can be used in other ways and that it gave me an interest in how to help other with physiological problems through technology.
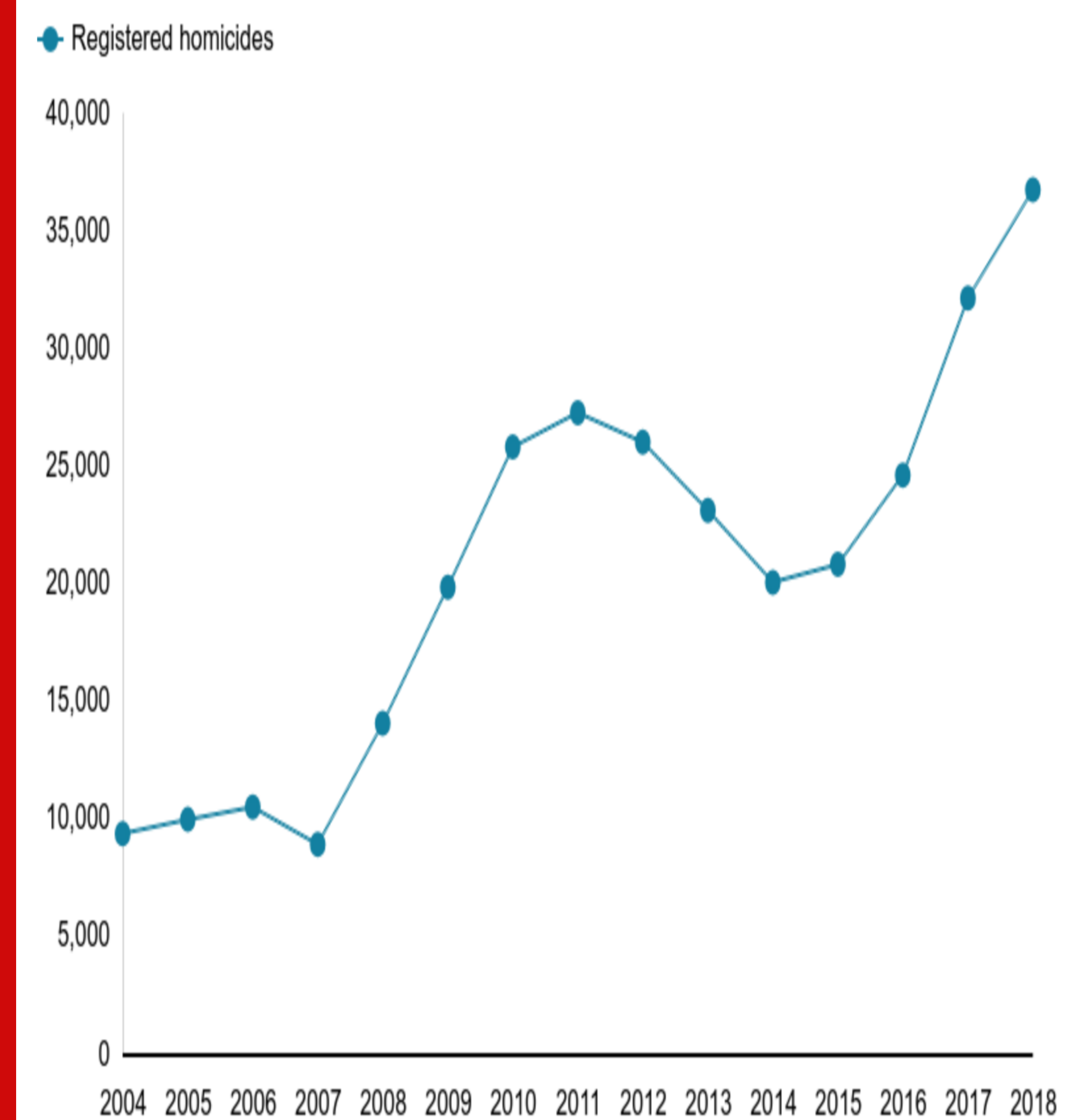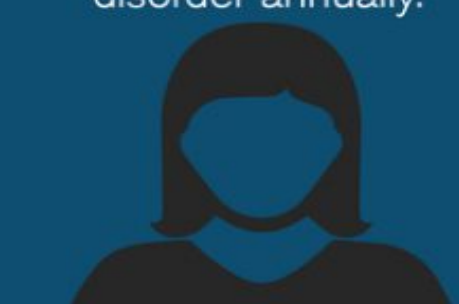
BIBLIOGRAPHY

- Anuario de Psicología 2012, vol. 42, nº 3, 377-391 © 2012, Facultat de Psicologia Universitat de Barcelona
- Almanza, J.J., Páez, F., Hernández, M., Barajas, G. y Nicolini, H. (1996). Traducción, confiabilidad y validez concurrente de dos escalas del trastorno por estrés postraumático. Salud mental, 19, 2-4.
- American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders. Washington, DC: Author.
- Baños, R., Guillén, V., Quero, S., García-Palacios, A., Alcañiz, M. y Botella, C. (2011). A virtual reality system for the treatment of stress-related disorders: A preliminary analysis of efficacy compared to a standard cognitive behavioral program. International Journal of Computer Studies, 69, 602-613.
- Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. y Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.
- Becker, C.B., Zayfert, C. y Anderson, E. (2004). A survey of psychologists' attitudes toward utilization of exposure therapy for PTSD. Behavior Research and Therapy, 42, 277–292.
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