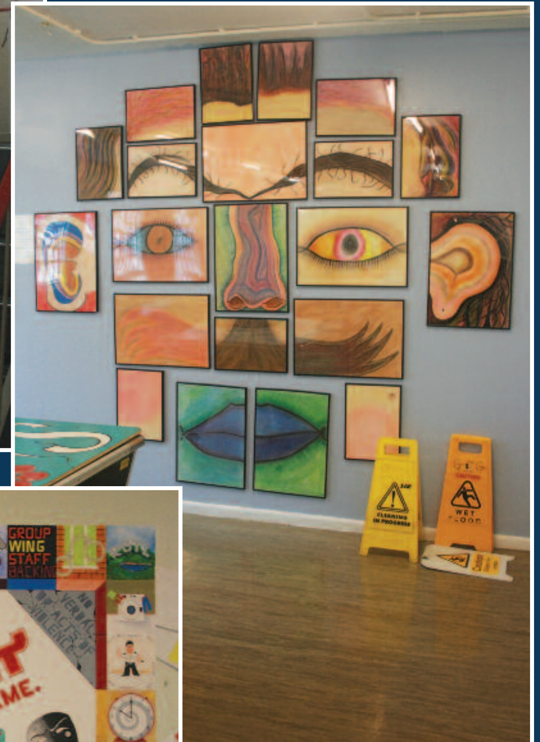
PRISON SERVICE
JOURNAL

May 2014 No 213



Breaking the Cycle

Responsibility without Blame:

Therapy, Philosophy, Law

***Dr Hanna Pickard**, Wellcome Trust Biomedical Ethics Clinical Research Fellow, University of Oxford.*

I offer a philosophical account of the meaning of responsibility and the meaning of blame which shows how it is possible to distinguish them, in theory and in practice. Drawing on clinical interventions targeting problematic behaviour in service users with personality disorder, I explain why it is essential to *maintain responsibility* and *accountability* in order to enable learning and change, while it is essential to *avoid blame*. I suggest that the clinical stance of Responsibility without Blame be adopted within the criminal justice system, as a framework for addressing offending behaviour in a way which serves not only justice, but also reform and rehabilitation, by attending to the mental health of offenders while yet holding them responsible and to account.

Introduction:
The Paradox of Responsibility without Blame

My first experience as a clinician was in a Therapeutic Community for service users with predominantly Cluster B personality disorder and related complex needs. Such service users are notoriously difficult to treat, and, within mental health services, often stigmatized as the service users 'no one likes'. Personality disorder [PD] is characterised by extreme, overwhelming emotions, maladaptive beliefs, and, especially for service users with strong borderline and anti-social tendencies, 'problematic' behaviour, such as self-harm, aggression and violence towards others, alcohol and drug misuse, and severe difficulties in maintaining positive interpersonal relationships and fulfilling social roles and duties. Some of this behaviour is straightforwardly criminal, but much of it, even when not criminal, is harmful and damaging — to service users themselves, to their children, families, and friends, and to others who come into contact with service users through any variety of ways. No wonder, then, that in his landmark study of High Security Hospitals in the UK, Len Bowers suggests the following explanation of staff attitudes to service users with personality disorder:

> *The generally hopeless, pessimistic attitudes of carers can be seen to originate in the difficult behaviours of ... PD patients. They bully, con, capitalize, divide, condition, and corrupt those around them. They make complaints over inconsequential or non-existent issues in order to manipulate staff. They can be seriously violent over unpredictable and objectively trivial events, or may harm and disfigure themselves in ways that have an intense emotional impact on staff. If this were not enough, they also behave in the same way towards each other, provoking serious problems that the staff have to manage and contain. On top of that, the staff have to come to terms with the committed offences that have brought patients into hospital — offences that can be so grievous as to elicit feelings of disgust and abhorrence.*[1]

Although couched in somewhat judgemental language, this description of the problematic behaviour of service users with PD is nonetheless accurate in many ways, and likely to feel familiar not only to staff who work in mental health services, but equally to those who work in prisons and probation services: 64 per cent of male and 50 per cent of female offenders have a personality disorder.[2] But in the Therapeutic Community where I worked, the staff attitude towards this behaviour was not as Bowers describes. Rather, the staff were very clear about what their attitude as clinicians should be, and usually, although not invariably, succeeded in achieving it. Service users were responsible and accountable for problematic behaviour, but an attitude of respect, concern, and compassion prevailed, and they were not blamed. As a novice clinician, this stance of Responsibility without Blame struck me forcefully. It is very different from the stance we, as individuals and as a society, ordinarily adopt towards people whom we believe do harm or behave badly. Problematic behaviour of the sort described tends to evoke blame, no doubt alongside related attitudes such as anger and resentment, dislike and rejection, and 'disgust and abhorrence', to use Bowers' phrase. And, if I am honest, I initially had no idea how this clinical stance of Responsibility without Blame was so much as possible to achieve: when a service user, who had personality disorder but was not psychotic and

1. Bowers, L. (2002) *Dangerous and Severe Personality Disorder: Response and Role of the Psychiatric Team*. London: Routledge, p 65.
2. National Offender Management Strategy (2011) *Working with Personality Disordered Offenders: A Practitioner's Guide*. London: NOMS.

so knew what they were doing, was angry and threatening towards me for no reason, and made me feel angry and scared, how was I to hold them responsible and accountable for this behaviour without blaming them for it? I could make sense of the idea that, despite appearances, they might not be responsible because their personality disorder excused them, and hence they were not to be blamed. And I could make sense of the idea that, despite their personality disorder, they were responsible, and hence to be blamed. But the combination of responsibility but not blame for harm or wrongdoing struck me as a paradox, in theory and in practice.

This article explains why there is no paradox: we can hold people responsible and accountable for harm or wrongdoing, without blaming them for it. It does so by offering a philosophical account of the meaning of responsibility and the meaning of blame that clearly distinguishes each idea from the other. But it also argues that, in so far as it is possible, we should aim to adopt the clinical stance of Responsibility without Blame within the criminal justice system, including courts, prisons, and probation services. For doing so may contribute to addressing offending behaviour in a way which serves not only justice, but also reform and rehabilitation, by attending to the mental health needs and problematic behaviour of offenders while yet holding them responsible and to account. Hence the article has three parts, as reflected in its title: therapy, philosophy, law.

Although medication is sometimes advisable . . . there is no miracle cure available: service users must 'take responsibility' for their behaviour, as we naturally say, and work to change.

1. Therapy

Why is the stance of Responsibility without Blame important to engage and effectively treat service users with personality disorder? The answer to this question has two components. The first pertains to why responsibility is essential to maintain, the second to why blame is essential to avoid.

Responsibility and Agency for Change

Quite simply, responsibility is essential to maintain because improvement in mental health and wellbeing requires service users with PD to stop behaving in ways that are so harmful and damaging, to them and to others. Although medication is sometimes advisable,[3] for instance, to help dampen impulsivity or anxiety, there is no miracle cure available: service users must 'take responsibility' for their behaviour, as we naturally say, and work to change.

Problematic behaviour is often a habitual if ineffective way of coping with psychological distress, and so part of a cycle of dysfunction: in the short-term it may seem to service users like the only way of dealing with underlying, negative emotions and beliefs, but in the long-term it makes things worse. So, for life to get better, service users must stop behaving in these ways in face of these emotions and beliefs, and learn to do things differently. This, of course, is not easy. Personality disorder is associated with extreme early psychosocial adversity: dysfunctional families, where there is breakdown, death, institutional care, and parental psychopathology; traumatic childhood experiences, with high levels of sexual, emotional, and physical abuse or neglect; and social stressors, such as war, poverty, and migration.[4] Negative emotions and beliefs may have their source in such childhood experiences, and alternative, healthy ways of coping with distress may not have been modelled by carers, and so were never available to be learned. As a result, both inner and outer resources may be extremely meagre: service users may lack any genuine self-esteem or self-belief, and their socio-economic status and other external factors that genuinely limit opportunities may understandably impede hope for a better future and with it motivation to change.

But, despite the importance of recognizing such hardship, the point remains that service users cannot even begin to resolve to change and embark on the process of learning to do things differently if they and those who work with them do not believe it is *in their power to do so.* For, it is only possible to deliberately change those patterns of behaviour over which we have choice and at least a degree of control — however difficult it may be to exercise our power. This is why *responsibility* is essential to engagement and effective

3. National Institute of Mental Health in England (NIMH(E)) (2002) *Personality Disorder: No Longer a Diagnosis of Exclusion*. London: NIMH(E).
4. Paris, J. (2001) 'Psychosocial adversity', in W. J. Livesley (ed.) *Handbook of personality disorders*, New York: Guildford Press, p231 – 241.

treatment of service users with personality disorder: the clinical task must be, in part, to motivate, encourage, and support service users in this project of doing things differently, by helping them to develop *their sense of agency*. This can include, for instance, encouraging them to see they have or can make different choices despite the pull of past habits, supporting them to learn new skills and ways of coping with underlying emotions and beliefs to improve their capacity for control, and helping them to better understand and recognize the feelings and motivations driving them, so they can stop and think instead of acting on impulse.

So, when service users behave in ways that are harmful and damaging, to them or to others, clinicians must not shy away from seeing service users as in effect *responsible agents* and asking them to take responsibility for their actions. Indeed, this commitment is a presumption of most forms of psychological interventions used to treat personality disorder, including cognitive-behavioural therapy, motivational interviewing, stop-and-think training, emotional intelligence, mentalization-based therapy, and Therapeutic Communities. These interventions are united in viewing service users as capable of choice and a degree of control over their behaviour, although the extent to which this presumption is explicitly articulated to service users themselves varies. For instance, in motivational interviewing, the clinician adopts a non-challenging stance, simply expressing empathy and encouraging service users to see the unwanted consequences of their behaviour, as a means to increasing motivation to change. In contrast, the language of agency and responsibility permeates the culture of Therapeutic Communities: the Community is explicit that members are expected to see themselves and others in this light.

The Rescue-Blame Trap

On the other hand, *blame* for problematic behaviour is essential to avoid. We all have some experience ourselves of what it feels like when we do something wrong and then get blamed for it. In the case of service users with personality disorder, most of whom are vulnerable and marginalized with limited inner and outer resources, blame may trigger feelings of rejection, anger, shame, and indeed self-hatred and self-blame, which bring heightened risk of disengagement from treatment, distrust and breach of the therapeutic alliance, hopelessness, desperation, relapse, and potentially even self-harm or attempts at suicide. For this reason, it is essential when working with service users with personality disorder that blame is avoided, and respect, concern, and compassion is maintained.

For this reason, it is essential when working with service users with personality disorder that blame is avoided, and respect, concern, and compassion is maintained.

Clinicians must therefore adopt the stance of *Responsibility without Blame*: they must hold service users responsible and accountable for harm or wrongdoing, without blaming them for it. But without a clear articulation of what this means, they may find themselves caught in what I call 'The Rescue-Blame Trap'. Conscious of the importance of avoiding blame given the potential repercussions and their duty of care, clinicians may (consciously or unconsciously) recoil from holding service users responsible and accountable for their behaviour, as a way of ensuring they do not end up blaming them. Rather than acknowledge the capacity for choice and control, they may 'rescue' service users by maintaining that they 'couldn't help it' or that their behaviour was caused by their disorder and hence not under their control. But if clinicians take this attitude, and deny service user agency and excuse them from responsibility, then they cannot work effectively to motivate, encourage, and support service users in the project of doing things differently. For, again, people cannot change what they are powerless to change — it makes no sense to ask this of them. Hence the possibility of getting trapped between the extremes of Rescue and Blame: rescuing service users removes the risk of blame but so too the possibility of changing problematic behaviour; while holding service users responsible and accountable secures the possibility of changing problematic behaviour but risks leading to blame.

The Rescue-Blame Trap often leads to splits within mental health staff teams, with some staff adopting a rescue stance, while others adopt a blaming stance.[5] The result is poor care and inconsistent, ineffective treatment, where service users are either 'let off the hook' or punished for their behaviour, neither of which is likely to lead to improved mental health and wellbeing. The solution to the Rescue-Blame Trap is

5. This may mirror the split sometimes found in prison staff between 'Care Bears' and 'Turn Keys'.

superficially easy to see: clinicians must adopt the stance of Responsibility without Blame, where service users are neither rescued nor blamed for problematic behaviour, but instead held responsible and accountable with respect, concern, and compassion. But what exactly does that mean, in theory and in practice?

2. Philosophy

We use words to mean different things in different contexts, and much of our ordinary use of language is imprecise or ambiguous. Nonetheless, we can often extract a core meaning through philosophical reflection. Responsibility and blame are easily confused because they often go together: when others are responsible for harm or wrongdoing, it is common in our society to find that we blame them. But despite this common association, they are nonetheless distinct. To put the distinction in the very plainest terms: responsibility is about *the other person*, while blame is about *us* and how *we choose to respond* to that person. Responsibility is about whether someone meets various conditions that must hold for it to be true that *they* are responsible for their actions. Blame is about *our* emotions, judgements, and actions towards those who are responsible for harm or do wrong.

The Meaning of Responsibility

What are the conditions that are necessary for responsibility? It seems probable that there is a good degree of cultural variation.[6] But within our culture, and implicit in the discussion in the first section, is a long history linking responsibility fundamentally to agency and free will. This idea of responsibility can be found in Western philosophy from Aristotle[7] onwards, and remains dominant in contemporary society. This idea of responsibility distinguishes behaviour which is voluntary, in the sense that it is subject to choice and at least a degree of control, from behaviour which is involuntary. So long as we are conscious, sane, and know what we are doing, we are then responsible for our behaviour to the extent that it is voluntary: the core necessary conditions for responsibility are choice and at least a degree of control. These conditions seem very intuitive, because it is only if a person has choice and a degree of control over their behaviour that it is *up to them* whether and how they act and, at least in our culture, it seems wrong to judge a person responsible for harm if there is nothing they could do to stop it happening — if they 'couldn't help it' and so did not do it of their own free will, as we say. But, so long as they can refrain from acting — so long as they are capable, at a given moment in time, of *not behaving* in a certain way — then they are responsible if they do so act.

This idea of responsibility distinguishes behaviour which is voluntary, in the sense that it is subject to choice and at least a degree of control, from behaviour which is involuntary.

Degrees of Responsibility

However, it is important to recognize that choices can be limited and control diminished relative to the norm, through no fault of a person's own. When this is so, then, even if it is true that a person could have not behaved in a certain way and so is responsible, it may be that their degree of responsibility is yet reduced. Early psychosocial adversity typically limits opportunities for development and learning, as well as future choices. Equally, service users with PD may sometimes have a reduced capacity for behavioural control relative to other people. On the one hand, the possibility of mentalization deficits and the high levels of emotional arousal associated with PD may diminish the extent to which service users are able to grasp the probable effects of their actions on others in the moment of acting.[8] On the other hand, in so far as the problematic behaviour is a habitual way of coping with psychological distress, refraining will require tolerating the distress, which is especially difficult if the service user has never had the opportunity to learn alternative ways of coping. If choices are constrained and control difficult through no fault of a person's own, responsibility may accordingly be reduced. In clinical contexts, this may be especially important to recognize, for identifying the factors and circumstances that limit choices and diminish control relative to the norm may

6. For a good, accessible survey of some of the data, see Sommers, T. (2012) *Relative Justice: Cultural Diversity, Free Will, and Moral Responsibility*. Princeton: Princeton University Press.
7. The classic text is the Eudemian Ethics which can be found in *The Complete Works of Aristotle*, vol. 2, J. Soloman (tr.), J. Barnes (ed.), Oxford: Oxford University Press.
8. For discussion of these deficits see Fonagy, P., Gergely, G., Jurist, E., and Target, M. (2004) *Affect regulation, mentalization, and the development of the self*. London: Karnac.

help to show where interventions aimed at developing a sense of agency should be targeted.

The Meaning of Blame

What, then, is it to respond to a person who is responsible for harm with blame? Just as there may be cultural variation in the conditions necessary for responsibility, there is individual variation in what kinds of harm or wrongdoing most strongly incline a person towards blame, and in blaming style. Nonetheless, within our culture, blame ordinarily involves a typical range of emotions, judgements, and actions. With respect to emotions, blame is connected to hostile feelings, such as hatred, anger, resentment, disgust, and contempt. With respect to judgements, blame usually involves forming a harsh, negative view of a person's overall character, or permanently stigmatizing and condemning them as a bad or worthless person. Finally, blame also typically involves expressing or acting on these emotions and judgements in a variety of ways, for instance, exhibiting behaviour that is aggressive, vengeful, and punitive, or alternatively passive-aggressive, rejecting and distancing.[9]

When we are confronted with wrongdoing and the perpetration of harm, it is common not only to respond with these sorts of emotions, judgements, and actions, but also to feel a sense of righteousness or entitlement to do so: as if the person 'deserves' whatever they get, including our blaming response. But, in theory, because responsibility and blame are distinct, we can drive a wedge between holding a person responsible and blaming them. To hold a person responsible is to believe that they meet the conditions necessary for responsibility — they had choice and a degree of control over their behaviour and so could have not acted as they did. We can believe this —indeed, as I shall discuss, we can believe this *and hold people to account* — but not allow blame to infect our emotions, judgements, and actions towards them as a person. That is what it means to adopt the stance of Responsibility without Blame.

Practising Responsibility without Blame

In practice, how we do this is complicated and context-specific. As a first step, and quite generally, we can keep the distinction between responsibility and blame clearly before our minds, and undertake to challenge our own sense of righteousness and entitlement while cultivating a commitment to treating all people, including those who are responsible for real and lasting harm, with respect, concern, and compassion. But the precise details of what this means and how it is achieved in practice may be context-specific.

Clinicians are no doubt helped by the nature of their role: the guiding aim of clinical work is to help patients. This duty of care structures the relationship between clinician and patient, providing a clear rationale for avoiding affective blame. Correspondingly, there exist guidelines and conventions that establish norms for how patients are spoken to and treated and promotes reflective practice, which ensures a culture in which respect, concern, and compassion are always expected, and often maintained. The therapeutic focus on service user responsibility may also help: in the clinic as elsewhere, it is easier not to blame those who actively take responsibility for their actions and 'own up' to what they have done. Finally, when all else fails, clinicians need a good poker face — a commitment and capacity to mask some of their emotions, and refrain from acting out of any blame they may feel.

But perhaps the most important counter to blame within clinical contexts is proper attention to service users' past history.

But perhaps the most important counter to blame within clinical contexts is proper attention to service users' past history. Treatment for PD can involve helping service users to explore their past and recognize its effects on their personality and their present experiences and behaviour, both as a way of coming to terms with the past, and as a way of developing skills needed to better manage the present.[10] But, in attending to this history, clinicians and service users together gain understanding of why service users are as they are. A fuller life story or narrative comes into view, in which — given the association between PD and extreme early psychosocial adversity — service users in all likelihood come to be seen not only as people who harm others, but as people who have been harmed by others. This capacity to see patients both as victims and as perpetrators can help clinicians avoid blame. It requires keeping in mind the whole of the person and the whole of their story, which undercuts any single attitude or emotion, forcing

9. As the variation in emotions, judgements, and actions suggests, blame can be either 'hot' or 'cold'.
10. For further discussion, see Pickard H. (forthcoming) 'Stories of recovery: the role of narrative and hope in overcoming PTSD and PD' in Fulford, K.W.M., Sadler, J., and van Straten, W. (eds), *The Oxford Handbook of Psychiatric Ethics*. Oxford: Oxford University Press.

any blame to exist alongside other attitudes and emotions, such as understanding and compassion, and thereby at least tempering, if not outright extinguishing, its force. As the moral philosopher Gary Watson has put this point in relation to the famous US psychopath Robert Harris: 'The sympathy towards the boy he was is at odds with outrage towards the man he is'.[11] Indeed, there is evidence that this sort of contextualisation may help to temper blame towards offenders. Research on social attitudes towards criminal offending consistently finds that more fully contextualised scenarios give rise to less punitive responses.[12]

Hence we can solve The Rescue-Blame Trap. We can distinguish responsibility from blame in theory. And, in practice, the nature of the clinical aim and culture, together with the therapeutic attention reliably paid to service users' past history, can act as a real-world antidote to blame, while yet leaving responsibility for present behaviour intact. Is something similar possible within criminal justice contexts?

3. Law

Criminal law employs the very idea of responsibility articulated above as a prerequisite for conviction: in order to be convicted, an offender must have known what they were doing when they committed the offence, and have exercised choice and a sufficient degree of control in doing so. But criminal legal theory and practice does not tend to distinguish clearly between responsibility and blame. In this, of course, it is not unique: as we saw, the distinction between them tends to be overlooked within our society quite generally. Nonetheless, as a result, law courts and criminal justice institutions, such as prisons and probation services, can become environments where blame is sanctioned, even encouraged, as part and parcel of the process of serving justice for crime.

. . . law courts and criminal justice institutions, such as prisons and probation services, can become environments where blame is sanctioned, even encouraged, as part and parcel of the process of serving justice for crime.

The UK Criminal Justice Act 2003 Section 142 codifies multiple purposes in sentencing, including punishment, reform and rehabilitation, reduction of crime, public protection, and the making of reparation by the offender to those affected by the offence. Arguably, these purposes would be better served by adopting the clinical stance of Responsibility without Blame within criminal justice contexts. Again, personality disorder is prevalent within the offending population: 64 per cent of male and 50 per cent of female offenders have a personality disorder. At least for those offenders who have PD and possibly more widely, enacting punishment within criminal justice institutions in a manner associated with and expressive of blaming emotions, judgements, and actions may undermine the possibility of reform and rehabilitation. The reason is the same as why blame is avoided in clinical contexts: it risks creating feelings of rejection, anger, shame, hopelessness, and desperation in offenders, thereby undermining the possibility that responsibility and accountability may enable learning and change. But, if the possibility of reform and rehabilitation is undermined, so too may be the possibility for reduction of crime, public protection, and any genuine making of reparation or 'giving back'.[13] The cost of blame to the prospect of realising the various purposes of sentencing may be high.

Adopting the clinical stance of Responsibility without Blame within criminal justice contexts allows us to re-conceive punishment as the imposition of serious or negative consequences in response to criminal responsibility, but with an attitude of concern, respect, and compassion for the offender. The law can in theory hold offenders to account, but within an environment — whether this is within the courts, prisons, or probation services — that may do better to help them address their offending behaviour and enable learning and change. Of course, the culture and practices in many corners of criminal justice services

11. Watson, G. (2004) 'Responsibility and the limits of evil' in his *Agency and Answerability: Selected Essays*. Oxford: Oxford University Press, p44.
12. See for instance Roberts, J. and Hough, M., eds (2002). *Changing Attitudes to Punishment: Public Opinion, Crime and Justice*. Uffculme: Willan Publishing.
13. For discussion of the importance of 'giving back' and other factors that emerge from the narratives of offenders who have desisted from crime, see Maruna S. (2001) *Making Good: How Ex-Convicts Reform and Rebuild their Lives*. Washington: American Psychological Association.

already aim to do this, as evidenced, for instance, by the history of Therapeutic Community prisons and the more recent Psychologically Informed Planned Environments (PIPEs) in prison and probation services, alongside initiatives to provide mental health and especially PD skills and awareness training for officers, and increase mental health care provision and educational and occupational training for offenders. But just as the clinical stance of Responsibility without Blame provides a framework for understanding how clinicians find a balance between the twin pitfalls of Rescue and Blame, so too it can provide a framework for understanding how criminal justice theory and practice can find a balance and reduce the conflict between punishment on the one hand, and reform and rehabilitation on the other.

Endnote: The Moral Case for Responsibility without Blame

The argument I have just offered for why we should adopt the clinical model of Responsibility without Blame within the criminal justice context is in essence pragmatic: doing so may better serve the multiple purposes of sentencing encoded in law.[14] I want to conclude this article by offering one further, moral argument, in favour of its adoption.

I suggested that proper attention to service users' past history can act as a real-world antidote to blame, while yet leaving responsibility for present behaviour intact. It can, but also, it should. When children grow up in our midst subject to extreme psycho-social adversity and impoverishment, arguably we as a society bear some responsibility for the harm inflicted on them if we fail to intervene. Our responsibility may undercut our moral standing or right to blame the adults these children become, even when we justly hold them responsible. There is therefore reason to hold that large-scale social institutions, like the criminal justice system, have a moral obligation to bear in mind our collective failure to protect children and promote psycho-social and economic equality for all, in the attitude taken to those who may have been victims before they became perpetrators. This is, to some degree, already recognised in sentencing practice: for example, pre-sentence reports addressing contextual factors such as these have long been a feature of the sentencing process in England and Wales.[15] Hence not only does the criminal justice system have pragmatic reasons, given the purposes of sentencing, to avoid blame. It may also, as a large-scale social institution, have a moral obligation to do so.

Adopting a stance of Responsibility without Blame within the criminal justice system would require a radical shift in culture — within in its institutions but also, no doubt, within broader society. But the exact contours and details of how far to go, and what such a shift would and should be like, is open for debate. What I hope to have established here is only a first step towards understanding why blame is not necessary to responsibility and accountability for wrongdoing in both clinical and criminal justice contexts, and to sketching some of the reasons we have, and steps we might take, to avoid it.[16]

14. Of course, lying behind this pragmatic argument is a moral presumption, that these multiple purposes of sentencing represent goods that it is right for the law to hope to achieve for offenders, victims, and society.
15. See Ashworth, A. (2010) *Sentencing and Criminal Justice 5th ed*. Cambridge: Cambridge University Press, p378-80.
16. For more detailed discussion of the ideas in this paper, see Pickard H. (2013) 'Responsibility without Blame: Philosophical Reflections on Clinical Practice' in Fulford, K.W.M., Davies, M., Gipps, R.G.T., Graham, G. Sadler, J.Z., Stanghellini, G. and Thornton, T. (eds) *The Oxford Handbook of Philosophy and Psychiatry*. Oxford: Oxford University Press and also Lacey, N. and Pickard, H. 'From the Consulting Room to the Court Room: Taking the Clinical Model of Responsibility without Blame into the Legal Realm. *Oxford Journal of Legal Studies* 33(1), p1-29. I am grateful to an anonymous reviewer and editorial board member for comments, to Nicola Lacey for allowing me to use some of the material in our joint paper, and both to Nicola and to Ian Phillips for countless constructive discussions of these ideas. This work was supported by The Wellcome Trust [grant number 090768].