

# Assessing the Spatial Correlations between Prosperity and Mental Health in Northern Ireland

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## Abstract:

With civic establishments focusing more on urban growth and international connectivity in light of global economic forces, we also find health and wellbeing introduced as key factor contributing to urban sustainability and international attractiveness. This is particularly evident within the goals of the Local Development Plan for Belfast, Northern Ireland. However, its articulation and strategic application remain obscure. Mental Health more recently finds heightened importance in socio-economic research and civic planning regimes due to its impact on resource allocation and urban experiences. Using available datasets for Northern Ireland via NISRA and other institutions, we aim to find a statistical correlation between mental health (use of antidepressants, availability of health facilities within SOA and Administrative Areas; Drug abuse and Alcoholism; rate of suicide) and infrastructural prosperity (services, connectivity, parklands) at a macro-geographic level for Northern Ireland. This study explores the relationship using standard global ordinary least squares (OLS) regression, and for the first time, geographically weighted regression (GWR) applied to examine the spatially determined patterns in Northern Ireland. The main contribution of this study is in the unity of spatial condition of mental health with local regression procedures and offer a specified assessment of mental health in association with infrastructural prosperity spatially.

## Introduction:

In July 2018, David Babington, the Chief Executive at Action Mental Health, highlighted once again the challenges faced by public services towards setting short and long-term strategic goals in the present political vacuum for mental health (Belfast Telegraph, 2018). Within his commentary he highlights issues of under-resourcing and disproportionate funding availed<sup>i</sup> to a place where the incidence of mental ill health, social need, and suicide<sup>ii</sup> is highest in the United Kingdom. The Mental Health Foundation in its 2016 report on mental health in Northern Ireland exemplifies that Northern Ireland spends less than half of England's per capita spend on supporting people with mental health problems and learning disabilities (Mental Health Foundation, 2016: 7). Northern Ireland is currently undergoing a *suicide epidemic* (Wallen, 2018), which continues to be impacted by the lack of funding and a government in limbo. As studies have shown, Northern Ireland was more affected by austerity than the rest of the UK, post 2008 crisis. Meanwhile, the current UK geopolitics of impending Brexit makes matters worse.

Janice Thompson, in a series of articles completed for the NI Assembly, highlights mental illness as the leading cause of ill health and disability in Northern Ireland, with 21% of women and 16% of men registering high scores on the 2015/16 General Health Questionnaire (GHQ12) suffering from a mental health problem. At least 19% of individuals who undertook the Northern Ireland Health Survey 2014/15 showed possible mental health problems. Respondents in the most deprived areas were twice as likely to record a high score (27%), as those in the least deprived areas (13%). The causes of mental illness are super diverse, varying from PTSD and genetic transmission, to geospatial disparities and opportunity. Generally, those living in lower socioeconomic groups are more likely to experience chronic ill-health and die earlier than those more advantaged (Mental Health Foundation, 2016: 19). However, urban areas present their own unique challenges, signifying a strong heterogeneous spatial geography, which have detrimental impacts on residents across ethnicities and minority groups. Such factors include crime rates, violence, neighbourhood deterioration, exclusionary spaces and fragmentation, and infrastructural segregation.

Three research aims are presented as follows; [i] to explore the spatial relationship between prosperity indices and available data on mental health in Northern Ireland, [ii] to discuss the viability of available data for Northern Ireland; and [iii] to highlight the implications of data on increasing migrant population from BAME communities and EU migrants.

### Defining Prosperity and Mental Health in Northern Ireland

In accordance with the World Health Organisation, good mental health is defined as “a state of wellbeing in which the individual realises [their]<sup>iii</sup> own potential, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to [their] community” (Thompson, 2017). We thus begin to see an initial emphasis on an individual’s physical and psychological health, but also the capacity to contribute to their community and the wider activities of the city (economic, cultural, social, environment), which expands the atypical explorations of mental health in regard to medicinal and psychiatric interventions. Prosperity, in its most simplistic description, is the delivery of basic components of livelihood and opportunity - notably health, social capital, education, wellbeing and sense of opportunity; where wealth necessarily does *not* dictate prosperous living (Legatum Institute, 2016: 16-17). Prosperity is a multidimensional theme that encompasses a myriad of indices including productivity, employment and socio-economic position, education, social cohesion and networking, quality of life, environmental and business capital, individual ability to provide and participate, access to services and amenities and healthier lifestyles (see Table 1, Friedli, 2009: 1 & 6). Quoting Amartya Sen, it is the ability for one (or all) to go about the day-to-day without shame (Friedli, 2009: 37).

Where health is mentioned within documents dedicated to prosperity [see bibliography] - mental health isn’t always given independent comment. What is acknowledged is the opportunity to flourish does not reach all citizens, constituting a heterogeneous spatiality of prosperity and intervention to be explored. This reinforces the importance of understanding prosperity towards themes of social resilience and sustainable-inclusive development. The availability of datasets to conduct such an exploration, and to what accuracy, is dependent on the geographical constituency under review.

With regard to Mental Health legislation for NI, Thompson (2017) recalls a legislative reform that had taken place in 2016 which devolved more responsibilities to community-based services towards providing further interventions for mental health. It also called for the development of more community-specific interventions regardless of age or ability<sup>iv</sup>. Policy progression identifies challenges and lack of significant understanding towards individual and community access to services, patient experience with services, needs and service gaps, and enhancing the range of options available to respective practitioners at their respective wards. Increased support for employment opportunities and social enterprise was also listed for needs-based interventions. There has to be political will to address these issues, and to discuss the impacts of social and economic changes in the region. The built environment has direct and indirect effects on mental health, such as but not limited to elements of density, deterioration, vacancy, trust, issues of control, inter-community linkages, fatigue and territoriality (spaces of inclusion/exclusion) that are recorded neighbourhood stressors (Evans, 2003: 536; Wandersman, 1998). They are part of the everyday experience, regardless of rural or urban situation. The emotional and cognitive effects of high levels of social status differentiation and access to economic and social resources reflect on levels of mental distress in communities. Here, health damaging behaviours and violence manifest in the face of multiple problems including livelihood security, poverty, debt, poor housing supply and other indicators of low social status (Friedli, 2009: iii).

Positive mental health breeds predominantly amongst those with equal access to resources and community participation, influencing outcomes in respective spatial domains (Friedli, 2009: 1). A key challenge for Northern Ireland as a post-conflict society is the perpetuation of significant segregation and fragmentation both mentally and infrastructurally, resulting from political planning practices adopted by divided communities of the Troubles (Wallen, 2018).

The Mental Health Foundation also offer information and extended discussions on LGBTQ+, Black, Asian and Minority Ethnic [BAME] citizens in Northern Ireland emphasising exclusion, discrimination, hate crime and isolation as contributing to deteriorating mental health. Organisations such as Counselling for All Nations [CANS]<sup>v</sup> in Belfast actively provide culturally-sensitive counselling services to overcome a range of barriers faced by non-Northern Irish civilians living, both permanently and temporarily. The larger Belfast Metropolitan Area has the challenge of incorporating a shared city paradigm. Such challenges include cultural specificities, language barriers, communication difficulties and social isolation. This is highlighted as a key challenge in mental health research for Northern Ireland for which there is a “significant absence” of recorded data for ethnic groups, trans, homeless, refugees and asylum seekers (Mental Health Foundation, 2016, 22).

In light of progressive documents towards a global city status, Belfast’s *Local Development Plan* (POP 2017) acknowledges mental health only once with regard to the provision of specialist housing, but only in the context of an increasingly aging population<sup>vi</sup> in the city and high levels of poor health therein. This point remains geographically ambiguous in the document and further emphasises the subordination of the theme of Mental Health in the civic planning for the capital’s future (Belfast City Council, 2017: 30). Contrary to the Local Development Plan, the City’s Community Plan - *The Belfast Agenda*, based on discussions, acknowledging the importance of mental wellbeing, social isolation and resilience, contingent to the delivery of an integrated city programme. As a *symbiotic* document co-addressing Civic Futures, with good health for everyone as a priority, they systematically dissociate mental health from the urban, thereby failing to articulate on how mental health is impacting the city’s growth and prosperity. It goes contrary to the New Urban Agenda emphasis on meeting Strategic Development Goal [SDGs] 3.5 stressing that the prevention and treatment of substance abuse 3.5.1 includes psychosocial and pharmacological interventions and rehabilitations. Data collection is also echoed in the summary report for ‘*Building Hope: Working Together to Prevent Suicide*’ (Belfast City Council, 2016) where data sharing and collection, which is accurate and reliable, can be used to inform service provision and create knowledge sharing.

From initial data collection and scoping, the availability of data for further analysis remains inconsistent, raising an issue of data transparency and accessibility for Northern Ireland. Some data sets provided through vendors such as Northern Ireland Statistics and Research Agency (NISRA) and OpenDataNI are often out of date or are spatially incompatible with each other. Current data is embargoed, requiring large periods of time to receive permission to access datasets. Compared to other geographies and urbanities in Great Britain, India, and Scandinavia - Northern Ireland is miles behind other cities, some of whom can provide incredibly detailed information on their respective urbanities and population at a myriad of geographical scales and digital formats. Broefhof and Van Marwijk (2012) assert that the availability of such datasets support strategic planning, including decisions for development and enables the monitoring of critical social data pertaining to poverty and other stimuli for mental illness.

The purpose of this research is not only to highlight a deficiency in data available for analyses on the impacts of mental health on civic and community relations and its impact on prosperity in Northern Ireland. It also helps to show that addressing such themes together provides a fresh narrative to inform planning policy and an understanding of the community’s sectoral and individual needs for future growth. Data can be used to energise community cultural capacity to be resilient, and provide a more prosperous environment that supports positive mental health and social participation. Although mental health research has advanced, free availability of information can become a versatile cross-sector policy instrument empowering public, private and community-based organisations to become more informed, digitally capable, and empowered to act upon strategic decisions. The strengthening of data collection capabilities for public policy echoes the SDGs of the New Urban Agenda and combines locally and globally harvested data for promoting data-driven governance (NIUA, 2017: 11). Data is a starting point for all points of inquiry.

## Methodology Design, Results and Interpretation:

According to the Legatum Institute (2016), Northern Ireland is separated into 11 Local Government Districts (LGD), with information relevant to their prosperity index registered into seven categories as follows in Table 1. From the Legatum index, Eight of the eleven LGDs reside in the 101<sup>st</sup>-194<sup>th</sup> ranking [yellow]; *Causeway Coast and Glens* occupies the 237<sup>th</sup> ranking of the 195<sup>th</sup>-289<sup>th</sup> band [pink]; *Belfast*, the capital, resides in the 240<sup>th</sup>-339<sup>th</sup> band [brown]; with *Derry City and Strabane* occupying a position in the 25 lowest prosperous localities, situated in the 340<sup>th</sup> – 389<sup>th</sup> band [red]. What we see from these results is a heterogeneous distribution of prosperity across Northern Ireland, with both Belfast and Derry being designated as lower in rank as a result of their greater population densities, class/ethnic diversity and disparities, and larger local variations in services, amenities, employment and investment as primary civic nodes. The scale in this research may be unacceptable for understanding these numbers further, producing anomalous results at the macro-geographic. Rural-characterised and peripheral LGD sectors present variable figures in regard to business environment, education, natural environment and safety, with sectors closer to major urban areas presenting higher ranking results.

**TABLE 1 – NUTS 3 and Prosperity Information**

NUTS3 Domain	Economic Quality	Business Environment	Education	Health	Safety/ Security	Social Capital	Natural Environment	Prosperity Rank
Lisburn and Castlereagh	240	61	61	278	59	13	324	109
Belfast	355	17	314	360	381	7	222	313
Armagh City, Banbridge and Craigavon	271	155	317	207	142	36	144	174
Newry, Mourne and Down	299	150	181	184	112	96	47	111
Ards and North Down	248	77	281	257	19	31	310	145
Causeway Coast and Glens	372	191	297	190	154	32	216	237
Antrim and Newtownabbey	188	79	340	157	66	5	296	122
Derry City and Strabane	389	164	367	365	225	99	85	367
Mid Ulster	284	200	304	140	111	2	236	151
Mid and East Antrim	257	168	253	167	108	17	207	142
Fermanagh and Omagh	250	244	91	158	78	11	151	105

*Prosperity Rank, Economic Quality and Social Capital* were chosen for this study to view prosperity as a product of economic outcomes, but also to view it as a product of human interaction. These became our base variables for the subsequent analysis.

## Methodological Framework and Results:

The methodological framework adopted for this research is structured into 3 stages of inquiry, exemplified in Figure 1. This shows the initial creation of the Combined Mental Health/Prosperity Index [MHP] that was used as a base foundation for the subsequent analyses on Economic Quality and Social Capital [Legatum Institute 2016], and on elements extracted from the NISRA's Living Environment Indicators [2017].

A key methodological restraint was the spatial data for generating the geographical platform for the analysis. The geographical data available via NISRA was out of date and didn't accommodate the local government reform in 2016 which created new Local Government Districts with a devolution of responsibilities. The NUTS3 data was obtained and selected as acceptable due to its congruence with the Legatum Institute Prosperity Information data [2016]. This established the macro-geographical scale at which the study was conducted. An aspiration is to transfer this narrative to the Super Output Area [SOA] scale, if data permits.

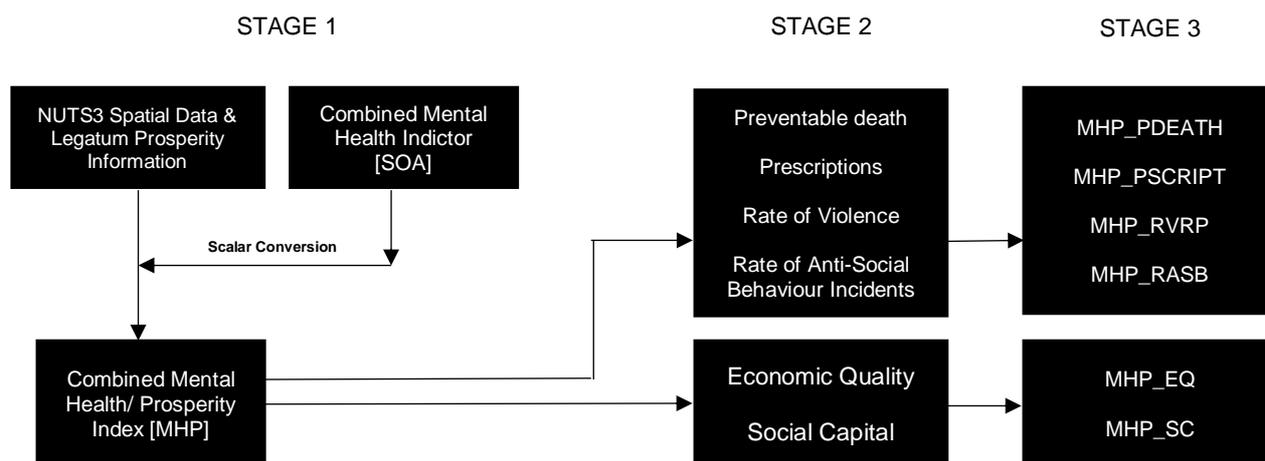


Figure 1: Visualisation of Methodological Framework

The Combined Mental Health Indicator was the most relevant information via NISRA we could find available to use as a co-efficient for examining mental health in Northern Ireland. This was available in Small Output Area format which, although detailed, required spatial reconfiguration to be compatible with the NUTS3 spatial platform. In order to proceed, the spatial reconfiguration required values to be subject to standard deviation to produce complimentary data sets for its geographical expression in ArcGIS. The results can be found in Table 2:

Table 2 – Combined Mental Health Indicator Standard Deviation Results

Combined Mental Health Indicator	Mean	Count	SD	Min.	Max.
Lisburn and Castlereagh	528.6	91	272	4	886
Belfast	315.4	163	290	1	889
Armagh City, Banbridge and Craigavon	487.0	88	224	57	851
Newry, Mourne and Down	438.0	83	222	60	862
Ards and North Down	587.0	86	220	85	887
Causeway Coast and Glens	499.0	72	208	39	852
Antrim and Newtownabbey	493.0	72	240	110	890
Derry City and Strabane	227.0	74	200	17	810
Mid Ulster	437.0	57	185	88	824
Mid and East Antrim	523.0	65	240	107	873
Fermanagh and Omagh	387.0	49	220	14	817

The above table shows that we do require further analyses that provide greater spatial information than NUTS3 datasets are capable of. For all areas, a large disparity is present between Min. and Max., consequently expressing larger standard deviation (SD). It means there is wide range of Combined Mental Health Indicator present within NUTS3 boundaries. Therefore, the subsequent analyses adopted three modes of Statistical Inquiry to explore these results: **Ordinary Least Squares [OLS]; Adjusted R<sup>2</sup> and Koenker Geography Weighted Regression [GWR] Test.** OLS estimates unknown variables to justify the strength between two datasets of congruent spatial boundaries. Both the *Adjusted R<sup>2</sup>* and *Koenker Test* evaluate the statistical relationship between variables in data and across geographical space.

**Variable Analysis and Results:**

Using OLS regression, a co-efficient was calculated for the Combined Mental Health Indicator dataset with the Prosperity Ranking, informed geographically by the NUTS3 spatial data [Table A]:

**TABLE A – OLS regression on Combined Mental Health Indicator and Prosperity Rank**

OLS	Coefficient: Combined Mental Health Indicator
Prosperity Index	-0.73

Table A suggests that there is a negative relationship between the explanatory *Prosperity Rank* and dependent *Combined Mental Health* Indicator at LGD scale in Northern Ireland. The resultant variable (*Combined Mental Health/Prosperity Index [MHP]*) showed statistical significance proposing that the variable generated provides useful information for the study. A negative relationship suggests that there is more likely to be greater deprivation in mental health especially where *Prosperity Rank* is lower. The Koenker test was subsequently used to assess if the coefficients are non-normal. When the Koenker test is not statistically significant, as it is not in this study (0.60) for regression analysis, it suggests that the relationship between the explanatory and dependent variables is spatially stationary, and GWR is not an appropriate method which can account for this. This is reflected in Table B:

**TABLE B – Combined Mental Health/ Prosperity Index [MHP] (Independent Variable)**

OLS	Combined Mental Health Indicator
Adjusted R <sup>2</sup>	0.42
The Koenker test	0.60

Table B shows, via Adjusted R<sup>2</sup> analysis, that 42% of deprivation on mental health could be explained by the Prosperity Rank variable. The Prosperity Rank has sub-group variables. This study is going to assess the *Economic Quality* and *Social Capital* indices. The same methodology is utilised in Stage 2, obtaining the following results in Tables C and D using the information from Table B.

**TABLE C – Economic Quality Index v. Prosperity Index**

OLS	Coefficient: Combined Mental Health Indicator
Economic Quality Index	-0.95
Adjusted R <sup>2</sup>	0.33
The Koenker test	1.62

**TABLE D – Social Capital Index v. Prosperity Index**

OLS	Coefficient: Combined Mental Health Indicator
Social Capital Index	-0.92
Adjusted R <sup>2</sup>	0.017
The Koenker test	0.00

Probability for the explanatory variable (*Economic Quality Index*) was statistically significant and this is suggestive that the independent variable (*Table B*) provides useful information. This coefficient for Table C is more negative than that in Table A. Table C therefore suggests that there is a negative relationship between *Economic Quality Index* and the *Combined Mental Health/Prosperity Index* at the local authority level in Northern Ireland. A negative relationship suggests that there is more likely to be more deprivation in mental health where *Economic Quality Index* is lower. While Table D shows a negative relationship, probability for *Social Capital Index* was not statistically significant using the Koenker test suggesting that the independent variable does not provide useful information. Table D also shows that only 1.7% of deprivation on mental health could be explained by *Social Capital Index* for Northern Ireland. The implications of this could reflect a deficiency in spatially mapped social data or an incompatibility of this research method for exploring this theme, requiring additionally qualitative methods to explain its statistical insignificance.

For Stage 3, the analysis adopts four variables to test the relationship between the Combined Mental Health co-efficient from Table B in order to expand the analysis. These variables included in Table E:

**TABLE E – Variables for Stage 3 Analyses [dependent variables]**

Variable	Title
P_Death	Standardised preventable death ratio (excluding Suicides)
P_script	Standardised ratio of people on multiple prescriptions on a regular basis (NI = 100)
R_VRP	Rate of Violence (including sexual offences), robbery and disturbance to public order (per 1,000 population)
R_ASB	Rate of Anti-Social Behaviour Incidents (per 1,000 population)

Across all variables for stage 3, using OLS, probability for *Prosperity Index [MHP]*, *Social Capital and Economic Quality* with these data sets was statistically significant only for Prosperity Index [MHP]. This suggests that the resultant variables do not provide useful information for *Economic Quality and Social Capital* indices relating to *Preventable Death Ratio [P\_Death]*, *Standardised Ratio of People on Multiple Prescriptions on a Regular Basis [P\_Script]*, *Rate of Violence [R\_VRP]* or *Rate of Anti-Social Behaviour Incidents [R\_ASB]*. These results are reflected in **Tables F to I**:

**TABLE F – Prosperity Index v. P\_Death**

OLS	Coefficient: preventable death ratio
Prosperity Index	0.13
Adjusted R <sup>2</sup>	0.51
The Koenker test	2.92

**TABLE G – Prosperity Index v. P\_Script**

OLS	Coefficient: preventable death ratio
Prosperity Index	0.10
Adjusted R <sup>2</sup>	0.45
The Koenker test	0.32

**TABLE H – Prosperity Index v. R\_VRP**

OLS	Coefficient: preventable death ratio
Prosperity Index	0.04
Adjusted R <sup>2</sup>	0.75
The Koenker test	0.05

**TABLE I – Prosperity Index v. R\_ASB**

OLS	Coefficient: preventable death ratio
Prosperity Index	0.05
Adjusted R <sup>2</sup>	0.62
The Koenker test	1.65

**Table F** suggests that there is a positive relationship between Prosperity Index and P\_Death ratio at the local authority level. A positive relationship suggests that there are more likely to be a higher preventable death ratio where prosperity is lower. The Koenker test is used to assess if coefficients are non-normal. When the Koenker test is not statistically significant, as it is not in this study (2.92) for regression analysis, it suggests that relationship between *Prosperity Index* and *Preventable Death Ratio [P\_Death]* is spatially static, and GWR is not an appropriate method which can account for this status.

**Table G** suggests that there is a positive relationship between Prosperity Index and *Standardised Ratio of People on Multiple Prescriptions on a Regular Basis [P\_Script]* at the local authority level. A positive relationship suggests that there is more likely to be greater request for multiple prescriptions on a

regular basis; especially where prosperity index is lower. When the Koenker test is not statistically significant, as it is not in this study (0.32) for regression analysis, it suggests that relationship between Prosperity Index and *Standardised Ratio of People on Multiple Prescriptions on a Regular Basis [P\_Script]* is spatially static, and GWR is not an appropriate method to account for this.

**Table H** suggests that there is a positive relationship between Prosperity Index and *Rate of Violence (including sexual offences), Robbery and Disturbance to Public Disorder (per 1,000 population) [R\_VRP]* at the local authority level. A positive relationship suggests that there are more likely to be a higher rate of violence, robbery and public order where areas are least prosperous. With the Koenker test not being statistically significant this study (0.05), it suggests that relationship between Prosperity Index and rate of violence is spatially static, and GWR is not an appropriate method which can account for this.

**Table I** suggests that there is a positive relationship between *Prosperity Index* and the *Rate of Anti-Social Behaviour Incidents [R\_ASBI]* at the local authority level. A positive relationship suggests that there is more likely to be more anti-social behaviour incidents where prosperity index is lower. The Koenker test is not statistically significant in this study (1.65) for regression analysis and suggests that the relationship between Prosperity Index and *Rate of Anti-Social Behaviour Incidents* is spatially static, and GWR is not an appropriate method which can account for this.

Adjusted R<sup>2</sup> variables for **Tables F, G, H and I** show statistical significance for each variable being explained by the Prosperity Index, revealing that a quantitative platform can be reliably established to inform further research and intervention.

### Discussion and Conclusion:

Overall, the results show potential statistically strong relationships between the dependent variables with the independent Combined Mental Health/ Prosperity Index [MHP] at the macrogeographic scale, with the exception of Social Capital providing an interesting anomaly. It is recorded by the Legatum Institute that Northern Ireland expresses a strong sense of belonging and strong identity and cultural bonds that reflect high ranks. However, their articulation of the criteria remains vague and a strong social capital can be seen as being both a negative and positive due to historical legacy which continues to confront Northern Ireland. Interestingly, Mid Ulster, Antrim and Newtownabbey, and Belfast rank with the top ten for strong social capital in the UK! Almedon (2005:943) identifies Social Capital in two modes, *bonding* [between individuals in groups] and *bridging* [between groups], where health, community and participation play a key role in social capital discourse, but not in promoting participation, integration, cohesion or support (944). There is no acknowledgement of cyber spaces that add a new dimension to the discourse (955). Northern Ireland also has consistently has significantly higher anti-depressant prescribing costs per capita than other UK regions. 2012 prescribing costs per capita amounted to £1.71 compared to Scotland with £0.41 and Wales with £0.26 (Mental Health Foundation, 2016: 6). Complimentary to the statistical output expressed in Table C reflects Northern Ireland possession of the highest proportion of economically inactive adults at 28.4% in the UK, 5% higher than the UK Average. Mental Health is also recorded as the leading cause for work-related absence in Northern Ireland, accounting for 1 in every 3 days lost (31.9% of all days) and for long term leave at 39.1% (Mental Health Foundation, 2009: 20; Friedli, 2009: 18).

With greater availability and access to robust data, a meaningful analysis could be undertaken for Northern Ireland. While quantitative analyses help describe crucial data, qualitative analyses and documentation remains critical to those explorations, especially in regard to mental health experiences and strategic community interventions. This signifies the importance to cultivate co-operation and create stronger bonds between organisations, networking a large stakeholder base into a collective dialogue necessary for the production of adequate mental health data infrastructures. No member of a community is irrelevant to the story of urban progress in Belfast.

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<sup>i</sup> In accordance to the statistics included in this article, the portion of the Northern Irish health budget dedicated to mental health services has decline from 7.72% in 2012/13 to 6% in 2016/17. Where England have a 25% lower incidence of mental health issues, they spend up to 12% of their total healthcare budget on these services. 8% of this stretched budget for Northern Ireland is dedicated to teenage mental health provisions.

<sup>ii</sup> In 2015, 318 suicides were registered, the highest since records began in 1970. Suicide is 3 times higher in more deprived areas than least deprived (Thompson, 2017). The following year 297 people committed suicide (Wallen, 2018).

<sup>iii</sup> 'Their' substitutes 'he or she' from the original text, in light of a wider spectrum of gender identities.

<sup>iv</sup> Mental Capacity Act (NI) 2016

<sup>v</sup> see <http://counsellingallnations.org/> for more information.

<sup>vi</sup> Found within the document under the subheading '6.1.4 Specialist Housing for Older People'