POLICY BRIEFING PAPERS FOR APPLIED SCIENCES TEACHING

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APPLIED SCIENCES TEACHING

- Theory

- Research Methods

- Analysis

- Presentation – essay, lab report, research project, oral presentation

- **Application:** research translated for practice, policy, legislation

NON-ACADEMIC USERS OF SCIENCE

- Audiences of science

- Public

- Media

- Charities / NGOs

- Parliament

- Service users

- Other academics

POLICY BRIEFING PAPERS

- Policy briefing papers are a frequently used medium for conveying research

- Written for a non-academic audience, non-expert, interested parties

- Generally include outlining of given issue, always applied in nature, executive summaries, overview of research *and* recommendations

- Generally a few pages of A4 in length

- **Not** in essay or research report format

evidence BRIEFING

PUBLISHED MAY 2013

Mental health and social relationships

Mental illness has huge cost implications for society and the NHS in terms of lost work days and healthcare. Research into the health effect of social networks and interaction could inform cost-efficient mental health initiatives and policies.

Depression, anxiety and other psychological conditions cost the UK an estimated £77 billion a year. Experts predict that by 2020 depression will be second only to heart disease as an international health problem.

Social isolation has long been known as a key trigger for mental illness, while supportive relationships with friends, family and neighbours are beneficial to the mental health of individuals and the population. Other forms of social interaction such as volunteering are also known to boost wellbeing.

People with supportive friends and family generally have better mental and physical health than those who lack these networks. The same is true for those who take part in churches, clubs and voluntary organisations.

It is only by analysing people's lives over time within a structural, social and cultural context that we can establish whether social relationships really do contribute to better health and increased wellbeing – or whether better health and more energy in the first place enable people to invest in relationships with family and friends.

Researchers at the ESRC-funded International Centre for Lifecourse Studies In Society and Health have examined how social networks have a positive psychological impact.

Attachment theory suggests that people with secure childhoods may be better at relationships of any kind – for instance making friends at school and work, or getting on well with neighbours. This theory can only be tested by looking at information over the span of a person's life, preferably from birth to old age.

Key findings

- Adults with no friends are the worst off psychologically. There are significant health cost implications from the impact of this social isolation.

- The importance of friendships and family networks is not affected by education, employment or marital/cohabiting status.

- For women, regular contact with a large family network doesn't necessarily lead to a higher level of wellbeing. These networks can actually place more obligations and burdens on them. Instead, the research found that women's friendship networks are more important.

- However, men did better when they had a large number of friends or family members. Family networks don't seem to place the same burdens on men as on women.

- Volunteering is not as effective as a social network in protecting the psychological health of working-age people. It does not compensate for the loss of work relationships for people without jobs. However, volunteering was positive for the wellbeing of older people who had retired.

- Friendships appear to be important across many nations. A French study showed that having no social exchange with neighbours has a large negative impact on men's and women's quality of life. This found that people physically isolated from their friends who maintained wellbeing did so by establishing relationships with neighbours instead.

The importance of friendships and family networks is not affected by education, employment or marital/cohabiting status.

Policy relevance and implications

A need exists for more interventions and policies that promote social relationships and psychological wellbeing. The policy actions which politicians should consider include:

- Providing financial support to volunteering and social enterprise groups. This will help older adults to participate more in social activities.

- Ensuring that planning policies include provision for public meeting places and green spaces for all. Public spaces such as parks need to be maintained so they encourage social networks. They need to be perceived as safe places to visit.

- Encouraging the development of neighbourhood projects. Small-scale funding to cover the running costs of community organisations and for hiring meeting places can have a major impact.

- Continuing to fund concessionary transport for senior citizens including bus and rail passes. Free or subsidised travel for older people enables them to maintain their social networks and reduce their risk of social isolation.

- Supporting parents during the early years of child development. Governments must continue to fund schemes such as Sure Start which are aimed at supporting parents of young children.

Small-scale funding to cover the running costs of community organisations and for hiring meeting places can have a major impact.

BRIEF DESCRIPTION OF THE RESEARCH

This briefing is based on *Life Gets Under Your Skin*, which summarises work by the ESRC-funded International Centre for Lifecourse Studies In Society and Health (ICLS). The research on social networks looked at members of the 1958 birth cohort, which studies around 12,000 people from birth to the present day. It compared the mental health of those people who had large networks of friends and family to the health of those with smaller networks.

Paper: *Friends are equally important to men and women, but family matters more for men's wellbeing* http://jech.bmj.com/content/67/2/166.abstract

Publication: *Life gets under your skin* www.ucl.ac.uk/icls/publications/booklets

FURTHER INFORMATION

The views expressed in this evidence briefing are those of the authors and not necessarily those of the ESRC.

BRIEFING PAPER
Number 8105, 9 October 2017

Reconfiguration of NHS services (England)

By Alex Bate

Contents:
1. Recent reconfiguration policy
2. Consultation and scrutiny
3. Trust Special Administration
4. Drivers of service reconfigurations
5. Sustainability and Transformation Partnerships

Public Health England

Local Government Association

BRIEFING PAPER
Number 8151, 25 June 2018

Healthy people, healthy places briefing

Obesity and the environment: increasing physical activity and active travel

Higher education tuition fees in England

AT WHAT COST?

The Human, Economic and Strategic Cost of Australia's Asylum Seeker Policies and the Alternatives

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Early Years

Updated for 2018

Information Pathway for professionals

NHS Health Scotland

Scope and purpose

This Early Years Information Pathway is designed to guide professionals through the national information resources that are available to facilitate discussion and effective communication with parents and carers. The pathway covers pre-birth to preschool, building on the resources outlined in the Public Health Toolkit within the **Universal Health Visiting Pathway in Scotland** distributed by Health Visitors, but in addition highlighting the

Guide to contents

Stage	Page no.
Booking appointment	5–7
22–25 weeks	7–8
32–34 weeks	8

ADVANTAGES OF USING BRIEFING PAPERS IN TEACHING OF APPLIED SCIENCE

- Briefing papers are the tool of conveying science to those who use it most often

- Literacy in this form of science communication is important from a citizen point of view, as well as being highly desirable by potential employers of science graduates

- Developing briefing papers also involves a working with the data that supports deep learning of the core material

A CASE STUDY: PSYCHOLOGY OF FAMILY

- Psychology of Family is a final year option module for undergraduate students on the Psychology course

- Modified Scale-Up Format: 2x2 hour sessions

- First session traditional lecture on given topic (E.g detention of asylum seeker children; children and higher education) and set up of briefing paper working groups. Includes setting up parameters of briefing paper, role allocation, evidence search plan, evidence review plan

- Between session group work on briefing paper

- Second session completion, presentation and review of briefing papers.

EXAMPLES OF STUDENT BRIEFING PAPERS

Children in Higher Education

- Traditional lecture given, with theory, research studies, and application

- Readings on the topic include research articles, chapter, UNICEF reports,

- Students select (hypothetical) audiences for briefing papers

Gifted Children and Starting University Early

Gifted and talented children are usually described in the context of students who have high performance capability and develop significantly beyond their expected age in areas such as intellectual, creative and specific academic subjects.

According to a lot of universities in England such as University of Exter, University of Nottingham and University of Kent all state that universities occasionally admit students who are under the required age which is 18 years old.

They claim that university is a mature, independent adult environment and everyone (including any younger students) will be treated the same, hence why anyone younger is usually rejected.

Some universities such as University of Kent and Nottingham is willing to take students as young as 16 as long as they have written consent from their guardians or parents. Although, University of Kent claims it will continue to review the minimum age requirement in light of recent changes to national legislation. This suggests that changes might be put in place in the near future for gifted children.

Advantages and Benefits for gifted children attending university early:

- Not letting gifted children skip years or start university early, presents a big threat to their mental wellbeing, because they need to work at less than half of their academic potential (Walker 2015)

- A correlational study (Boazman and Sayler, 2011) showed that gifted children, who were allowed to start university early, expressed greater global satisfaction with their lives than age peers. Also the findings state that gifted children reported elevated levels of satisfaction in their achievements, immediate standard of living, personal safety, and future security. Therefore, suggesting that early university entrants are on a path toward personal thriving and living a positive and fulfilled life.

- Research has proven that early university entry has a positive effect on the well-being of gifted children in terms of well-being as a whole, their current achievements in life, their personal safety, and the prospects for their future security, thus acceleration may actually improve social and psychological adjustment.

- Additionally, findings suggest that early university entrants showed higher general self-efficacy

Disadvantages and Problems with gifted children attending university early:

- Gifted children are not always popular or very social even if they are really successful academically. As their intellect is more developmentally advanced than their social and emotional needs.

- They may not be able to work well with group work at university as they think differently and they are so used to working and succeeding independently.

- Another negative factor influencing university acceleration is that gifted children that are separated from their age group or peers, can result in the inability to develop appropriate interpersonal skills and relationships (Noble et al., 2007).

- Some research studies believe that acceleration is harmful for gifted children in terms of social and emotional development as findings show that they may experience under-achievement, inattention, university exclusion social and academic conflicts and depression, due to lack of academic support and appropriate accommodation (Robinson and Noble, 1992).

High Learning Potential

Perseverance +
Understanding +
Support +
Motivation +
Opportunities +
Challenge +
=
Fulfilment of potential

Future suggestions and routes:

- In order to prevent these issues, the minimum age should be 16 for students to join university- this is because if they join in a mature environment too fast they can have psychological issues such as social anxiety and self-esteem issues. This may be because they won't be able to fit into the adult environment and the transition would be too big for them. Although they are academically smart, they don't have the skills to be independent, also students aged 16-17 might find it hard to make friends or socialise with their classmates at university as they may have nothing in common.
- Furthermore, we suggest parents and teachers should encourage gifted students to start university early if they wish so (only 16 and above), as studies show that academic acceleration has a positive influence on social and psychological development
- Moreover, we propose that gifted children should receive some kind of counselling to help them understand what it means to be gifted and learn the persistence needed to develop their talents, as well as helping them expressing their concerns.

*FURTHER INFORMATION:

http://webarchive.nationalarchives.gov.uk/20130401 15171 5/http://www.education.gov.uk/publications/ eOrderingDownload/Getting%20StartedWR.pdf
.

*https://www.goodschoolsguide.co.uk/help-and-advice/choosing-a-school/educating-the-gifted-childhttps://www.nottingham.ac.uk/ academicservices/qualitymanual/admissions/ minimum-age-requirement.aspx

*Boazman, J., & Sayler, M. (2011). Personal well-being of gifted students following participation in an early college-entrance program. Roeper Review: A Journal On Gifted Education, 33(2), 76-85. doi:10.1080/02783193.2011.554153

*Kruszynski, W. P. (2014). Canadian University Early Admission Policies for Gifted and Talented Students (Doctoral dissertation, The University of Western Ontario

By Merieme, Fariah and Sharon

Gifted & Talented

BENEFITS OF USING BRIEFING PAPERS

- Students reported in EvaSys that the format aided there understanding of the content, scaffolded group work in a way that felt realistic for professional settings, and assisted in their essay writing

- Students also used briefing papers in applications for positions post degree, with employers noting the benefit of seeing relevant work such as this.

SUMMARY

- Briefing papers are one of the most common forms of science communication, and as such they are a great resource & a useful communication format for students to become familiar with

- The vast range of users of briefing papers makes them functional as a supplementary resource for a range of courses

- Using briefing papers found to be useful for students content learning of the course, as well as in the job search market.