

The Standard of Living of Female Offenders in

Durham, Newcastle and County of York, 1853-88

Kerri Armstrong

PhD Student

Northumbria Law School

Northumbria University

16th January 2026

Abstract

This paper explores the economic, social and environment conditions of two hundred and thirteen sampled women that were convicted by the Sessions and Assizes Courts of Durham, Newcastle and the County of York between, 1853-1888, by providing a regional case study of the quality of living of the women of the working classes in the northeast England. The primary resource used for this paper is parole records taken from the UK Licence of Parole of Female Convicts, 1853-1871, 1883-1887, held at the National Archives under PCOM4 and digitised on ancestry.com. Drawing on height data recorded in each woman's parole file, this paper examines the relationship between height and living standards, documenting the bodies that bore witness to the harsh realities of life. Anthropometric research has instigated the use of different methods for measuring human quality of life other than economic development, such as height, weight or BMI, demonstrating their importance as an indicator of an individual's socio – economic environment. Living environment is intrinsic to health, but data about women's bodies can be hard to find. This paper contributes not only to the field of female standard of living by presenting new evidence from a previously unexamined source, but also to the field of female crime by considering each offender as a whole person, and not just a snapshot of their criminality.

Word Count: 2,496

This paper uses evidence from the parole records of 213 female offenders convicted in Durham, Newcastle and County of York between 1853 and 1888, to explore the relationship between height and living standards. The height data has been collected from each parole record and analysed to provide a biological measure of the standard of living, documenting the bodies that bore witness to the harsh realities of life across the northeast, in the second half of the nineteenth century. This paper is taken from a chapter of my thesis, which examines the height, weight, nutrition and diet, quality of housing and literacy of the sampled convicts, to build a detailed picture of their standard of living. Analysis of welfare is multidimensional, and these indicators complement each other to demonstrate areas of disadvantage present in the sampled women's lives and are read alongside qualitative sources to contextualise the motivations and actions that resulted in their convictions and reveal new information about nineteenth century life.

Different methods for measuring human quality of life and economic development allow for more than simply assessing the income of an individual. These are particularly important when researching groups where conventional income estimates are difficult to calculate, such as women who were not always part of the permanent workforce.¹ Anthropometric research has instigated the use of these various measures, such as height, weight or BMI, demonstrating their importance as an indicator of an individual's socio – economic environment. Anthropometric historians have played a particular part in assessing the relationship between welfare, nutrition, health, housing

¹Examples of this research include: Sara Horrell and Jane Humphries, 'Women's Labour Force Participation and the Transition to the Male-breadwinner Family, 1790 – 1865', *Economic History Review*, Vol. 48, no. 1 (1995), pp. 89 – 117; Joyce Burnett, *Gender, Work and Wages in Industrial Revolution Britain* (Cambridge: Cambridge University Press, 2009); Jane Humphries and Carmen Sarasúa, 'Off the Record: Reconstructing Women's Labour Force Participation in the European Past', *Feminist Economics*, Vol. 18, no.4 (2012), pp. 39 – 67.

and family dynamic inequalities through the study of these body indicators.² An individual's living environment is intrinsic to their health, and an exploration of the sampled women's environment can determine new health data for the three localities, allowing for cross region comparisons of female quality of life and economic dynamics of households.³ This paper is a key contribution not just to the aim of my thesis but to the field of female crime, by considering each woman as a whole person rather than just a snapshot of their criminality, uncovering not just their story but their physicality and body as well.

1. Historiography

Traditionally, the historiography surrounding living standards of the nineteenth century was split into two groups: the optimists, who argue that the Industrial Revolution improved living standards of the lower classes due to a broad rise in real wages, and the pessimists, who contrastingly, argue that living standards of the lower classes decreased due to the negative externalities brought by the Industrial Revolution, such as rising inequality and urbanisation.⁴ These conventional approaches to the study of welfare focus on GDP and on male real wages alone, engaging with an assumption that families

²Important studies include (but are not limited to): Roderick Floud et al., *The Changing Body: Health, Nutrition and Human Development in the Western World Since 1700* (Cambridge: Cambridge University Press, 2011); Sara Horrell and Deborah Oxley, 'Bargaining for Basics? Inferring Decision Making in Nineteenth-Century British Households from Expenditure, Diet, Stature and Death', *European Review of Economic History*, Vol.17, no. 2 (2013), pp. 147–170.

³ For example: David Meredith and Deborah Oxley, 'Blood and Bone: Body Mass, Gender and Health Inequality in Nineteenth Century British Families', *The History of the Family*, Vol. 20, no. 2 (2015), pp. 204-230 provide a cross-region examination between Paisley and London using gendered trends in body mass.

⁴ Optimists include Peter Lindert and Jeffrey Williamson, 'English Workers' Living Standards During the Industrial Revolution: A New Look', *The Economic History Review*, Vol.36, no.1 (1983), p. 24. Further Optimist studies include Joel Mokyr, 'Is There Still Life in the Pessimist Case? Consumption During the Industrial Revolution, 1790 – 1850', *The Journal of Economic History*, Vol. 48, no.1 (1988), pp. 69-92. Pessimist research include: Charles Feinstein, 'Pessimism Perpetuated: Real Wages and the Standard of Living in Britain During and after the Industrial Revolution', *The Journal of Economic History*, Vol. 58, no. 3 (1998), pp. 625 – 658.

were one economic unit. The assumption of a male breadwinner model renders the remaining family members invisible, failing to acknowledge economic value of women and children, familial resource allocation and environmental factors. From the 1990s, notable studies, such as that from Jane Humphries and Sara Horrell, have scrutinized this research, emphasising the need to incorporate the economic contributions of women.⁵ Women's economic activities are harder to capture with data of their remuneration fragmented, but as studies have well documented, women worked.⁶ Women took part in the workplaces of industrialising Britain, through casual work, seasonal work or traditional employment, and they worked as single women, married women and widows. These studies shade the optimistic consensus, showing that although substantial gains in material standards were achieved over the course of industrialisation, there were caveats such as family size and thus the number of working family members, that had previously been underestimated.⁷

To fully comprehend welfare, measures of real wage must be combined with alternative indexes such as that as resource allocation, physical stature, nutrition, and

⁵ Sara Horrell and Jane Humphries, 'Old Questions, New Data and Alternative Perspectives: Families' Living Standards in the Industrial Revolution', *The Journal of Economic History*, Vol. 52, no. 4 (1992), pp. 849-880; Other notable works include Stephen Nicholas and Deborah Oxley, 'The Living Standards of Women During the Industrial Revolution, 1795-1820', *The Economic History Review*, Vol. 46, no. 4 (1993), pp. 723-749; Paul Johnson and Stephen Nicholas, 'Male and Female Living Standards in England and Wales, 1812-1857: Evidence from Criminal Height Records', *Economic History Review*, Vol. 48 (1995), pp. 470-481; Kirsty McNay, Jane Humphries and Stephan Klasen, 'Excess Female Mortality in Nineteenth Century England and Wales', *Social Science History*, Vol 29, no. 4 (2005), pp. 649-681; Sara Horrell, Jane Humphries and Jacob Weisdorf, 'Beyond the Male Breadwinner: Life-Cycle Living Standards of Intact and Disrupted English Working Families, 1260-1850', *The Economic History Review*, Vol. 75, no. 2 (2021), pp. 530 – 560 have all advanced the work by presenting the first study of family living standards across the life cycle, including families of different sizes and structures.

⁶ Jane Humphries and Jacob Weisdorf, 'The Wages of Women in England, 1260-1850', *The Journal of Economic History*, Vol. 75, no. 2 (2015), pp. 405 -447; Joyce Burnett, *Gender, Work and Wages in Industrial Britain: Cambridge Studies in Economic History* (Cambridge: Cambridge University Press, 2008); Jennifer Aston, *Female Entrepreneurship in Nineteenth- Century England: Engagement in the Urban Economy* (London: Palgrave Macmillan, 2016).

⁷ Horrell and Humphries, 'Old Questions, New Data, pp. 849- 880.

environmental factors such as urbanisation. The welfare situation of women was not uniform across the United Kingdom, depending on differing local economic regimes. Significant differences occurred between the north and south of England, with the north becoming the centre for heavy industries including textiles, coal mining, ship building and iron manufacturing, while the south became primarily characterised by finance and trade. Through the examination of body mass of both males and females in Wandsworth (a trade economy near London) and Paisley (a manufacturing economy), Meredith and Oxley question how gender issues within the family were shaped by their relationship with the labour market, demonstrating that differing local economic opportunities impacted the working-class family unit differently.⁸ In Paisley, where women and children both worked in industry, a maternal sacrifice of resources was not occurring as much as it was in Wandsworth, where traditional gender roles were still operating within the home.⁹

Furthermore, a rural and urban divide existed across the nation, with mass migration creating new social structures, with depopulation in rural parishes and overcrowding in cities, and the importance of these environmental factors on a person's quality of living should not be ignored. Roy Bailey, Timothy Hatton and Kris Inwood's study demonstrated the impact of pollution on the heights of men, who completed their army service between 1914 until the early 1920s, concluding that coal smoke reduced adult height by almost half an inch, and that efforts to clean up air pollution has

⁸ Meredith and Oxley, 'Blood and Bone: Body Mass, Gender and Health Inequality', pp. 204-230. Further studies on resource allocation include: Sara Horrell, David Meredith and Deborah Oxley, 'Measuring Misery: Body Mass, Ageing and Gender Inequality in Victorian London', *Explorations in Economic History*, Vol. 46, no. 1 (2009), pp. 93-119.

⁹ Ibid.

accounted for approximately 25 per cent of the gain in average male height between 1890 and the 1980s.¹⁰ Following this, it can be confidently assumed that Newcastle with its heavy industry, would likely have had a detrimental impact on the health of the women and men living there. This assumption cannot, however, be directly applied to the women of Durham and County of York due to the urban – rural divide, illustrating the importance of cross region research and that studies focusing on welfare of one area cannot automatically be applied to another.

Anthropometric data is vital for welfare studies, particularly when investigating groups to compensate for the absence of other data such as real wages. Height is used a biological measure, it is the cumulative net nutritional status of an individual from conception through to maturity and can therefore, capture any details of illness.¹¹ Height data is informative because it reflects health by capturing the impact of environmental conditions such as urbanisation and disease regardless of an individual's real income, for example, Robert Fogel discovered that those in the top level of income distribution in the eighteenth century, still experienced stunted growth due to exposure to higher disease.¹² This study of height is by no means meant as a replacement for conventional standard of living, but the physical stature of the sampled women is an important complement, illuminating the extent to which their socio-environment impacted them biologically.

¹⁰ Roy E. Bailey, Timothy J. Hatton and Kris Inwood, 'Atmospheric Pollution, Health and height in Late Nineteenth Century Britain', *The Journal of Economic History*, Vol. 78, no. 4 (2018), pp. 1210-1247.

¹¹ Horrell, Meredith and Oxley, 'Measuring Misery', p. 96.

¹² Floud et al, *The Changing Body*); Jane Humphries and Timothy Leunig, 'Was Dick Whittington Taller Than those he Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth Century London?', *Explorations in Economic History*, Vol. 46. (no.1), pp. 120-131; Robert Fogel, 'Economic Growth, Population Theory and Physiology: The Bearing of Long -Term Processes on the Making of Economic Policy', *The American Economic Review*, Vol. 84, no. 3 (1994), pp. 369-395.

2. Methodology and Sources

The nineteenth century was a time period that has been closely associated with the wider development of an ‘information state’ in not just England, but across the entire British Empire, devoted to the collection and manipulation of personal data about its subjects.¹³ The implementation of the Habitual Offenders Act 1869 saw record keeping of criminals undergo a fundamental transformation; from a situation where personal characteristics of the criminal did not seem to matter, to a situation where every minor detail of personal information and behaviour was being documented, now with a clear desire to understand, and more importantly, control the criminal.¹⁴ For the state, the collection of data provided a new form of power, in which the prison acts as a means to control and ‘normalise’ individuals.¹⁵ Information collected by officials was constantly changing and growing throughout the second half of the nineteenth century, meaning the information available of the sampled 213 women is inconsistent, with some parole files having as many as thirty pages of information documented, whilst others only having up to three pages.

Data gathered from Her Majesty’s Prisons is at the centre of this study, analysing the parole records of the sampled women who had been incarcerated at the convict prisons between 1853 and 1888. This paper relied on information collected from the

¹³ Robert Shoemaker and Richard Ward, ‘Understanding the Criminal: Record – Keeping, Statistics and the Early History of Criminology in England’, *The British Journal of Criminology*, Vol. 57, no. 6 (2017), p. 1443.

¹⁴ 1869 Habitual Offenders Act was enacted to provide supervision and control of repeat offenders and included the legal creation of a repeat offender register. This act was replaced by the 1871 Prevention of Crime Act to further facilitate the identification of criminals and promote harsher punishments for repeat offenders.

¹⁵ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (Pantheon Books, London, 1977). This theory was further developed by the likes of Pat O’Malley, ‘Governmental Criminology’, in Eoin McLaughlin and T. Newburn (eds.), *The Sage Handbook of Criminological Theory*, (Sage Publishers: London, 2010), p. 319 – 336.

‘medical history’ form found within an individual’s parole file, and from the sample, there is access to 160 women’s height data. Initially completed by the Prison Medical Officer (PMO) when the women were first admitted to a prison, the same ‘medical history’ form would stay with the prisoner throughout their prison journey, and the PMO at each subsequent prison would update that form. If the prisoner, after their release, reoffended and was incarcerated again, each PMO would either continue filling this form, or a new ‘medical history form’ would be filled and inserted into their parole file alongside their previous form. Information collected included age, height, incoming and outgoing weight, general health, physical condition, body marks and wounds or injuries, alongside any additional health notes made in the margins by the PMO or clerks.

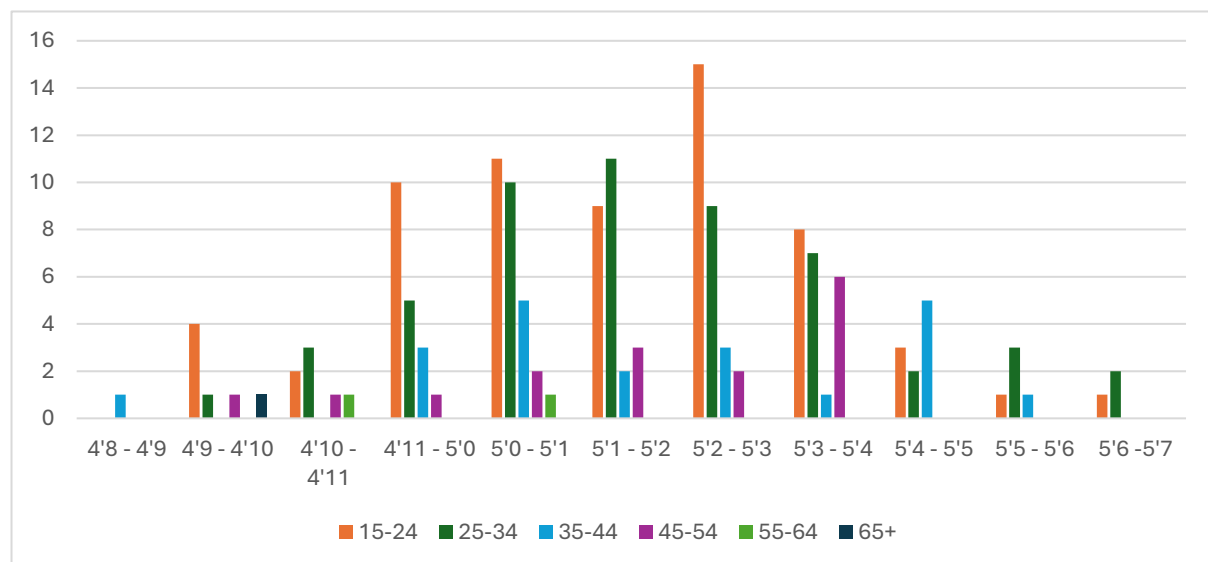
This relatively small but extremely rich dataset illustrates the value of investigating imprisoned women. The use of a collaborative framework of social, cultural and economic perspectives, provides evidence of the complexity of living standards of a group of women who would otherwise be almost impossible to gather any meaningful data on. This paper provides a space to show not only the local stories of these women, but the part they played in their local infrastructure, whether it be for the better or worse. The examination of this dataset generates important new information about the poor and working classes, law and order and the State’s priorities regarding the ‘criminal class’ of these three localities.¹⁶

¹⁶ Rosemary Auchmuty and Erika Rackley, ‘Feminist Legal Biography: A Model for All Legal Stories’, *The Journal of Legal History*, Vol. 42, no. 2 (2020), p.202.

3. Data and Results

In the parole records, heights have been measured in feet and inches, measured to the half inch, and this is consistent with every local gaol and convict prison across the sample. Following the assumption that prisoners entering Wandsworth House of Correction were measured naked and unshod, made by Horrell, Meredith and Oxley in their study of heights of London prisoners, no adjustment has been made for shoes or clothes when calculating height in this study.¹⁷

Figure 1 Overall Distribution of Age and Height of the Sampled Convict Women



As height is a measure of net nutrition accumulated from conception to maturity, cohorts have been grouped appropriately into age groups, and although heights are reasonably varied amongst the sample, these results illustrate more favourably to the younger generations. Looking at the tallest cohorts, most women were aged between 25 to 34, and using the poverty lifecycle model created by Seebohm Rowntree, this cohort

¹⁷ Horrell, Meredith and Oxley, 'Measuring Misery'.

coincides with the ‘marriage and child raising’ stage, it also meant single women moving from stable employment to more flexible and casual work once married.¹⁸ Following the data series proposed by Humphries, Horrell and Weisdorf, who document family living standards using the household’s net surplus at each life cycle stage, that is the consumption from potential of earnings, it is assumed that by the 1850s a young working class couple could potentially purchase up to two ‘respectability baskets’, meaning that a ‘respectable’ living standard was experienced.¹⁹ This rationale is consistent with this cohort, 57 per cent of them were married, and 40 per cent were recorded to have an occupation, all of which increased their economic value and subsequently provided the opportunity to reach peak stature. Interestingly, the cohort of women aged between 15 to 24, averaged a height of 61 inches, which is one and a half inches taller than women of a similar age incarcerated at Wandsworth prison in London.²⁰ This could be attributed to a geographical and environmental variance worthy of further study.

For those women from the older generations, there were several events from the first half of the nineteenth century that would have impacted physical growth and cannot be ignored. Firstly, the implementation of the Corn Laws in 1815, followed by the ‘hungry forties’ exacerbated by industrial stagnation and poor harvests all impacted the real wages and food availability for the working classes. Secondly, the inevitable

¹⁸ Seebohm Rowntree, *Poverty: A Study of Town Life* (London: Macmillan, 1901); Humphries and Weisdorf, ‘The Wages of Women in England’ 1260-1850’.

¹⁹ Sara Horrell, Jane Humphries and Jacob Weisdorf, ‘Beyond the Male Breadwinner: Life Cycle Living Standards of Intact and Disrupted English Working Families, 1260-1850’, *The Economic History Review*, Vol 75, no. 2 (2022), pp. 530-560; ‘Respectability baskets’ is a historical template introduced by Robert Allen to refer to a specific set of goods that a working – class family needs to consumer to appear respectable to neighbours and society. Please see: Robert Allen, ‘The Great Divergence in European Wages and Prices from the Middle Ages to the First World War’, *Explorations in Economic History*, Vol. 38, (2001), pp. 411- 447; Jane Humphries, ‘Respectable Standards of Living: The Alternative Lens of Maintenance Costs, Britain 1270 – 1860’, *The Economic History Review*, Vol. 78, no. 2 (2024), pp. 613 – 645.

²⁰ Horrell, Meredith and Oxley, ‘Measuring Misery’, p107-108.

epidemiological consequences of urbanisation and industrialisation. The redistribution of the population from rural to urban environments generated a rapid circulation of infectious diseases, for example the cholera epidemic between 1831 and 1832.²¹ Gastro related illnesses could range from cholera to stomach troubles that resulted from everyday food hygiene, all of which account for stunting growth during a child's development, as it stops food absorption and prevents the body from adequate nutrition.²² Despite there being no confirmation in the parole records whether the sampled women had had cholera or similar gastro illnesses as a child, it is documented that the north east experienced some of the highest mortality rates in the country during these outbreaks, with Gateshead having a reported 115 cases in just one day (December 1831), this would make it a likely possibility that the older generations experienced some form of disease as a child, impacting their body's growth capabilities.²³

Measuring at 4 foot and 8.5 inches or 57 inches, Mary Smith was the smallest recorded woman of the cohort.²⁴ In 1866, Smith, a known hawker, was arrested for stealing fifty-two yards of silk in West Yorkshire. In modern society, Smith's short stature would see her official diagnosed with restricted growth (dwarfism), a condition defined as an adult having a height of less than 4 foot 10 inches.²⁵ There is relatively little data provided in her parole file to provide a definite diagnosis, however, her physical description has been described as having a 'large and wrinkled forehead', and while

²¹ Romola Davenport, Max Satchell and Leigh Shaw-Taylor, 'Cholera as a 'Sanitary Test' of British Cities, 1831 – 1866', *The History of the Family: An International Quarterly*, Vol. 24, no. 2 (2018), pp. 404 -438.

²² Pamela Sharpe, 'Explaining the Short Stature of the Poor: Chronic Childhood Disease and Growth in Nineteenth Century England', *The Economic History Review*, Vol. 65, no. 4 (2012), pp. 1482 – 1483.

²³ 'Cholera in Sunderland', UK Parliament, accessed 15/01/2026.

²⁴ Mary Smith, Licence Number 3665, 26th August 1870.

²⁵ 'Restricted Growth', NHS, <https://www.nhs.uk/conditions/restricted-growth/>, 12 March 2025, accessed 08/01/2026.

frontal bossing and skin creases are a distinctive feature of achondroplasia, this diagnosis can only be surmised.²⁶ Prisoners with physical disabilities in the Victorian prison system remains a largely under-researched area, often hampered by a limitation within the historical records, illustrating the importance of researching height data combined with microhistories. Helen Johnston and Joanne Turner explain that in a time without photographs, the physical description provided in the prison records, is where any pre-existing disabilities would be listed and it was only recorded, when necessary, not to indicate any special treatment of the prisoner.²⁷

4. Conclusion

This paper uses height data found in the parole records of 213 women convicted by the Sessions and Assizes Courts for Durham, Newcastle and County of York between 1853 and 1888, as a biological measure of welfare and to provide new and important information on the bodies of the female offenders across the northeast. This paper has shown that the tallest statures favour those of the younger generations. The older women had grown up in a period of economic depression, with frequent disease outbreaks contributing to a stunt of growth during their developmental years. This paper has also demonstrated the use of the parole records in uncovering information on women's bodies that would otherwise remain lost, such as that of disability. Nevertheless, the study of welfare is multidimensional, and collaboration with different welfare indicators, such as weight and literacy rates are necessary to understand the full extent of welfare for these women. Only then can we grasp a fuller understanding of the bodies that bore witness to

²⁶ 'Achondroplasia', National Library of Medicine, medlineplus.gov. May 29, 2023, accessed 08/01/2026.

²⁷ Helen Johnston and Joanne Turner, 'Disability and the Victorian Prison: Experiencing Penal Servitude', *Prison Service Journal*, no. 232 (2017), p.16.

the harsh realities of life across the northeast, in the second half of the nineteenth century.

References

- Anon, 'Achondroplasia', *National Library of Medicine*, 29 May 2023, [<https://medlineplus.gov/genetics/condition/achondroplasia>], accessed 08/01/2026.
- Anon, 'Restricted Growth', *NHS*, 12 March 2025, [<https://www.nhs.uk/conditions/restricted-growth/>] accessed 08/01/2026.
- Aston, Jennifer, *Female Entrepreneurship in Nineteenth-Century England: Engagement in the Urban Economy* (London: Palgrave Macmillan, 2016).
- Auchmuty, Rosemary, and Erika Rackley, 'Feminist Legal Biography: A Model for All Legal Stories', *The Journal of Legal History*, Vol. 42, no. 2 (2020), pp. 186 - 211.
- Bailey, Roy E., Timothy J. Hatton and Kris Inwood, 'Atmospheric Pollution, Health and height in Late Nineteenth Century Britain', *The Journal of Economic History*, Vol. 78, no. 4 (2018), pp. 1210-1247.
- Burnett, Joyce, *Gender, Work and Wages in Industrial Britain: Cambridge Studies in Economic History* (Cambridge: Cambridge University Press, 2008).
- Davenport, Romola, Max Satchell and Leigh Shaw-Taylor, 'Cholera as a 'Sanitary Test' of British Cities, 1831 – 1866', *The History of the Family: An International Quarterly*, Vol. 24, no. 2 (2018), pp. 404 -438.
- Feinstein, Charles, 'Pessimism Perpetuated: Real Wages and the Standard of Living in Britain During and after the Industrial Revolution', *The Journal of Economic History*, Vol. 58, no. 3 (1998), pp. 625 – 658.
- Floud, Roderick, Robert Fogel, Bernard Harris and Sok Chul Hong, *The Changing Body: Health, Nutrition and Human Development in the Western World Since 1700* (Cambridge: Cambridge University Press, 2011).
- Fogel, Robert, 'Economic Growth, Population Theory and Physiology: The Bearing of Long-Term Processes on the Making of Economic Policy', *The American Economic Review*, Vol. 84, no. 3 (1994), pp. 369-395.
- Foucault, Michel, *Discipline and Punish: The Birth of the Prison* (Pantheon Books, London, 1977).
- Horrell, Sara and Jane Humphries, 'Old Questions, New Data and Alternative Perspectives: Families' Living Standards in the Industrial Revolution', *The Journal of Economic History*, Vol. 52, no. 4 (1992), pp. 849-880.

Horrell, Sara and Deborah Oxley, (2013) 'Bargaining for Basics? Inferring Decision Making in Nineteenth-Century British Households from Expenditure, Diet, Stature and Death', *European Review of Economic History*, Vol.17, no. 2 (2013), pp. 147–170.

Horrell, Sara and Jane Humphries, 'Women's Labour Force Participation and the Transition to the Male-breadwinner Family, 1790 – 1865', *Economic History Review*, Vol. 48, no. 1 (1995), pp. 89 – 117.

Horrell, Sara, David Meredith and Deborah Oxley, 'Measuring Misery: Body Mass, Ageing and Gender Inequality in Victorian London', *Explorations in Economic History*, Vol. 46, no. 1 (2009), pp. 93-119.

Horrell, Sara, Jane Humphries and Jacob Weisdorf, 'Beyond the Male Breadwinner: Life-Cycle Living Standards of Intact and Disrupted English Working Families, 1260-1850', *The Economic History Review*, Vol. 75, no. 2 (2021), pp. 530 – 560.

Humphries, Jane and Carmen Sarasúa, 'Off the Record: Reconstructing Women's Labour Force Participation in the European Past', *Feminist Economics*, Vol. 18, no.4 (2012), pp. 39 – 67.

Humphries, Jane and Jacob Weisdorf, 'The Wages of Women in England, 1260-1850', *The Journal of Economic History*, Vol. 75, no. 2 (2015), pp. 405 -447.

Humphries, Jane and Timothy Leunig, 'Was Dick Whittington Taller Than Those He Left Behind? Anthropometric Measures, Migration and the Quality of Life in Early Nineteenth Century London?', *Explorations in Economic History*, Vol. 46. (no.1), pp. 120-131.

Mokyr, Joel, 'Is There Still Life in the Pessimist Case? Consumption During the Industrial Revolution, 1790 – 1850', *The Journal of Economic History*, Vol. 48, no.1 (1988), pp. 69-92.

Johnson, Paul and Stephen Nicholas, 'Male and Female Living Standards in England and Wales, 1812-1857: Evidence from Criminal Height Records', *Economic History Review*, Vol. 48 (1995), pp.470-481.

Johnston, Helen, and Joanne Turner, 'Disability and the Victorian Prison: Experiencing Penal Servitude', *Prison Service Journal*, no. 232 (2017), pp.11 -16.

Lindert, Peter and Jeffrey Williamson, 'English Workers' Living Standards During the Industrial Revolution: A New Look', *The Economic History Review*, Vol.36, no.1 (1983), pp. 1- 25.

McNay, Kirsty, Jane Humphries and Stephan Klasen, 'Excess Female Mortality in Nineteenth Century England and Wales', *Social Science History*, Vol 29, no. 4 (2005), pp. 649-681.

Meredith, David and Deborah Oxley, 'Blood and Bone: Body Mass, Gender and Health Inequality in Nineteenth Century British Families', *The History of the Family*, Vol. 20, no. 2 (2015), pp. 204-230.

Nicholas, Stephen and Deborah Oxley, 'The Living Standards of Women During the Industrial Revolution, 1795-1820', *The Economic History Review*, Vol.46, no. 4 (1993), pp.723-749.

O'Malley, Pat, 'Governmental Criminology', in Eoin McLaughlin and T. Newburn (eds.), *The Sage Handbook of Criminological Theory*, (Sage Publishers: London, 2010), pp. 319 – 336.

Rowntree, Seebohm, *Poverty: A Study of Town Life* (London: Macmillan, 1901).

Sharpe, Pamela, 'Explaining the Short Stature of the Poor: Chronic Childhood Disease and Growth in Nineteenth Century England', *The Economic History Review*, Vol. 65, no. 4 (2012), pp. 1475-1494.

Shoemaker, Robert, and Richard Ward, 'Understanding the Criminal: Record – Keeping, Statistics and the Early History of Criminology in England', *The British Journal of Criminology*, Vol. 57, no. 6 (2017), pp. 1442 – 1461.