

Mental Health Practice

The long-term impact of childhood wartime trauma on anxiety in later life: an exploration of the literature --Manuscript Draft--

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Abstract:	<p>The outbreak of World War Two in 1939 heralded a shift in family dynamics in Britain as men were conscripted into the army. Children were raised in fatherless families and lived in communities where women took on male-focused roles. It is too simplistic a view to imagine that life simply "returned to normal" and several researchers have attempted to analyse the impact of war upon the lives of families and of children in particular</p> <p>Bowlby (1939) wrote to the British Medical Journal expressing concerns that separation from parents at a young age (because of evacuation) would have long term consequences for psychological health in later life and WWII has been described as a "unique natural experiment" for the evaluation of the impact of separation of children from their fathers.</p> <p>A number of authors have explored the impact of childhood trauma on mental health and found that such events are implicated in the development of anxiety and depression. This review will explore the research carried out to date and explore how this knowledge may support the work of clinicians in older age mental health services in understanding the life experiences of the people they care for.</p>
Keywords:	Mental health; anxiety; later life; World War Two; childhood trauma
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Introduction

Anxiety disorders have significant impact on the lives of older people (Korte et al 2009). However, the area is under-researched and measuring prevalence is not straightforward, indeed results range from 1.2%-15% (Bryant et al 2013, Bryant et al 2008). Fuentes and Cox (2003) reported a lack of quantitative data relating to anxiety in older people and also raised the issue of potential gender disparities in presentation and their impact on diagnosis rates. The National Institute of Health and Care Excellence (NICE) (2013) estimate that 25% of people in the United Kingdom (UK) will experience an anxiety disorder at some point in their lives, and it is most likely to occur between the ages of 35 and 55 years of age but at any given time up to 10% of people over the age of 65 will be experiencing symptoms of anxiety (Byers et al 2010). Despite some insights into anxiety and the lives of older people, the impact of anxiety is frequently both underestimated and under researched in older populations (Alwahhabi, 2003).

Lenze and Wetherall (2011) identified a number of known factors predisposing to anxiety in later life including female gender, low income and chronic ill-health but suggested that there are gaps in knowledge as to how psychosocial factors interplay with these predisposing factors and influence the development of anxiety over time. It is known that stress in childhood can impact on mental health in later life and it is hypothesised that stress during early development may present long term hypersensitivity to stress-related changes in brain development (Maniam, Antoniadis and Morris 2014).

Paternal separation in childhood has been cited as a significant factor for psychological wellbeing later in life and may be of greater significance for males than females (Otowa et al 2014, Beekman et al 1998, Franz et al 2007). A period of particular significance in paternal separation was World War II (WWII) when 1.5 million British children were evacuated from cities. Older men who are now becoming octogenarians may have experienced significant social and personal upheaval in childhood because of their wartime experiences and it could

be argued that the presence of psychiatric symptoms in later life may be directly linked to these experiences, with the impact of the absence of the father seeming to be of particular significance to males (Franz et al 2007). John Bowlby wrote a letter to the British Medical Journal (BMJ) in 1939, expressing concerns that separation from parents at a young age (primarily because of evacuation) may impact on psychological wellbeing across the life course and at the end of the war Bowley (1948) wrote specifically about its impact on children.

This paper explores the link between childhood experiences of WWII and anxiety across the life course specifically for men. The aim is to establish the need for and potential direction of future research and the potential implications for practice for those working with older adults (particularly men) experiencing anxiety disorders in later life.

Method

A literature search was carried out to identify research relating to paternal absence during WWII and anxiety in later life for men. An initial search using EBSCO Host was conducted which included the following databases - Amed, Medline, PsychINFO, Ageline, Cinahl Plus and Academic Search Complete. A preliminary search using the keywords "anxiety" and "older age" produced 2079 results indicating that there is a considerable body of research and knowledge relating to this subject already available.

A search was undertaken to generate results on the subject of paternal separation and impact on males across the life course using a combination of keywords including "parental deprivation", "father absence", "paternal deprivation", "anxiety", "males", "later life", "older adults", "world war two", and "war". 29 papers were identified and exclusion criteria (not available in English, not addressing male anxiety or not including WWII) applied which led to 14 papers being rejected. A final total of fifteen papers were reviewed in full.

In order to establish that British authors had not been overlooked the search term “United Kingdom” was added but generated no results and a further search using Proquest and the British Nursing Index was carried out using the key words “father Absence”, “anxiety”, “war” and “older males” which again generated no results. Underpinning narrative around the experiences of children in World War Two was collected from a variety of sources including websites and books.

Findings

Figure 1 is a data extraction table and outlines the main themes and findings.

Beekman et al (1998) reported on findings from the Longitudinal Aging Study Amsterdam (LASA) in relation to anxiety disorders in the older Dutch population. A random sample of 3107 older adults in The Netherlands was screened using a two stage screening process to establish prevalence and risk factors for anxiety. They established that anxiety disorders are common amongst older people and that a range of risk factors including the impact of traumatic childhood experiences during WWII exist.

Pesonan et al (2009) described WWII as a “natural experiment” that has facilitated the examination of the impact of separation on the stress response of children later in their lives. Participants were randomly selected from the Helsinki Birth Cohort Study and assessed using a Trier Social Stress Test (Kirschbaum et al 1996), a psychosocial stress test which provokes a powerful response from the Hypothalamus-Pituitary-Adrenal (HPA) Axis) before salivary cortisol and plasma Adrenocorticotrophic hormone (ACTH) levels are measured. Cortisol and ACTH levels are used to measure levels of stress (Hellhamer et al 2009), and subjects who had experienced separation from both parents during WWII had higher levels of both salivary cortisol and plasma ACTH than those who had remained with their parents, thus identifying a potential link between early life separation and stress physiology in later life. On a similar theme, Maniam et al (2014) established that Early Life Stress (ELS) can deregulate the HPA Axis leading to a risk for metabolic disorders; given the impact of stress

on physical health further research may establish whether similar risks exist for psychological disorders.

Foster et al (2003) carried out a retrospective study of 169 people who experienced evacuation as children during WWII comparing them with a group who had been children during the same period but were not evacuated. This study used an adapted questionnaire – the Evacuation Experience Questionnaire with a combination of likert scale and open-ended questions to assess participants' experiences of evacuation. Findings show that the experience of evacuation is associated with reduced psychological wellbeing later in life which may in turn be related to an insecure attachment style developed as a consequence of the experience of evacuation.

Waugh et al (2007) carried out a similar study using the same questionnaire (Evacuation Experience Questionnaire) to explore the experiences of people who had been children during WWII. A sample of evacuees and non-evacuees (self-selected from the Evacuees Reunion Association or adverts in local press) answered questions about their experiences and results indicated that a number of factors, including whether the person had been separated from one or both parents or had experienced abuse were of significance. Both studies indicate that people who were evacuated as children risk reduced psychological wellbeing in later life, indicating that evacuation and separation are both factors which have the potential to impact on mental health across the life course.

Rusby and Tasker (2009) studied 870 adults aged between 62-72 years to establish whether evacuation as a child had impacted on their mental health over time. This study analysed a range of life-course experiences including social class and parental divorce alongside evacuation finding that a number of variables including time away, age at evacuation and quality of nurturing were all influential, with those evacuated at a younger age (4-6) more likely to experience depression in later life. The authors acknowledge limitations to the study; respondents may have had difficulties remembering specifics about parental visits or

judging the quality of the care they had received, but overall the results seem to reinforce the fact that childhood history needs to be explored when working clinically with older people.

Studies reviewed to this point have explored the experiences of all children separated due to WWII, however Carlsmith (1967) focused specifically at the experiences of boys in the USA who had experienced separation from their fathers during WWII. A group of 20 Harvard students whose fathers were absent for between 22 and 36 months were studied in relation to academic achievement in a range of verbal aptitude and mathematical tests. Results indicated that father absence had a “powerful and long-range effect” on development over time, particularly in relation to sex role identity.

Franz et al (2007) and Grundmann (1996) explored the impact of being fatherless on the experience of German children in WWII. Franz et al (2007) studied people born before 1947 who were separated from their fathers during WWII and demonstrated that they experienced a higher rate of psychiatric symptoms than those who were not separated, whilst Grundmann (1996) looked retrospectively at the life experiences of boys whose fathers were absent and argued that the “normalisation” of the experience (primarily because of the numbers of boys affected) potentially mitigated against any negative effects on development.

Otowa (2014), attempted to establish links between parental loss in childhood and psychopathology across the life course by examining the experiences of male twins born between 1940 and 1974 in Canada. 6814 telephone interviews were followed up by 5629 face to face interviews where twins were interviewed separately by clinically trained interviewers. Seven common mental health disorders including depression and generalised anxiety disorder (GAD) were included and parental loss was found to be significant for all disorders. It was found that parental separation (as opposed to loss) was generally significant for the development of GAD but for some disorders, paternal separation seemed to be more significant for males than for females

A link between wartime experiences and psychological trauma in children was established more recently by Hasavonic (2006) who examined the experiences of 186 children in Bosnia and Herzegovina between 1992 and 1995. This study compared the experiences of 93 boys and 93 girls who had either been cared for in a government orphanage, cared for in a children's village, lost a parent but lived with the surviving parent or lived with both parents. The children were assessed using the Children's Posttraumatic Stress Index and Child Depression Index and over half (51.6%) reported symptoms of Post Traumatic Stress Disorder (PTSD). Children who remained with both parents had the lowest prevalence for symptoms whilst children cared for in the foster village had the highest, indicating that separation does indeed seem to have an impact on psychological wellbeing. The loss of a parent impacted on self esteem but the presence of male caregivers seemed to offer some protection against psychological effects which may implicate the absence of a father figure specifically, rather than simply the absence of a parent as being of significance. This work reflects the findings of Carlsmith (1967) and Franz et al (2007) both of whom had established that the absence of the father was of significance for boys growing up through WWII.

Sociological perspectives seem to have significance with societal normalisation having a protective element for boys (Grundmann, 1996). Neale and Flowerdew (2003) look to longitudinal qualitative research as having value in establishing causal links between events across the life course but caution that childhood is not a "unitary enterprise"; the age at which an event occurs along with sociological factors can all influence how a child processes an experience and how that experience influences development over time. Given the ages of the boys concerned in the wartime studies, and their ages now, a gap exists, which, if closed, could establish whether the experiences described have indeed had a lasting impact into older adulthood.

One aspect which a number of studies have identified is a link between wartime evacuation and attachment as first postulated by Bowlby in 1939 (Foster et al 2003, Rusby and Tasker

2008 and Waugh et al 2007). Waugh et al (2007) even went as far as to say that the “impact of WWII on the population of Britain cannot be overestimated”. Evacuation may result in insecure attachment which in turn may impact on psychological wellbeing later in life (Foster et al 2003). There is a developing body of work exploring this phenomenon with a number of authors alluding to long lasting impact from wartime experiences (Beekman et al 2008, Pesonan et al 2009 and Bryant et al 2008). Evacuation and societal changes impacting on gender identity and separation seem to be significant but studies carried out so far have largely been self-selected from groups such as evacuation associations. Given that these people had responded to an advertisement it could be assumed that they were keen to talk about their experience introducing potential bias impacting on the objectivity of the results. Foster et al’s (2003) Evacuation Experiences Questionnaire was developed specifically to test the hypothesis that children who were evacuated would have lower levels of psychological wellbeing and whilst results from this study seem to support that hypothesis, the number of variables identified, including the wartime experience of the parent serve to demonstrate that evacuation was not a “homogenous” event.

Fuentes and Cox (2000), in exploring the validity of self report questionnaires for symptoms of anxiety in older adults found similarities with the experience of symptoms across all age groups but found gender differences within the older cohort. Despite the fact that their study had limitations because samples were small and self-selecting, Fuentes and Cox (2000) suggested that their work is a starting point from which further exploration can be made, whilst Rusby and Tasker (2009) in their study of anxiety across the life course identified the need for those caring for older people with anxiety symptoms to acknowledge historical experiences in their assessments. In relation to assessment, tools which focus only on the current presentation and symptomology may fail to identify historical factors whereas those taking a narrative approach would be better suited to unpicking the complexity of how mental health disorders develop over time, including potential issues linked to childhood wartime experiences.

Discussion

Themes from the literature indicate that although the impact of anxiety upon the lives of older people is not disputed, more needs to be known about how anxiety develops over the life course. Experiences from the author's own clinical practice uncovered a potential link with anxiety and childhood, having met a number of older men verbalising having had little or no contact with their fathers early in life due to WWII and subsequently developing symptoms of anxiety post-retirement.

Given Bowlby's (1939) warning about the potential impact of WWII and Howe's (2011) recent work exploring links between attachment, resilience and psychopathology in later life, the findings of the literature review seem to indicate that these links should not be ignored and may be of significance for those who are experiencing issues with anxiety as older people having experienced separation as children. The timing of some of the studies reviewed means that the people discussed had not yet achieved older age and relatively few authors have followed up this cohort to confirm ongoing impact of childhood separation into later life.

There may be merit in developing further understanding of the processes which impact upon psychopathology across the life course, and in particular in developing potential links between childhood wartime experiences and anxiety disorders in later life. The availability of narrative through a range of cultural media would suggest that people are happy to talk about their childhood experiences of war and commemorative events (such as anniversaries) re-kindle memories from this time. Caution is needed however to avoid the risk of recall bias or placing emphasis on singular events as being of greater significance than others (Foster et al 2003, Neale and Flowerdew 2003).

In conclusion, it would appear that Bowlby's warning issued in 1939 that childhood separation could impact on mental health across the life course could indeed be relevant to older people experiencing anxiety in later life today. Evidence from the literature reinforces the idea that mental health in older people is a complex matter and that a number of factors

interplay over time. The absence of the father for boys during WWII appears to be of significance and further research, particularly within the British population, may establish whether methods for assessing symptoms of anxiety in the here and now should be supported by historical narrative. If childhood factors are indeed precipitating and impacting upon the development of anxiety disorders across the life course a method for collecting this information is required. Further qualitative exploration of the subjective experience of events and the interpretation of that experience could be used to take forward the themes identified by previous research and enable men experiencing anxiety for the first time as older adults to understand how factors from their early lives may have impacted on their mental health, as well as supporting the development of more in-depth assessment strategies for clinicians working in mental health services for older people.

People born in the years preceding the start of WWII are the first cohort to become older adults having lived through this period in history as children and further research exploring their experiences could cement the links already described and inform future assessment and treatment of anxiety disorders in older adults.

References

Alwahhabi, F. 2003. Anxiety symptoms and generalised anxiety disorder in the elderly: a review. *Harvard Review of Psychiatry*. **11**, 4, 180-93.

Beekman, A.T.F., Bremmer, M.A., Deeg, D.J.H., Van Balkom, A.J.L.M., Smit, J.H., De Beurs, E. et al 1998 Anxiety disorders in later life: A report from the longitudinal aging study in Amsterdam. *International Journal of Geriatric Psychiatry*. **13**, 717-726.

Bowlby, J. 1969. *Attachment and Loss: Volume 1*. London: Penguin

Bowley, A. 1948. *The War and the child*. *Modern Child Psychology*. London: Hutchinson's University Library

Bryant, C., Jackson, H. and Ames, D. 2007. The prevalence of anxiety in older adults: Methodological issues and a review of the literature. *Journal of Affective Disorders***109**, 2008, 233-250.

Bryant, C., Mohlman, J., Gum, A., Stanley, M., Beekman, A.T.F., Wetherell, J.L., Thorp, S.R., Flint, A.J. and Lenze, E.J. 2013. Anxiety disorders in older adults: Looking to DSM5 and beyond...*American Journal of Geriatric Psychiatry*.**21**, 9, 872-876 doi: 10.1016/j.acqp.2013.01.011.

Byers, A.L., Yaffe, K., Covinsky, K.E., Friedman, M.B. and Bruce, M.L. 2010. High occurrence of mood and anxiety disorders among older adults. *Arch Gen Psychiatry*.**67**,5,489-496.

Carlsmith, L. 1967. Some Personality Characteristics of Boys Separated from their Fathers during World War II. *Ethos***1**,4,466-477.

Foster, D., Davies, S. and Steele, H. 2003. The evacuation of British children during World War II: a preliminary investigation into the long-term psychological effects. *Aging and Mental Health*.**7**,5, 398-408.

Franz, V.M., Hardt, J. And Brahler, E. 2007. Fatheress: Long term sequelae in German children of World War II. *Zeitschrift fur Psychosomatische Medizin und Psychotherapie*.**53**,2007,216-227.

Fuentes, K. and Cox, B. 2000. Assessment of anxiety in older adults: a community-based survey and comparison with younger adults. *Behaviour Research and Therapy***38**, 2000, 297-309

Grundmann, M. 1996. Historical context of father absence: some consequences for the family formation of German men. *International Journal of Behavioural Development*.**19**, 2, 415-431.

- Hasanovic, M., Sinanovic, O., Selimbsic, Z., Pajevic, I. And Avdibegovic, E. 2006. Psychological Disturbances of War-traumatized Children from Foster and Family Settings in Bosnia and Herzegovina. *Croatian medical Journal* **47**,1, 85-94.
- Hellhammer, D.H., Wust, S. and Kudielka, B.M. 2009. Salivary cortisol as a biomarker in stress research. *Psychoneuroendocrinology*. **34**,2, 163-171.
- Howe, D. 2011. *Attachment across the lifecourse: A brief introduction*. Basingstoke: Palgrave Macmillan
- Kirschbaum, C., Pirke, K-M. and Hellhammer, D.H. 1993. The "Trier Social Stress Test" – A tool for investigating psychological stress responses in a laboratory setting. *Neuropsychobiology*. **1993**, 28, 76-81.
- Korte, J., Bohlmeijer, E.T. and Smit, F. 2009. Prevention of depression and anxiety in later life: design of a randomised controlled trial for the clinical and economic evaluation of a life-review intervention. *BMC Public Health*. **9**,250. DOI:10.1186/1471-2458-9-250.
- Lenze, E.J and Wetherall, J.L. 2011. A lifespan view of anxiety disorders. *Dialogues in Clinical Neuroscience*. **13**, 4, 381-399.
- Maniam, J., Antoniadis, C. And Morris, M.J. 2014. Early life stress, HPA axis adaptation and mechanisms contributing to later health outcomes. *Frontiers in Endocrinology*. Doi: 10.3389/fendo.2014.00073
- Mohlman, J. 2013. Understanding late life anxiety and cognitive processes-We are rapidly gaining momentum: Introduction to the special issue *Journal of Anxiety Disorders*, 05/14/2013.

Neale, B. and Flowerdew, J. 2003. Time, texture and childhood: the contours of qualitative longitudinal research. *International Journal of Social Research Methodology: Theory and Practice*.**6**, 3, 189-199.

National Institute for health and Care Excellence (2011) Generalised anxiety disorder and panic disorder in adults: management. Retrieved from www.nice.org.uk. Last accessed 28/4/16.

Otowa, T., York, T.P., Gardner, C.O., Kendler, K.S. and Hettema, J.M. 2014. The impact of childhood parental loss on risk for mood, anxiety and substance use disorders in a population-based sample of male twins. *Psychiatry Research*.**220**, 1-2, 404-409.

Pesonan, A.K., Raikkonene, K., Heinonen, K., Kajantie, E., Foren, T. And Eriksson, J.G. 2007. Depressive symptoms in adults separated from their parents as children: a natural experiment during World War II. *American Journal of Epidemiology***166**,10, 1126-33.

Rusby, J.S.M. and tasker, F. 2009. Long-term effects of the British evacuation of children during World War 2 on their adult mental health. *Aging and Mental Health***13**, 3, 391-404

Therrien, Z. and Hunsley, J. 2012. Assessment of anxiety in older adults: A systematic review of commonly used measures. *Aging and Mental Health***16**, 1, 1-16.

Waugh, M.J., Robbins, I., Davies, S. and Feigenbaum, J. 2007. The long-term impact of war experiences and evacuation on people who were children during World War Two. *Aging and Mental Health* **11**, 2, 168-174

Figure 1

Reference	Type of study	Findings	Themes
Beekman, A.T.F; Bremmer, M.A; Deeg, D.J.H; Van Balkom, A.J.L.M; Smit, J.H.; De Beurs, E. et al (1998) Anxiety disorders in later life: A report from the longitudinal aging study in Amsterdam. <i>International Journal of Geriatric Psychiatry</i> . 13 pp717-726	10 year longitudinal study of predictors and consequences of changes in wellbeing and autonomy in the older population.	Anxiety disorders common Range of risk factors Prevalence 10.2%	World war two experiences significant risk factor for anxiety in later life. Use of vulnerability stress model
Bryant, C; Jackson, H. and Ames, D. (2007) The prevalence of anxiety in older adults: Methodical issues and a review of the literature. <i>Journal of Affective Disorders</i> 109 (2008) pp233-250	Systematic search of articles published between 1980-2007 discussing anxiety in people over the age of 60	Prevalence in community samples 1.2-15%. GAD most common anxiety disorder in older adults Mixed methodology in study hinders comparison	Nature of anxiety in older people needs more exploration Hampers interventions Needs more research
Carlsmith, L. (1967) Some Personality Characteristics of Boys Separated from their Fathers during World War II. <i>Ethos</i> 1(4) pp466-477	Mixed methods – interviews and aptitude (verbal and mathematical) tests Single female experimenter Direct comparison – male students who had been separated and those who were not separated	Father absent students share fewer interests with adult males Father absent students more self acceptance and ideal self more like mother	Separation from the father impacts on academic achievement and sex role behaviours There are lasting measurable effects from being separated from the father at a young age
Foster, D; Davies, S. and Steele, H. (2003) The evacuation of British children during World War II: a preliminary investigation into the long-term psychological effects. <i>Aging and Mental Health</i> . 7(5) pp398-408	Retrospective non-randomised post test group study	Childhood evacuees show lower levels of psychological wellbeing than non-evacuees. Events linked to childhood attachment are	May be related to attachment Evacuation not a homogenous event and attachment is an important

		significant for wellbeing over time.	factor.
Fuentes, K. and Cox, B. (2000) Assessment of anxiety in older adults: a community-based survey and comparison with younger adults. <i>Behaviour Research and Therapy</i> 38(2000) pp 297-309	Comparison study – symptoms of anxiety amongst young and older adults – to test whether anxiety presents differently for different age groups	Anxiety symptoms as common in older adults as in younger cohorts. Symptoms in older men more specific so could be missed by generalised measurement scales Small sample, no demographic data	Anxiety measures may not be reliable for older male pattern anxiety
Grundmann, M. (1996) Historical context of father absence: some consequences for the family formation of German men. <i>International Journal of Behavioural Development</i> . 19(2) pp415-431	Retrospective study, 2 cohorts, born 1929-31, 1939-41	Paternal absence impacts on family formation and sex type behaviour	Absence normalised because all men conscripted. Social meaning has significance on sex role development
Hasanovic, M; Sinanovic, O; Selimbsic, Z; Pajevic, I. And Avdibegovic, E. (2006) Psychological Disturbances of War-traumatized Children from Foster and Family Settings in Bosnia and Herzegovina. <i>Croatian medical Journal</i> 47(1) pp85-94	Assessment of mental health in war traumatised children.	Loss of parent increased risk for PTSD and depression	Parental absence significant but male caregiver can mediate effects
Lenze, E.J and Wetherall, J.L. (2011) A lifespan view of anxiety disorders. <i>Dialogues in Clinical Neuroscience</i> . 13(4) pp381-399	Comparison of anxiety across the lifecourse including data on prevalence in older age compared with younger age groups.	Neurodevelopmental changes and psychosocial factors significant in development of later life anxiety. Proposes eight strategies for treatment of anxiety in later life.	Gaps in understanding need to be closed to facilitate effective treatment.
Maniam, J; Antoniadis, C. And Morris, M.J. (2014) Early life stress, HPA axis adaptation and mechanisms contributing to later health outcomes. <i>Frontiers in Endocrinology</i> . Doi: 10.3389/fendo.2014.00073	Review of the mechanisms underlying how early life stress leads to maladaptation of the stress	Early life stress can deregulate the HPA axis and increase risk of metabolic disorders	Impact on physical health may be risk factor for mental illness

	response		
<p>Otowa, T.; York, T.P.; Gardner, C.O.; Kendler, K.S. and Hettema, J.M. (2014) The impact of childhood parental loss on risk for mood, anxiety and substance use disorders in a population-based sample of male twins. <i>Psychiatry Research</i>. 220(1-2) pp404-409</p>	<p>Examination of association between parental loss (any loss, death, and separation) during childhood and lifetime risk for seven common psychiatric and substance use disorders in a sample of 2605 male twins. Structural equation modelling used</p>	<p>Early parental separation more significant than parental death.</p>	<p>Need to explore the links between paternal separation and anxiety in later life further</p>
<p>Pesonan, A.K; Raikonen, K; Heinonen, K; Kajantie, E; Foren, T. And Eriksson, J.G. (2007) Depressive symptoms in adults separated from their parents as children: a natural experiment during World War II. <i>American Journal of Epidemiology</i> 166(10) pp1126-33</p>	<p>Participants randomly selected from birth cohort study and invited to participate – 129 separated from father, 68 from both parents, 85 not separated. “Natural experiment” afforded by world war two</p>	<p>Separation from father or both parents affects stress physiology (HPA Axis) over time.</p>	<p>Childhood events have impact across the life course into later life.</p>
<p>Rusby, J.S.M. and Tasker, F. (2009) Long-term effects of the British evacuation of children during World War 2 on their adult mental health. <i>Aging and Mental Health</i> 13(3) pp 391-404</p>	<p>Self-select study – participants identified via advert and invited to take part</p>	<p>Evacuation impacts on mental health in later life. Level of care received as an evacuee is significant</p>	<p>Supports Bowlby’s assertion that evacuation at a young age impacts over time. Need to include childhood events in assessment</p>

<p>Therrien, Z. and Hunsley, J. (2012) Assessment of anxiety in older adults: A systematic review of commonly used measures. <i>Aging and Mental Health</i> 16(1) pp1-16</p>	<p>Systematic review of the literature</p>	<p>91 anxiety measures identified, mostly developed for younger populations</p>	<p>Clinicians need to use age appropriate measurement tools for anxiety in older cohorts.</p>
<p>Franz, V.M; Hardt, J. And Brahler, E. (2007) Fatherless: Long term sequelae in German children of World War II. <i>Zeitschrift fur Psychosomatische Medizin und Psychotherapie</i>.53/2007 pp216-227</p>	<p>Interviews conducted with men, average age 68 about absence of father in WW2 in Germany</p>	<p>Subjects who lost a father had more psychiatric symptoms</p>	<p>Growing up fatherless may have lifelong consequences .</p>
<p>Waugh, M.J; Robbins, I; Davies,S. and Feigenbaum, J. (2007) The long-term impact of war experiences and evacuation on people who were children during World War Two. <i>Aging and Mental Health</i> 11(2) pp168-174</p>	<p>Self-select sample Retrospective cross sectional design Standardised self-report questionnaire</p>	<p>World war two experiences of evacuation still significant 60 years later.</p>	<p>“Likely to be of relevance” to older cohorts – need to explore childhood experiences during assessment.</p>