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Outline

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Background

Youth Mental Health

- Peak onset for mental ill-health occurs during the adolescent and early adult period.
- Mental ill health as the *leading cause of* disability for 10-24 year old persons
 worldwide.
- 1 in 3 Irish adolescents will have experienced some form of mental health disorder by age 13 (Cannon et al, 2013).
- Numerous risk factors identified including familial conflict and adverse learning environment.





Background

Migration and Mental Health

- Mental health disorders may increase when exposed to stressful circumstances.
- Process of migration may result in 'exposing migrants to social stress and increased risk of mental disorders' (WHO, 2001).
- Rise in the absolute number of child migrants in recent years.
- 15% rise in immigrants to Ireland in year leading up to April 2016.





Conceptual Framework

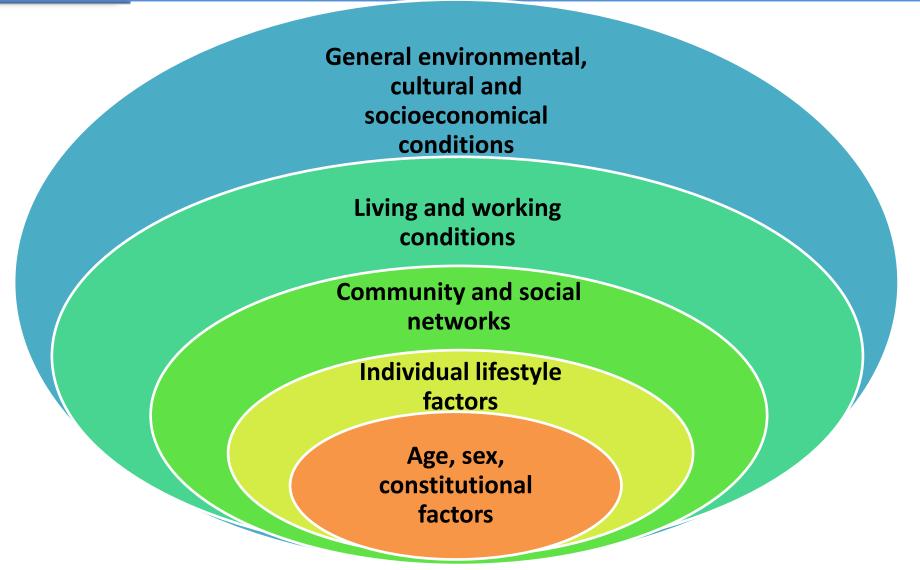


Figure 1: Model of health determinants (based on Dahlgren and Whitehead's 1991 model)



Aims of the study

This study aimed to investigate:

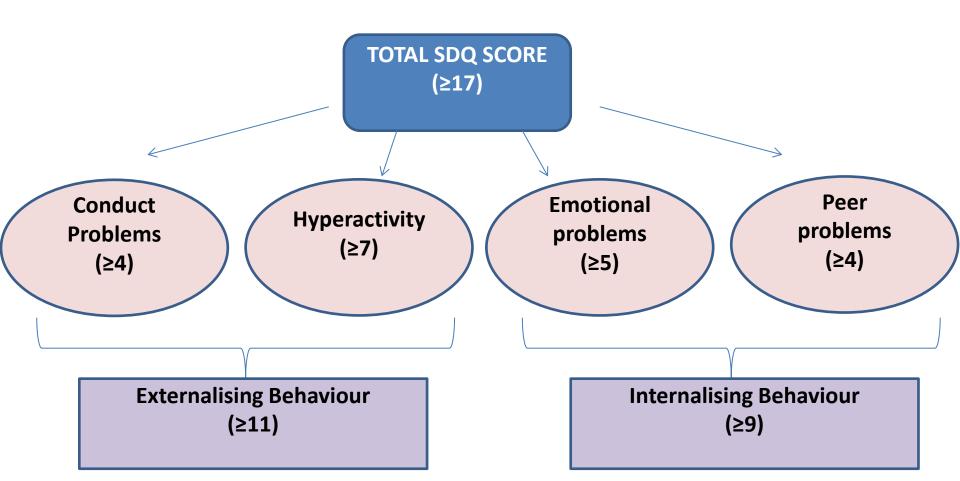
- 1) Whether there is greater psychological distress among young migrants than native Irish adolescents.
- 2) The types of mental health difficulties experienced by migrant youth in comparison to children who are Irish citizens.
- 3) Whether the link between having a migrant background and the likelihood of developing mental health problems changes over time.
- 4) Whether the experience of stressful life events impacts on the association between migrant status and psychological distress.
- 5) Whether there is a greater number of stressful life events experienced by migrant children compared to non-migrant.



Methods

Measure:

SDQ scores based on PCG questionnaires

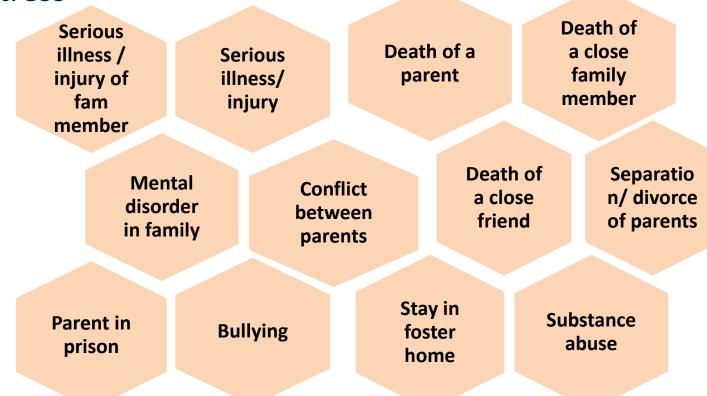




Methods

Exposure

- Numeric variable counting total number of stressful life events experienced by age 9 yrs
- Cumulative stress
- ≥3 stressors





Methods

Potential confounding factors:

- SES * (measured by maternal education levels)
- Gender
- Parental marital status

Statistical Analysis:

- SPSS Statistics 22 was used for all statistical analyses
- Chi-squared, parametric t-tests, logistic regression



Results

- Demographics:
- Aged 9 yrs: **8,568 children**

Native Irish (n = 8,110)

Migrants (n = 458)

- No significant difference in gender or parental marital status of migrant vs. Irish children.
- Mean level of maternal education *significantly higher* (p< 0.01) in migrant children (\bar{x} = 3.71, SD: 1.38) than in native Irish (\bar{x} = 3.17, SD: 1.25).
- 90% follow-up rate at age 13 yrs.



Migrancy Status and SDQ Scores, 9 yrs

SDQ Subscale	Total abnorma I N (%)	Migrant abnormal N (%)	Irish abnormal N (%)	Abnormal SDQ OR (95% CI) *	P- value
Total Score	652	32	620	1.12	0.54
	(7.2)	(7.2)	(7.6)	(0.77-1.64)	
Emotional	1200	54	1146	0.98	0.94
	(14.0)	(12.2)	(14.1)	(0.74-1.33)	
Conduct	839	30	809	0.77	0.18
	(9.8)	(6.8)	(10.0)	(0.52-1.13)	
Hyperactivity	1017	61	956	1.35	0.03
	(11.9)	(13.8)	(11.8)	(1.02-1.79)	
Peer Problems	738	39	699	1.15	0.41
	(8.6)	(8.8)	(8.6)	(0.82-1.62)	

- A significantly greater proportion of migrant children endorsed abnormal levels of hyperactivity



Migrancy Status and Externalising/Internalising Behaviours

Behaviour	Migrancy Status	Abnormal Score N (%)	Total Pop Abnormal Score N (%)	Abnormal PCG SDQ OR (95% CI)
Externalising	Irish	563	597	1.05
		(6.9)	(7.0)	(0.72-1.52)
	Migrant	32		p= 0.24
		(7.2)		
Internalising	Irish	263	277	0.83
		(3.2)	(3.2)	(0.46-1.50)
	Migrant	12		p= 0.98
		(2.7)		

- Differences
associated with
migrancy status
and abnormal
externalising /
internalising
behaviours were
non-significant
following
adjustment for SES



Early Life Stressors

No. of Stressors	Total N (%)	Migrant N (%)	Irish N (%)	Odds Ratio citizenship (CI)
≥3	4763	200	4563	0.64
	(55.6)	(45.2)	(56.2)	(0.53-0.78)
				p< .01

- Significantly higher (p= 0.04) mean cumulative stress in Irish citizens (\bar{x} = 2.84) than migrant children (\bar{x} = 2.71).
- Despite increased no. of stressors Irish children experience, no sig. difference in abnormal SDQ scores noted*.
- ≥3 stressors → no sig. difference (p=0.40) in proportion with abnormal SDQ scores between Irish/migrants.



Individual Early Life Stressors

Stressors		Migrant	Irish N (%)	Odds Ratio citizenship (95% CI)			
		N (%)		Unadjusted	P-value	Adjusted*	P-value
Death of a	214	12	202	1.09	0.77	1.34	0.34
parent	(2.5)	(2.7)	(2.5)	(0.61-1.97)		(0.74-2.45)	
Death of a close	3609	123	3486	0.51	<0.01	0.53	<0.01
family member	(42.2)	(27.8)	(42.9)	(0.41-0.63)		(0.43-0.66)	
Death of a close	516	17	499	0.61	0.05	0.68	0.13
friend	(6.0)	(3.8)	(6.1)	(0.37-1.00)		(0.42-1.12)	
Separation/Divo	1253	72	1181	1.14	0.31	1.19	0.26
rce of parents	(14.6)	(16.3)	(14.5)	(0.88-1.48)		(0.88-1.62)	
Stay in foster	115	8	107	1.38	0.39	1.63	0.22
home	(1.3)	(1.8)	(1.3)	(0.67-2.84)		(0.75-3.56)	
Serious	404	27	377	1.34	0.16	1.25	0.30
illness/injury	(4.7)	(6.1)	(4.6)	(0.89-2.00)		(0.82-1.89)	



Individual Early Life Stressors

Stressors	Total N	Migrant	Irish N	Odds Ratio citizenship (95% CI)			
	(%)	N (%)	(%)	Unadjusted	P-value	Adjusted*	P-value
Substance	294	6	288	0.37	0.01	0.19	<0.01
abuse	(3.4)	(1.4)	(3.5)	(0.17-0.84)		(0.07-0.51)	
Mental disorder	303	15	288	0.95	0.86	0.75	0.75
in family	(3.5)	(3.4)	(3.5)	(0.56-1.62)		(0.42-1.35)	
Conflict	1047	64	983	1.23	0.14	1.08	0.67
between parents	(12.2)	(14.4)	(12.1)	(0.93-1.61)		(0.76-1.53)	
Parent in prison	78	8	70	2.12	0.04	1.97	0.12
	(0.9)	(1.8)	(0.9)	(1.01-4.43)		(0.84-4.65)	
Bullying	2010	106	1904	0.97	0.81	0.95	0.67
	(23.5)	(24.0)	(23.5)	(0.78-1.22)		(0.75-1.20)	

Significantly greater proportion of Irish children experienced death of a close family member and substance abuse in unadjusted and adjusted (for SES and all other stressors) models



Migrancy status and abnormal SDQ subscale/total scores, 13 yrs

SDQ Subscale	Total abnormal SDQ N (%)	Migrant abnormal N (%)	Irish abnormal N (%)	Abnormal SDQ OR* (95% CI)	P- value
Total Score	490	14	476	0.69	0.19
	(6.5)	(3.9)	(6.6)	(0.40-1.19)	
Emotional	876	26	850	0.65	0.04
	(11.6)	(7.3)	(11.9)	(0.43-0.98)	
Conduct	599	32	567	1.34	0.13
	(8.0)	(9.0)	(7.9)	(0.92-1.95)	
Hyperactivity	700	24	676	0.78	0.24
	(9.3)	(6.7)	(9.4)	(0.51-1.19)	
Peer	587	32	555	1.22	0.31
Problems	(7.8)	(9.0)	(7.7)	(0.83-1.77)	

- Following
adjustment for
SES, a *significantly greater proportion of Irish children*generated
abnormal
emotional SDQ
scores (p= 0.04)



A significantly greater proportion of Irish citizens had experienced a greater number of early life stressors

- Are Irish children more susceptible to stress?
- Ireland's Adolescent Brain Development Study
- → Irish adolescents (15%) at higher risk of developing mental health disorders than equivalently aged counterparts in UK (11.2%) and USA (9.6%)
- Work/life balance of parents adequate support network?



Migrant children did not appear to have higher levels of abnormal total SDQ scores

- 'Economic' migrants > conflict-driven migrants
- 2006 census → non-Irish citizens had higher levels of education
- Irish labour workforce more than doubled to almost 14% in decade leading up to 2006



A significantly greater proportion of migrant children endorsed abnormal hyperactivity levels, aged 9 yrs.

- Difficulty in adjusting to new environment
- Need to seek acceptance from new peer groups?
- Variation in PCG's interpretation of children's behaviours
- Economic stresses → parental emotional distress →
 altered parenting style → behavioural problems (conger et al.,
 2002)



A significantly greater proportion of native Irish children endorsed abnormal emotional levels, aged 13 yrs.

- Integration of immigrants culturally and economicallysuccessful assimilation
- PCG perception of emotional problems and relationship with children



'Healthy migrant effect'



Ability to overcome challenging situations
'Positive selection'

Mental health advantage of migrants



'Immigrant health paradox'

 Ability to evaluate current circumstances as higher quality that previously

- Strong migrant community support networks



Limitations

Restricted access to ethnicity of migrant children

Maternal education as a proxy measure for SES

Early life stressors only available at age 9 yrs

'Citizenship' = migrancy status

Psychological distress → SDQ scores recorded by PCG

Cultural variation in interpreting 'abnormal functioning'

Social desirability bias

Individual perception of stressful events

✓ Large nationallyrepresentative sample

✓ Longitudinal nature of study

✓ Numerous variables (exploration of potential confounders)



Conclusion

 This study indicated no significant difference in mental health outcomes between migrant and native Irish children.

- Future studies could further investigate the underlying reasons why Irish children are being exposed to an increased number of early life stressors.
- Further research in this area could aid policy makers in the development of effective policies which promote integration and provide accessible mental health services.



Recommendations for practice and future research

 Analysis and comparison with psychological development of the infant cohort.

- Further research could help identify the most influential factors in the relationship between migrant status and mental health and the underlying mechanisms of such.
- Mixed methods studies- increased understanding of young people's perceptions of 'stressors'?
- Ethnicity of migrant children and exploration of factors causing vulnerability/resilience within similar ethnic groups



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