

An international comparison study about psychotherapists' and patients' attitudes towards the use of Serious Games in psychotherapy

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Theoretical Background

- Limited knowledge and research activities regarding the acceptability of serious games as novel e-mental health technology.
- Yet, only the study in German-speaking countries carried out by Eichenberg et al. (2016) provides information how psychotherapists and patients assess serious games in mental health treatment.
- Considering the capacity of serious games to close the treatment gap by delivering mental health support to underserved people, e.g. living in rural areas or in low-to-middle-income countries.
- Followingly, a relevant direction for research is to analyze populations in different countries and cultural contexts.

Research questions

Do psychotherapists and patients in various countries differ in knowledge and attitudes towards the use of Serious Games in psychotherapy?

Methods

Surveys:

Two online surveys (cf. Eichenberg, Grabmayer & Green, 2016), one version for psychotherapists ($N = 1557$) and one for patients ($N = 1450$), were carried out.

Sample:

- Psychotherapists:** Delivering psychotherapy
- Patients:** Age between 18 and 85; any experience with psychotherapy



Countries:

Australia, Canada, China, Finland, Germany (two collection periods in 2015 and 2020) Italy, the Netherlands, New Zealand, Mexico, Russia, Slovenia, South Africa and the United Kingdom

Results

54% of the **psychotherapists** ($N = 139$) and 24% of the **patients** ($N = 143$) have been familiar with Serious Games.

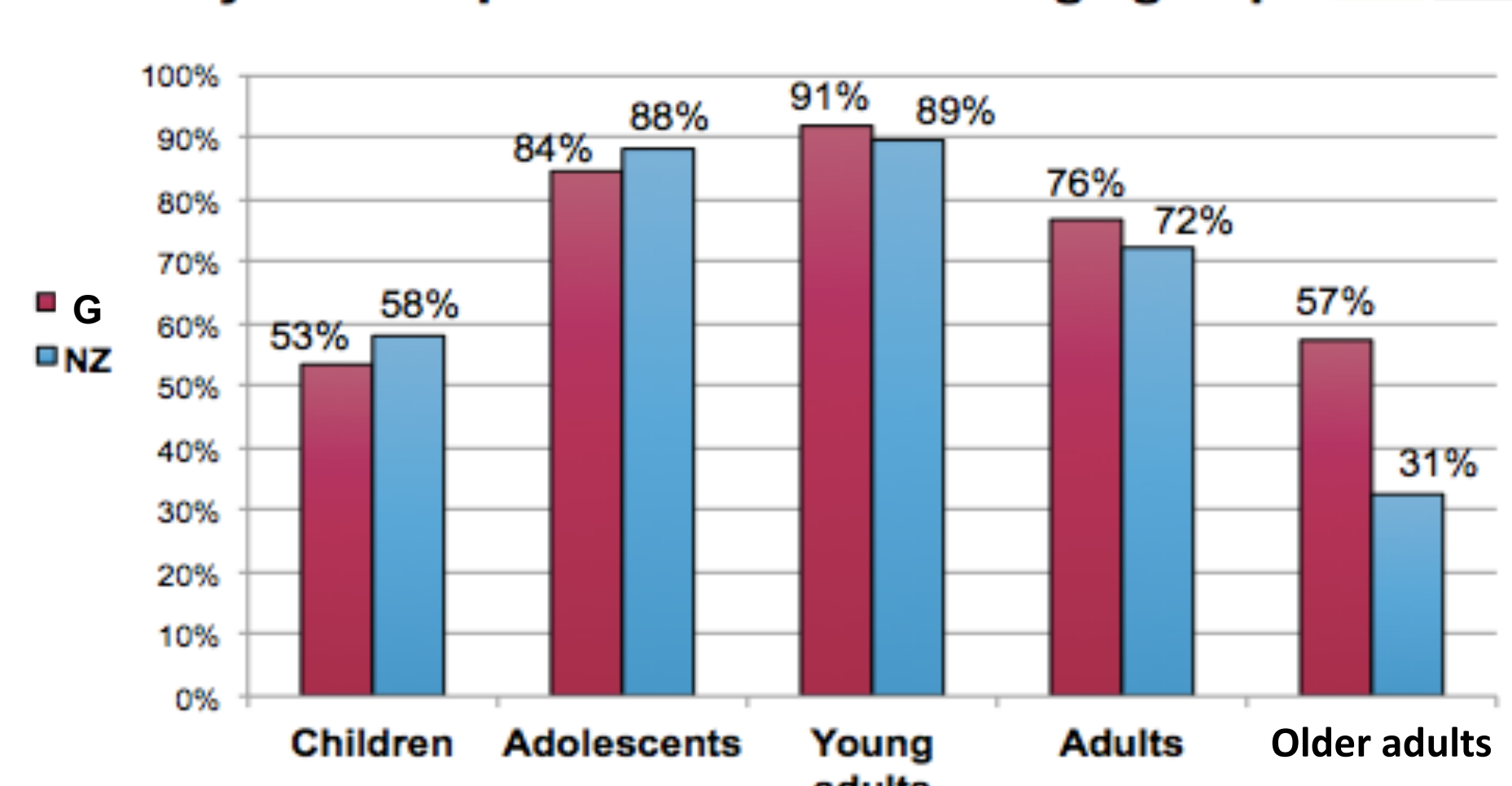
Results

- *German data by Eichenberg et al. (2016)
- 10% of the German psychotherapists ($N = 234$) and patients ($N = 260$) have already heard of Serious Games; 90% of both samples would consider applying them.
 - Significant correlation between **psychotherapists'** consideration of serious game use and the therapeutic approach ($\chi^2 (df(3), n=186) = 13.61; p=.003$).
 - Patients** who are current gamers would play less Serious Games per week ($r = -.325; p < .001$).

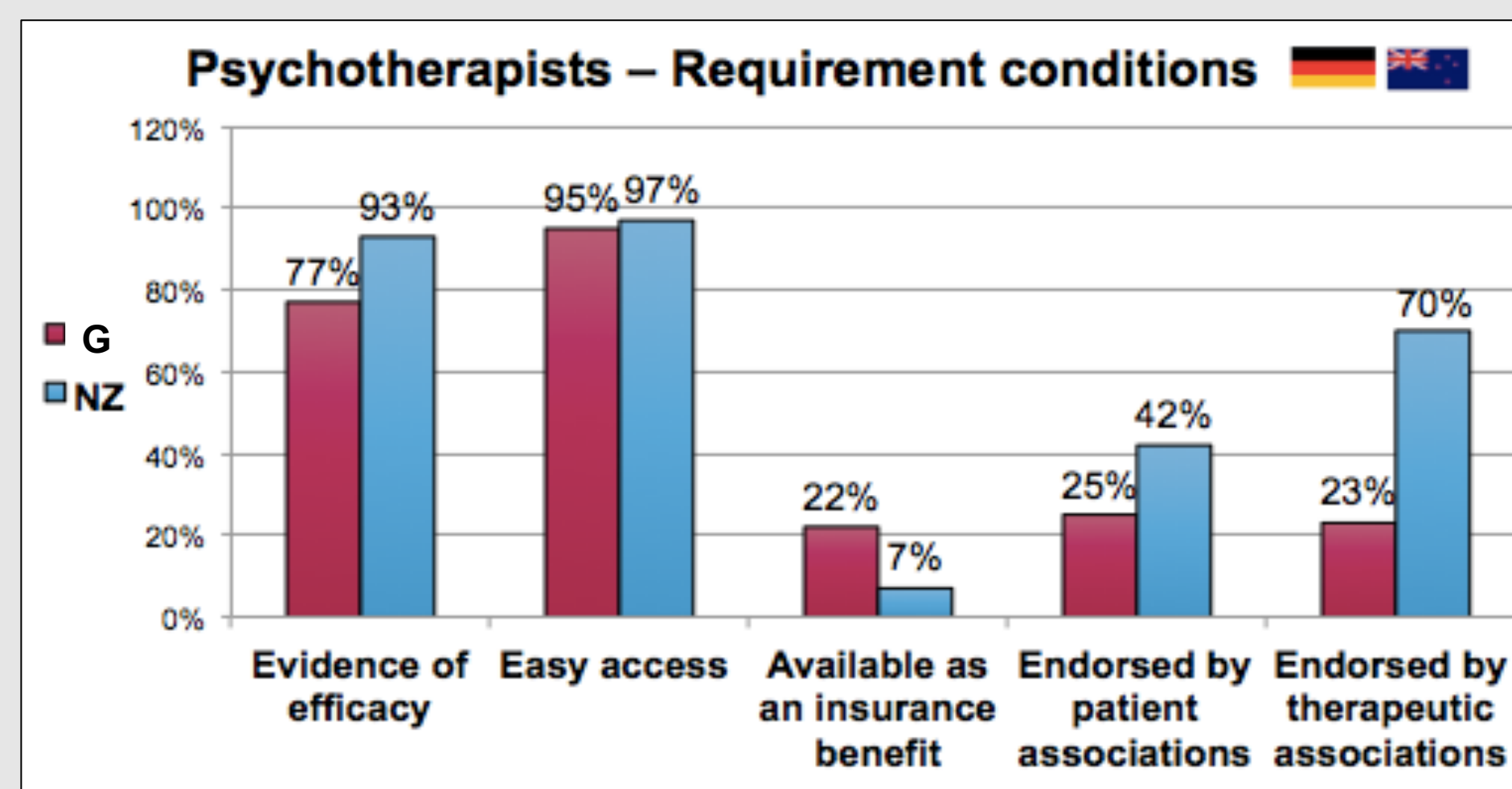
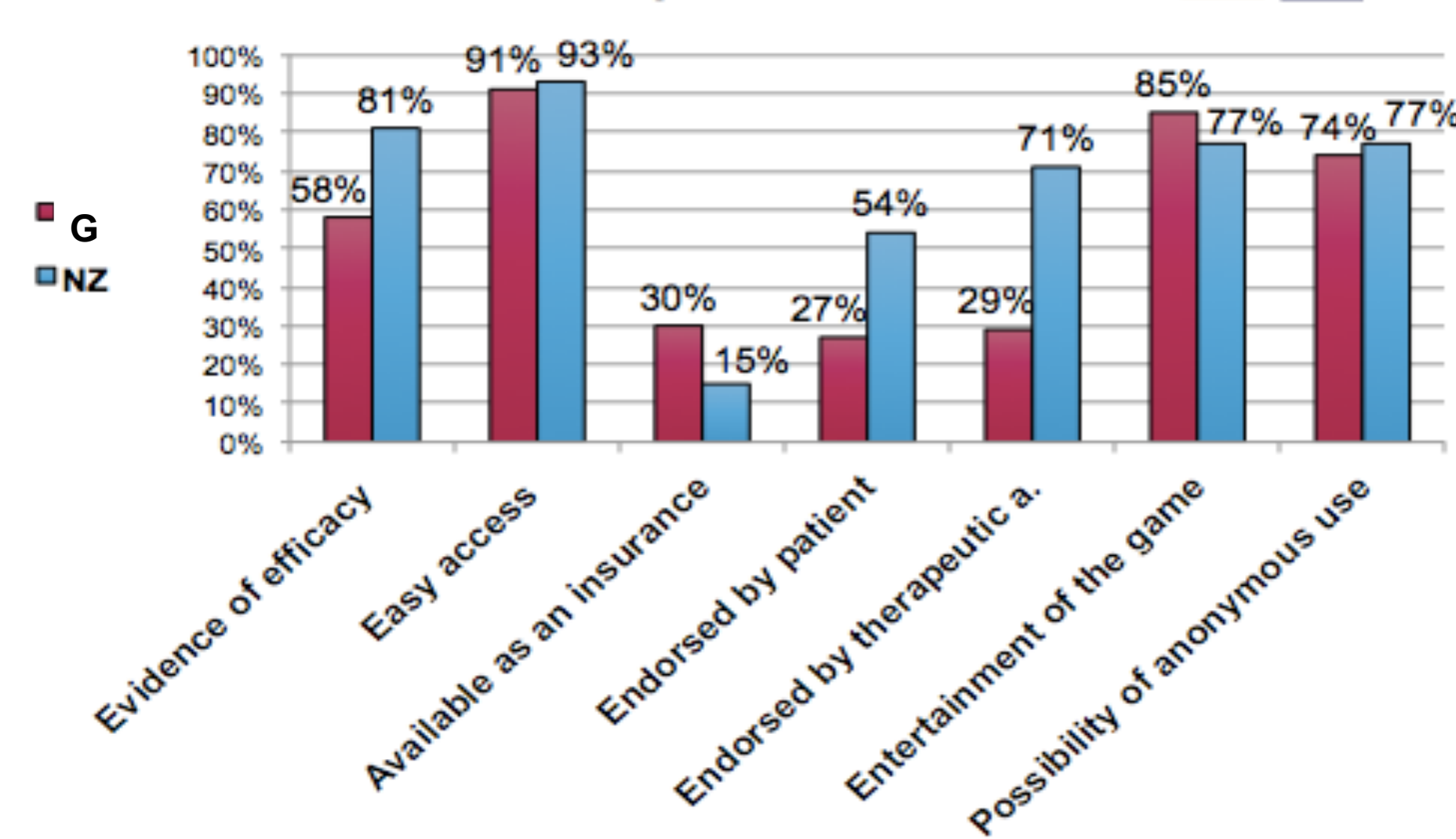
Psychotherapists – Treatment for psychological disorders

Psychological disorders	Germany	New Zealand
Psychologic disorders due to a medical condition	40,6%	50,3%
Supportive treatment with somatic diseases	50,2%	59,4%
Substance use and addictive disorders	23,7%	58,0%
Schizophrenia spectrum and other psychotic disorders	14,5%	32,2%
Affective disorders	69,6%	73,4%
Anxiety disorders	73,9%	88,8%
Obsessive-compulsive and related disorders	49,3%	66,4%
Post-traumatic stress disorders	32,8%	55,2%
Adjustment disorders	54,6%	64,3%
Somatoform disorders	42,5%	38,5%
Personality disorders	36,2%	48,3%
Artificial disorders	9,7%	11,9%
Dissociative disorders	15,9%	25,9%
Sexual and gender identity disorders	18,4%	36,4%
Feeding and eating disorders	50,2%	42,0%
Sleep-wake disorders	39,1%	38,5%
Impulse control disorders	59,6%	54,5%

Psychotherapists – Treatment for age groups



Patients – Requirement conditions



Psychotherapists – Knowledge of Serious Games

Country	Number	Country	Number
Australia	(N = 71 / 12) 16,9%	New Zealand	(N = 139 / 75) 53,9%
Canada	(N = 173 / 27) 15,6%	Mexico	(N = 132 / 32) 24,2%
China	(N = 149 / 9) 6,0%	Russia	(N = 96 / 18) 18,7%
Finland	(N = 81 / 48) 59,25%	Slovenia	(N = 61 / 15) 24,5%
Germany*	(N = 118 / 33) 27,9%	South Africa	(N = 115 / 16) 13,0%
Italy	(N = 126 / 64) 50,7%	United Kingdom	(N = 176 / 18) 10,2%
The Netherlands	(N = 120 / 64) 53,3%		

*Follow-up data from 2020

Patients – Knowledge of Serious Games

Country	Number	Country	Number
Australia	(N = 83 / 12) 14,4%	New Zealand	(N = 142 / 35) 24,6%
Canada	(N = 143 / 16) 11,1%	Mexico	(N = 102 / 12) 11,7%
China	(N = 67 / 5) 7,4%	Russia	(N = 100 / 16) 16,0%
Finland	(N = 70 / 31) 44,2%	Slovenia	(N = 86 / 7) 8,1%
Germany*	(N = 163 / 33) 20,2%	South Africa	(N = 142 / 17) 11,9%
Italy	(N = 142 / 57) 40,14%	United Kingdom	(N = 129 / 19) 14,7%
The Netherlands	(N = 81 / 14) 17,2%		

*Follow-up data from 2020

Conclusion

- The comparison between Germany and New Zealand showed that clinicians and patients in both countries have demonstrated willingness to try Serious Games, though New Zealand's sample showed a greater knowledge of Serious Gaming.
- Further country comparison will show which conditions hamper or promote serious games use in mental health treatment.