

Perceptions of Flood Risk, Mental Health & Well-Being

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Flood Risk, Mental Health and Well-Being

Overview

- Previous research on flooding, mental health, and well-being
- Residential exposure to flood risk in Wales
- New National Survey for Wales
- Emerging findings on perceptions of flood risk and well-being
- Future research and partnership opportunities

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Previous Research

NIHR / PHE study (Lancet 2017): Effect of evacuation and displacement on the association between flooding and mental health outcomes

- PHE National Study of Flooding and Health (2013-14)
- People displaced due to flooding (n=622) – significant association with depression; anxiety, and PTSD
- No Flood Risk warning - associated with higher levels of depression and PTSD (no significant difference for anxiety)

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Previous Research

Climate Just (JRF; Manchester Uni; EA; Climate UK): Social vulnerability to the impacts of climate change, especially flood risk and heat effects

- Personal factors: age (children / elderly); existing health problems
- Environmental factors: housing status (rented / owned); extent of green infrastructure
- Social factors: deprivation; length of residency; low incomes; deprivation

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Residential Flood Risk in Wales

- 148,150 residential properties at risk from flooding (11% of all properties in Wales)
- NRW delivers a flood forecasting service for 176 locations in Wales
- 108,788 properties now registered to receive the flood warning service from Floodline Warnings Direct
- 963 Flood Plans in place for communities and businesses and 265 Flood Plan Wardens
- Research into understanding flood risk awareness and behaviours

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National Survey for Wales

New large-scale household survey of adults in Wales (2016-21):

- Perceptions of flood risk (awareness, concern, actions)
- Perceptions of climate change (awareness, concerns, causes)
- Mental Health
- Subjective well-being (ONS 4)
- Material Deprivation
- Housing tenure
- Standard demographics (age, gender, ethnicity etc)

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Emerging Findings

Looked into whether own home is at risk of flooding:

- All population: Yes: 18%; No (should do): 8%; No (not needed) 74%
- Poor General Health: less likely to have looked into this (15%); more likely to consider it is not needed (78%)
- Material Deprivation: also less likely to have looked into this (16%), but interestingly more likely to think they should do (13%)
- Rural / Urban residency also made a difference: rural residents more likely to have looked in to this (21%)

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Emerging Findings

Level of concern about flood risk

(A) very / fairly concerned about flood risk to own home:

- All population: 9%
- Respondents in “material deprivation” more concerned (11%)
- Indication that those with overall ‘fair’ or ‘bad’ health are less likely to be concerned (note - small sample sizes)
- No difference between rural and urban areas

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Emerging Findings

Level of concern about flood risk

(B) very / fairly concerned about flood risk to local area:

- All population: 25%
- Material deprivation made no difference
- Indication that those with self-reported overall 'fair' or 'bad' health are less likely to be concerned (small sample sizes)
- Respondents in rural areas were more concerned (34%)

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Emerging Findings

Level of concern about flood risk

(C) very / fairly concerned about flood risk to other areas in Wales:

- All population: 59%
- Respondents in “material deprivation” were LESS concerned (50%)
- Self-reported overall health made no difference
- Respondents in rural areas were again more concerned (62%)

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Future Research

- Analysis of additional potentially relevant single variables (eg age differences; tenancy status; mental health; subjective well-being)
- Analysis of the interaction between multiple variables to understand the more complex relationships
- Consider the relative mental health and well-being impacts of concern at different scales (own home, local area, other areas)
- Comparative analysis of those in flood risk areas and those not in a flood risk area (along with exposure to previous flood events)

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Thank You

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