Body site specificity of self-injurious behaviour in children with severe intellectual disability

Dr. Katharine Dickson

Supervised by:
Professor Eric Emerson
Professor Chris Hatton
Dr. Alan Dowey
Dr. Sandy Toogood

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Abstract

Self-injurious behaviour (SIB) in people with intellectual disability (ID) is an often persistent and sometimes life-threatening problem. Research suggests that body sites targeted by SIB are non-randomly distributed across the body (Symons & Thompson, 1997). Self-injury sites may also overlap with acupuncture analgesia (AA) sites, which has been linked to the opioid hypothesis of SIB. The distribution and location of body sites that are injured may, therefore, be important in understanding and developing interventions for self-injury.

A literature review was conducted to examine research which relates to body-site preference of SIB. This indicated that SIB is likely to be mediated by both neurochemical and behavioural mechanisms, but a lack of integration between the two
models makes interpretation of results problematic. The existing, but limited site-specificity research provides an interesting methodology for research studies in this field.

In this study, school teachers of 30 children with severe ID recorded the distribution of self-injury sites. Standardised measures of adaptive functioning and autistic behaviour enabled investigation of possible covariates of body-site specificity of SIB. Possible relationships between body site and behavioural function were examined via naturalistic behavioural observations.

In line with previous research, significantly more SIB sites overlapped with AA points than expected by chance. Findings indicated that children who self-injured in AA sites were older, more likely to self-hit and had presented with SIB for longer. No statistically significant association was found between behavioural function and body site.

Results of this study tentatively support the opioid and behavioural hypotheses of site-specificity of SIB. This highlights the need for future research that incorporates behavioural and neurochemical methodologies. At a service delivery level, it is hoped that research of this kind could help to further develop individualised assessments and reduce the ‘clinical trial and error’ that is often apparent in interventions for SIB.