1. The following has been prepared by **Helen Hodges**, PhD Student, Hillary Rodham Clinton School of Law, Swansea University to highlight the potential of novel statistical approaches to shape the future direction of risk assessment processes in a devolved youth justice.

2. Context:

Those aged 10-17 who come into conflict with the law in England and Wales are referred to their local youth offending team where the likelihood of reoffending is assessed. The original risk assessment tool, ASSET was devised by The Centre for Criminological Research, University of Oxford for use across the newly formed YOTs in 2000. Supported by an advisory panel consisting of representatives from YOTs, the secure estate, the Department of Health, the Department for Education and Skills, the Drugs Prevention Advisory Service, the magistracy and the police, the Centre designed a tool which they felt incorporated and reflected a wide range of perspectives on the risks and needs of young people who offend.

- 3. ASSET, was in various forms, the standardised risk assessment tool used across the youth justice system until it was replaced by ASSETPlus. This fourth generation tool was designed in response to the growing criticism and to address concerns around ASSET's usefulness and validity in the context of broader developments across services for children and young people, and the justice system itself.
- 4. Although work to develop ASSETPlus began in 2011, its rollout across the YOTs and the secure estate was been beset by problems. It first went operational in October 2015, with the first Welsh YOTs getting ASSETPlus the following month. The roll out of ASSETPlus across the various English and Welsh YOTs was completed at the end of August 2017 having taken almost 2 years.

5. The Challenge for a Devolved Youth Justice:

Whilst predictions of future offending are now an integral part of the criminal justice decision making process with ideas being incorporated from other disciplines, there are a number of key methodological limitations associated with the use of actuarial tools which undermine the assumption that being able to predict future criminality will reduce crime: firstly, the predictive accuracy of risk assessment tools; secondly, their ability to predict individual rather than group behaviour; and thirdly, the problem of predicting different types of offending.

- 6. ASSET in particular was criticised for being a 'blunt tool' with which to 'carve out risk factors and 'at risk' populations' (Case and Haines, 2009: 19), insensitive not just to individual differences but also fundamental differences in terms of the nature and type of offending. As has been identified by reviews such as those by Lord Laming around the overrepresentation of those with care experience in the youth justice system (Prison Reform Trust, 2016) and David Lammy MP around BAME experiences in the criminal justice system (Lammy, 2017), it is my belief that it is not appropriate to have a one size fits all approach. Rather, a more nuanced approach tool is required which has the flexibility to reflect the different offending behaviours of various sub-groups.
- 7. Not only is it important that the risk assessment tool reflects the age, gender and other characteristics of children who have come into conflict with the law, it also needs to reflect the complex realities of real lives. It is widely acknowledged that some young people who have come into contact with the law live very chaotic and complex lives. Thus it is important that situations are identified which can elevate the risk of offending behaviours so that timely

interventions can be put in place to mediate these. As such an understanding is required of the interaction between the different facets of risk over time.

- 8. The shift towards maintaining a 'live' document rather than having as series of snapshots as occurred under ASSET, means that ASSETPlus makes this easier for practitioners to capture and hence monitor a child's progress. However, completion of the new tool has been referred to as 'feeding the beast' with it taking practitioners 3-4 days to complete initial assessments.
- 9. Philosophically, the approach taken in the Welsh youth justice system is distinct to that taken in England, yet the two nations currently share a common risk assessment tool. It is therefore advocated that as part of the creation of a devolved youth justice system, a new risk assessment tool is created which is encapsulates:
 - (1) Wales' Children First, Offender Second approach which articulates the UNCRC and sees custody as a last resort, and
 - (2) can be utilised with individuals within the formal youth justice system and also with those for whom a more diversionary approach more appropriate.

10. A Potential Solution:

If a new risk assessment tool is to be developed which reflects the rights and entitlements enshrined in Welsh policy and practice, then we can ill afford to take 5 years to complete the task.

- 11. The novel statistical techniques explored within my thesis (Hodges, 2018) offer a solution which would enable more to be achieved with less in terms of the number of cases initially required. Given that the numbers entering the formal youth justice system are decreasing, and that those not diverted tend to represent the more complex cases (Youth Justice Board, 2016), this represents a methodological challenge which is beyond the limits of traditional approaches where the requirements for minimum sample sizes impacts upon the statistical power and hence the robustness of the analysis. Employing these techniques means that there is also the opportunity to explore for example, gender differences since the exploration of these has historically been limited by the low number of females within the youth justice system.
- 12. Whereas using traditional techniques require new models to be constructed in order to add additional variables, this is not a requirement when constructing models under a Bayesian framework. As such the techniques demonstrated within my thesis offer a more flexible and efficient methodology with which to develop a new tool one which will continue to 'learn' both about individuals as more information is captured, but also about the circumstances and activities which can increase / mitigate the likelihood of further risky behaviours. In this way the calculation of the probability of further offending can become more precise.
- 13. The flexibility afforded by applying Bayesian approaches means that the tool can continue to evolve in response to new evidence which emerges and as the nature of offending shifts as has been seen in the case of cyber enabled crime. Since the statistical techniques are not limited by sample size, they provide the opportunity to consider factors which are associated with different crime types, including those which occur less frequently eg sexual and serious violent offending.

- 14. Under Bayesian approaches, it is possible to incorporate existing knowledge and to test new theories, thus not constraining any new tool to be limited to the current evidence base. Using data linkage techniques, there is the potential to explore administrative data to enhance what is already known about the aetiology of offending behaviours without having to reassess those who have since exited the youth justice system.
- 15. The approach advocated complements the use of the trauma recovery model which is being used in a number of Welsh YOTs. The information gathered to support this model can be incorporated into the tool to enhance for example understandings of the role of adverse childhood experiences in the context of youth offending behaviours, personal resilience and pathways to desistence.
- 16. My research demonstrates the potential for the effect of system contact, both in terms of being a child with experience of care and also coming into contact with facets of the youth justice system, to be explored. Thus building on the work of the Edinburgh Study (McAra and McVie, 2007) and findings from Lord Laming's review (Prison Reform Trust, 2016).

For additional information please contact:

Helen Hodges

mailto: 807913@swansea.ac.uk

References:

Case, S and Haines, K (2009) *Understanding Youth Offending: Risk Factor Research, Policy and Practice.*Cullompton: Willan Publishing

Hodges (2018) Unpublished Thesis. *Towards A Bayesian Approach in Criminology: A Case Study of Risk Assessment in Youth Justice.* Swansea University

Lammy, D (2017) The Lamming Review: Final Report. London: Gov.UK

McAra and McVie (2007) Youth Justice? The Impact of System Contact on Patterns of Desistence from Offending. *European Journal of Criminology 4(3): 315-345.*

Prison Reform Trust (2016) In Care, Out of Trouble. London: Prison Report Trust

Youth Justice Board. (2016) *Understanding and Improving Reoffending Performance: Annex B - What Does ASSET Data Tell Us About Changes in the Youth Justice Cohort over Time?* Available at: https://yjresourcehub.uk/yjb-effective-practice/youth-justice-kits/item/download/567 5f1df82e058308c67a2ec3cdb35b294e.html (Accessed 4/6/18).