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A neglected aspect of conscience: awareness of implicit attitudes

The conception of conscience that dominates discussions in bioethics focuses narrowly on the regulation of behaviour resulting from explicit attitudes and neglects to mention implicit attitudes. But if conscience is a way of ensuring that a person's behaviour is in line with her moral values, it must be responsive to all aspects of the mind that influence behaviour. There is a wealth of recent psychological work demonstrating the influence of implicit attitudes on behaviour. A necessary part of having a well-functioning conscience must thus be awareness and regulation of one's implicit attitudes in addition to one's explicit attitudes and resulting behaviour. On my revised conception of conscience, the ethical training necessary to ensure that health professionals develop and maintain a well-functioning conscience must involve cultivation of awareness of implicit attitudes and techniques to enable better control over them. This could be done through the methods of reflective practice in combination with workshops on implicit attitudes.

If the function of conscience is to encourage a person to behave in accordance with her moral values, conscience must be responsive to all aspects of the mind that influence behaviour. Recent empirical work in psychology demonstrates the influence of implicit attitudes on behaviour and also emphasises the need for self-awareness relating to these aspects of one's mind. Implicit attitudes are attitudes that are below the level of conscious awareness and thus seemingly not subject to direct conscious control nor to rational revision through reflection.

Yet recent research has suggested that there are ways in which we can become aware of these attitudes and work to reduce their influence and change them.[1]

This need for self-awareness above and beyond the realm of explicit moral beliefs and reasoning tends to be neglected by views of conscience in bioethics. To rectify this neglect, a conception of conscience should widen the objects regulated by conscience to include implicit attitudes in addition to explicit attitudes and their resulting behaviour.

The article will develop as follows: in section one, I will outline what is problematic about the dominant view of conscience in bioethics and show that conscience must involve awareness and regulation of implicit attitudes if it is to function well. In section two, I will explain how we can uncover our implicit attitudes and indicate ways in which implicit attitudes can be controlled. In section three, I briefly discuss the implications of my view for health professional education.

1. Problems with the dominant view of conscience in bioethics

Conscience is currently a topic of lively interest in bioethics because health professionals in North America and other parts of the world are increasingly claiming a right to conscientious refusal to provide certain services, typically those to do with reproductive and end-of-life care. Accordingly, there have been a spate of recent attempts in the bioethics literature to give an account of what a conscience is and why it might be worth protecting in health professionals. It is

[1] Monteith, M., Lybarger, J. & Woodcock, A. 2009. Schooling the cognitive monster: the role of motivation in the regulation and control of prejudice. *Social and Personality Psychology Compass* 3: 211–226.

important how we conceive of conscience in bioethics because this will shape how we evaluate conscientious refusals in health care and how we think that health professionals should be educated and trained.

The prevailing view of conscience in bioethics is that it functions by compelling a person to act in accordance with her moral principles. By so doing, a person's conscience protects her integrity, where this is understood as psychological unity. I follow McLeod in referring to this as the 'dominant view' of conscience in bioethics.[2] Influential proponents of this view include Martin Benjamin, Jeffrey Blustein, James Childress and Mark Wicclair.[3] On this dominant view, our conscience is an inner voice that signals to us when we are in danger of disrupting our psychological unity by an action, or when we have already performed an action that has disrupted our psychological unity. I expose a serious flaw in the dominant view: its exclusive focus on explicit attitudes at the expense of implicit attitudes.[4]

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[2] McLeod, C. 2012. Taking a feminist relational perspective on conscience. In J. Downie and J. Lewellyn, eds. *Being relational: reflections on relational theory and health law.* Vancouver: University of British Columbia Press: 161-181.

[3] Benjamin, M. 1995. Conscience. In Warren T. Reich, ed. *Encyclopedia of bioethics.* 2nd ed. Macmillan. Vol. I: 469-72; Blustein, J. 1993. Doing what the patient orders: maintaining integrity in the doctor-patient relationship. *Bioethics*, 7: 289-314; Childress, J. 1997. Conscience and conscientious actions in the context of MCOs. *Kennedy Institute of Ethics Journal*, 7: 403-411; Childress, J. 1979. Appeals to conscience. *Ethics*, 89: 315-335; Wicclair, M. 2011. Conscientious objection in health care: an ethical analysis. Cambridge: Cambridge University Press; Wicclair, M. 2000. Conscientious objection in medicine. *Bioethics*, 14: 205-227.

[4] My view is indebted to McLeod's relational view of conscience that contrasts with the dominant view she identifies (op. cit. note 2). She argues that part of the value of conscience is that it can

Recent research indicates that much of our behaviour is not the result of our explicit thoughts and judgements, but is instead influenced by implicit attitudes that are not under our direct rational control. The most famous research employs the Harvard Implicit Association Test (IAT) as a measure of implicit attitudes.[5] These tests involve tasks where subjects must match up on a computer screen negatively and positively valenced words with, for instance, white faces and black faces. The speed of association of a black face with a negatively valenced word is an indication of the level of negative bias towards black people. The tests are performed so quickly that conscious reflection does not influence the task. The majority of white people tested with these tests associate positively valenced words with white faces more quickly. Some of the other biases tested include gender, social status, ethnicity, nationality and sexual orientation and there is evidence that these implicit attitudes influence behaviour outside the laboratory.[6]

The problem of implicit bias has been shown to affect health professionals just as it affects the general population and there are worrying consequences for the treatment of stigmatised groups. For instance, one landmark study showed

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help us to recognise when we have underlying affective attitudes that contradict our explicit values, but she does not link awareness of implicit attitudes to the proper functioning of conscience as I do.

[5] Try it at https://implicit.harvard.edu/implicit/.

[6] Jost, J. et al. 2009. The existence of implicit bias is beyond reasonable doubt: a refutation of ideological and methodological objections and executive summary of ten studies that no manager should ignore. *Research in Organizational Behavior,* 29: 39-69

that the level of implicit pro-white bias exhibited by white physicians was negatively correlated with the likelihood that they would recommend an effective treatment option (thrombolysis) to a black patient.[7] Another recent study demonstrated that the level of implicit pro-white bias of paediatricians was negatively correlated with the likelihood that they would prescribe a narcotic pain medication to a black patient.[8] A study on nurses who worked in a drug and alcohol treatment and rehabilitation facility found that the nurses with a higher level of implicit bias against intravenous drug users were more likely to suffer occupational stress, express lower job satisfaction and express intentions to leave their jobs.[9] A study looking specifically at clinical communication and level of care demonstrated that clinicians with higher levels of implicit pro-white bias deliver a poorer quality of care and clinical communication to black patients.[10]

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[7] Green, A. et al. 2007. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine*, 22:1231–1238

[8] Sabin, J. & Greenwald, A. 2012. The influence of implicit bias on treatment recommendations for 4 common pediatric conditions: pain, urinary tract infection, attention deficit hyperactivity disorder, and asthma. *American Journal of Public Health*, 102: 988-95

[9] von Hippel, W., Brener, L., & von Hippel, C. 2008. Implicit prejudice toward injecting drug users predicts intentions to change jobs among drug and alcohol nurses. *Psychological Science*, 19: 7–11

[10] Cooper, L. et al. 2012. The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. *American Journal of Public Health*, 102: 979-988

The discovery of implicit attitudes and their influence on behaviour is only part of a wealth of empirical evidence from psychology revealing that our explicit conscious reasoning forms only a part of our mental activity. Much of what goes on in the mind involves processes that are intuitive, fast and mandatory, working outside our conscious awareness and control. The products of this intuitive activity sometimes conflict with our explicit judgements arrived at through steps of controlled conscious reasoning.

Implicit attitudes have only recently begun to be discussed in philosophy and bioethics and the proponents of the dominant view make no mention of them. Childress, Blustein, Benjamin and Wicclair emphasise that conscience is both prospective and retrospective. They see conscience as a mode of consciousness that examines whether past or future behaviour accords with an agent's moral values.[11] They only consider the actions that an agent plans explicitly. Yet an agent may unwittingly act against her conscience because her behaviour stems from implicit attitudes of which she is unaware. I argue that our conscience should regulate the behaviour resulting from our implicit attitudes because it is behaviour over which we can exert indirect and long-range control. Where implicit attitudes are involved, others may be in a better position to see that an agent is violating her conscience because they view her behaviour more clearly from a distance. The dominant view always talks of conscience as a private exercise, but we may require the help of others to become aware of our implicit attitudes and thus to be able to regulate them.

[11] Op. cit. note 3.

The dominant view claims that a person's moral integrity may be at stake when she conscientiously refuses. For example, Wicclair uses the example of the imaginary case of Dr. K, who conscientiously refuses to participate in the care of a patient, Mr. S, who has refused further therapeutic treatment for his cancer. Dr. K believes that she has an ethical obligation to postpone or prevent death and thus feels she cannot continue treating Mr. S if she is to preserve her moral integrity:

> To claim that her moral integrity is at stake implies that: (1) She has core ethical values (e.g. principles, virtues, and/or paradigm-based maxims.). (2) These core ethical values are part of her understanding of who she is. That is, they are integral to her self-conception or identity. (3) It would be incompatible with those core ethical values to participate in Mr. S's care if he refuses additional therapeutic interventions.[12]

Wicclair focuses here on how an action that goes against her conscience can threaten Dr. K's explicit self-conception. He and the other proponents of the dominant view do not consider the possibility that an agent's explicit self-conception is erroneous because it does not take account of the implicit attitudes she holds. I might have an explicit self-conception of myself as a devoted daughter, but my behaviour towards my parents may reveal that I am influenced by implicit attitudes of rebellion towards them.

Wicclair's discussion of conscience here and elsewhere focuses on cases, real or hypothetical, where a health professional explicitly considers whether an action will threaten her moral integrity. It is unsurprising that bioethicists who

[12] Op. cit. note 3 (2000, p. 214).

consider conscience use the paradigm of a health professional contemplating an action that she foresees will contravene the demands of her conscience. However, we should not allow the focus on cases where a health professional contemplates a future action to obscure other ways in which we can behave contrary to our consciences. There are cases where we may fail to act according to our consciences because of our implicit attitudes. For instance, consider the following case:

> *Sheena*: Sheena is a lawyer committed to treating women equally with men. However, unbeknownst to her, Sheena tends to treat her female colleagues differently from her male colleagues. She subjects the quality of their work to more exacting scrutiny than that of her male colleagues. She makes unfair judgements about them that are not substantiated by the evidence, such as, 'Sally is intellectually lazy.' Yet Sheena is convinced that she treats all her colleagues fairly, regardless of gender. She believes that her judgement about Sally's laziness is a reflection of Sally's inadequate work and nothing to do with the fact that she is a woman.

Sheena thinks that she has a clear conscience with regards to her treatment of women. She actually considers herself a feminist. Yet she has implicit attitudes towards women that lead her to treat them as intellectually inferior in subtle ways. I claim that Sheena's conscience is not functioning properly because it is not flagging occasions where she fails to behave in accordance with one of her core moral values.

The malfunction of Sheena's conscience is serious because it leads her to perform actions that are wrong by her own lights. Sheena has an implicit attitude of contempt towards other women that does not match her explicit belief that they should be treated equally and her explicit desire to do so. Sheena's implicit attitude leads her to perceive women as professionally and intellectually inferior to men. This implicit attitude is partly the result of a widespread cultural bias against women.

The dominant view cannot explain how Sheena's conscience is malfunctioning because it focuses only on a person's explicit intentions to act or on past actions that she explicitly initiated. Sheena's explicit intentions to act match her core values so the dominant view will evaluate her conscience as clean and her moral integrity as intact. This verdict is deeply counterintuitive because Sheena is acting in a way that is not in accordance with her values. Cases like these pose a serious problem for the conception of conscience held by the dominant view. The dominant view limits its focus to the regulation of explicit attitudes and the behaviour that results from them and thus fails to account for cases like *Sheena*.

Advocates of the dominant view have two options to explain cases like *Sheena*. Firstly, they could argue that Sheena does have a problem involving her behaviour not complying with her values, but that this is not a malfunction of her *conscience*. Secondly, they could accept that Sheena does have a malfunctioning conscience, but argue that this is due to a lack of regulation of her explicit attitudes.

The first option is problematic because the dominant view claims that part of the function of a conscience is to ensure that one behaves in accordance

with one's moral values and thus maintain one's moral integrity. Sheena does not behave according to her moral values and her moral integrity appears threatened, even if she is unaware of this fact. One possibility for the proponents of the dominant view would be to argue that conscience only regulates behaviour for which we are morally responsible and to make the additional argument that we are not responsible for behaviour that results from our implicit attitudes.

However, the additional argument that we are not responsible for behaviour resulting from our implicit attitudes is by no means easy to make. The issue of responsibility for implicit attitudes is a complex one and proponents of the dominant view cannot simply assume that we lack responsibility for them. It is, to some extent, an empirical question having to do with whether we can control our implicit attitudes and there is recent evidence that suggests that we may be able to do so. Jules Holroyd marshals empirical evidence showing that we can exert indirect long-range control over our implicit biases to build a convincing case that we do have responsibility to mitigate and to avoid manifesting implicit biases.[13]

On the other hand, Neil Levy has recently argued that we are not morally responsible for our implicit attitudes because their contents are associative and not rule-based and they thus cannot play a proper role in moral agency.[14] While Levy makes some important points about the differences in structure between

[13] Holroyd, J. 2012. Responsibility for implicit bias. *Journal of Social Philosophy*, 43: 274-306.

[14] Levy, N. 2012. Consciousness, implicit attitudes and moral responsibility. *Noûs*, doi: 10.1111/j.1468-0068.2011.00853.x.

implicit and explicit attitudes, I am not convinced that his argument rules out responsibility over the long term for the development of implicit attitudes. Furthermore, if we are not aware of our implicit attitudes, I argue that we have a responsibility to become aware of them and that we can do this most successfully through social processes that help us to gain self-knowledge.

However, here my point is simply that philosophers are currently engaged in debate over responsibility for implicit attitudes. This is sufficient to show that proponents of the dominant view could not simply help themselves to the assumption that we are not responsible for our implicit attitudes. Therefore, they could not assume that the regulation of implicit attitudes is not a necessary condition for a well-functioning conscience. They would have to engage with the empirical literature and present an argument to counter mine.

The second option for proponents of the dominant view is more promising, but it ultimately involves conceding my point that they have neglected a vital part of what is involved in having a well-functioning conscience. The second option is to say that Sheena does have a malfunctioning conscience, but that the malfunction is due to lack of regulation of her explicit attitudes rather than lack of awareness of her implicit attitudes. Although Sheena professes explicitly that she is committed to equal treatment for women, the argument would be that she has not fully embraced this value at an explicit level. She has not engaged in sufficient reflection on how she should treat women and this is why her implicit attitudes do match her explicit ones. The solution for her is thus to reflect more on her explicit values, rather than focusing on her implicit attitudes.

I accept that this could be a correct assessment of Sheena. For instance, there is some empirical evidence indicating that those who have a deep commitment to eliminating racist bias for its own sake with no additional instrumental motivation display less implicit race biases than those who are also motivated by instrumental reasons to avoid appearing racist.[15] If one has a deep commitment to eliminating racist bias one is likely to be confident that one is not biased. But there is also empirical evidence to the effect that confidence in our own abilities to avoid manifesting biases towards others actually makes those biases worse. In one study, subjects who reflected on past failures in controlling bias were less likely to display bias than those who reflected on successes in controlling bias.[16] The researchers hypothesise that those who reflect on past success do not have the goal of avoiding bias activated because it is registered as achieved, whereas those who reflect on failure do have the goal activated because it remains to be pursued. As Holroyd notes, this seems to imply that confidence in one's ability to avoid bias and prejudice is dangerous and that merely possessing the goal of being unbiased is insufficient – we need to cultivate humility about the goal.[17]

If we are unaware of the danger of implicit biases, we are likely to be confident that we are unbiased, just as Sheena is. This confidence could make our biases stronger because we are unlikely to have our goal of avoiding biases

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[15] Devine, P. et al. 2002. The regulation of explicit and implicit race bias: the role of motivations to respond without prejudice. *Journal of Personality and Social Psychology*, 82: 835–48.

[16] Moskowitz, G., & Li, P. 2011. Egalitarian goals trigger stereotype inhibition: A proactive form of stereotype control. *Journal of Experimental Social Psychology*, 47:103-16.

[17] Op. cit. note 15, p. 290.

activated. Therefore, even if Sheena does engage in further explicit reflection and become more deeply committed to the value of equal treatment for women, it will not guarantee that she will be free from implicit biases towards women and could make her dangerously confident that she is not. Sheena will only be able to fully embrace the value of equal treatment for women if she also develops awareness of her existing implicit attitudes towards women and works to change them. Explicit reflection will be a part of this, but it should involve explicit recognition that she holds or is in danger of holding implicit attitudes that exert an influence on her behaviour. The proponents of the dominant view who choose this option must therefore end by conceding that Sheena needs to become aware of her implicit attitudes in order for her conscience to function well, which is precisely what I argued was missing from their conception of conscience in the first place.

Neither of the two options open to the dominant view can save its proponents from engaging with the empirical literature over implicit attitudes and thus recognising the importance of their existence for a conception of conscience. If they choose to deny that Sheena's conscience is malfunctioning they must be prepared to wade into the depths of a difficult debate to argue that we are not morally responsible for our implicit attitudes. If they choose to accept that Sheena's conscience is malfunctioning, they must recognise that awareness of her implicit attitudes should form part of her explicit reflection on whether she is abiding by her conscience.

In the next section, we will look at what is involved in gaining awareness of and managing one's implicit attitudes.

2. Implicit attitudes and cultivating a well-functioning conscience

Cultivating a well-functioning conscience is not easy. Much of our behaviour is the result of processes that are to some extent cognitively impenetrable (not affected by a person's beliefs or assumptions) so we cannot access the processes that led to it. Furthermore, unaware that we are doing so, we tend to confabulate explanations for our behaviour and sincerely believe in them. Much of the initial evidence for this was summarised by Richard Nisbett and Timothy Wilson in a classic article in 1977. There, they cited many experiments showing that people misdiagnosed the factors influencing their judgements or behaviour. [18]

When Sheena is asked why she thinks Sally is lazy, she may come up with very good reasons for her judgement: Sally did not get a project done in time; she has not offered to take on extra work. She sincerely believes that these reasons explain why she made the judgement. Sheena will therefore be unlikely to discover her own implicit bias without some help.

In the first subsection we will discuss ways that we can uncover our implicit attitudes: through empirical tests like the IAT, and through self-interpretation, involving close attention to emotional states combined with social feedback. In the second subsection, we will consider how we can control our implicit attitudes once we have uncovered them.

2.1 Uncovering implicit biases

One way of uncovering our implicit attitudes is to test for implicit attitudes through the tools of social psychology, such as the IAT. However, the implicit

[18] Nisbett, R. & Wilson, T., 1977. Telling more than we can know: verbal reports on mental processes. *Psychological Review*, 84: 231-59.

biases that we tend to share due to the nature of our societies are not the only problem facing our consciences, although they may be the most pressing. We all have idiosyncratic attitudes and these may include biases against particular groups that are often explained (not excused) by our particular histories. For instance, someone who has been struggling on a low income for many years could exhibit an implicit bias towards those who are more comfortable and secure economically. They make her feel envious and threaten to hurt her pride. She explicitly reasons to herself that there is no injustice in the situation, or that, if there is, it is not the fault of those who are comfortable and secure. Yet she cannot help disliking those people and judging them more harshly in everything they do. We also need to develop methods for detecting the implicit attitudes that wide-scale empirical testing for the most common biases do not uncover.

To return to *Sheena*, we can imagine a scenario where Sheena's implicit attitude is exaggerated by her childhood experiences. She was the youngest of three sisters and was treated harshly by her older sisters, who made her feel stupid. She always feels a sense of unease and insecurity when she is around women in the workplace because they remind her of her sisters. Her feelings amplify the level of her implicit attitude against women in a professional setting.

One way for Sheena to discover her implicit attitude without the IAT is through paying careful attention to subtle signs in her own behaviour, feelings and patterns of thought; in short, she must engage in self-interpretation. Gianni Morelli was an art historian who had success in distinguishing forgeries from originals using his method of focusing on the minor details in paintings. A forger would concentrate on imitating the faces and obvious parts of the painting, rather than minor details like the ears, and this is where she might give herself

away. Morelli argued that the individuality of a style such as Botticelli's is best revealed in the parts of the painting over which he took the least care and exerted least conscious control; when painting these parts he was less influenced by the style and school of his time and his personality came to the fore.[19]

In a similar way, we can often learn more about whether we are behaving in accordance with our conscience by taking note of our own Morellian details, the small signs that reveal our implicit attitudes, than we can by focussing on our explicit attitudes. A good way to study our Morellian details is by paying attention to our emotions and feelings, which are often thought to lie at the intersection of implicit and explicit cognition. If Sheena reflects on the feelings of discomfort she has when around women at work, feelings that she tends to push aside, she could come to see that she feels threatened by other women in the workplace and so realise that there is something amiss. She might even look for the origin of these responses, finding their origin partly in her treatment as a child at the hands of her big sisters.

What Michael Lacewing refers to as 'emotional self-awareness' is a highly relevant strategy here.[20] Emotional self-awareness involves recruiting emotional feelings as well as explicit reasoning in order to judge whether one's emotional responses are appropriate. Lacewing argues that it is sometimes a feeling or an emotion *about* another feeling or emotion that can give us a clue as to the origin of our responses. If Sheena feels annoyed with Sally, emotional self-

[19] Ginzburg, C. & Davin, A. 1980. Morelli, Freud and Sherlock Holmes: clues and scientific method. *History Workshop*, 9: 5-36 (p. 11).

[20] Lacewing, M., 2005. Emotional self-awareness and ethical deliberation. *Ratio*, 18: 65-81.

awareness might involve her recognising that she feels anxious about her annoyance and that her anxiety stems from the fact that she feels threatened by Sally.

Sheena should also recruit the help of others who can see the tendencies in her behaviour more clearly than she can herself. For example, a friend might point out that Sheena is unfair on Sally and other women at work. It is much easier to recognise bias in others than in oneself.[21] Self-interpretation should be a social process rather than a solitary exercise in introspection. Indeed, there may be kinds of self-knowledge that we can only gain from others. In her discussion of self-trust, McLeod argues that the process of gaining self-knowledge relies heavily on feedback from others and is a highly social phenomenon. She cites examples of self-misunderstandings used by Hilary Kornblith, such as paranoid personality disorder and colour-blindness.[22] One simply cannot discover that one has these disorders without feedback from others.

In summary, health professionals should employ all the methods they can to uncover their implicit attitudes if they wish to have a well-functioning conscience. Empirical testing through the IAT and other tools devised by social psychology is one method. Another method, useful for uncovering idiosyncratic

[21] Wilson, T., Centerbar, D., & Brekke, N., 2002. Mental contamination and the debiasing problem. In: T. Gilovich., D. Griffin, & D. Kahneman, eds. *Heuristics and Biases*. New York: Cambridge University Press

[22] McLeod, C. 2002. Self-trust and reproductive autonomy. Cambridge, Massachusetts: MIT Press (p. 74); Kornblith, H. 1998. What is it like to be me? *Australasian Journal of Philosophy*, 76: 48-60.

biases and attitudes, is a form of self-interpretation that builds self-knowledge from close attention to feelings and from social feedback.

2.2 Controlling implicit biases

What are we to do we do once we become aware of our implicit biases?[23] Unfortunately, the most obvious way of controlling implicit biases, through effortful conscious control while interacting with people, may do more harm than good. Although some studies show that people can successfully control their performance on the IAT, it seems to make the bias actually worse in the long run. The effortful monitoring required to avoid using a stereotype may make it more accessible so that one is more likely to revert to it once one relaxes.[24] This may make what I am advocating for health professionals seem impossible. If they cannot exert direct conscious control over their implicit attitudes, how can they develop a well-functioning conscience?

The good news is that there is a growing body of research looking at ways in which we can exert indirect and long-range control over our implicit attitudes. In section one, I mentioned two ways in which our explicit beliefs and goals may have an influence on our implicit biases. One study indicated that having a non-instrumental commitment to being unbiased (e.g. 'Being nonprejudiced toward Black people is important to my self-concept'), which the researchers call an

[23] In this subsection I draw heavily on Holroyd's excellent discussion of possible methods for controlling our implicit biases (op. cit. note 15).

[24] Galinsky, A., & Moskowitz, G. 2000. Perspective-taking: decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality & Social Psychology,* 78: 708–724.

'internal motivation,' seems to reduce bias, provided it is not accompanied by instrumental reason, (e.g. 'I attempt to appear nonprejudiced toward Black people in order to avoid disapproval from others'), an 'external motivation'.[25] This suggests that it is not enough to be sincerely committed to a moral value such as being unprejudiced; one must also try *not* to be influenced by instrumental reasons, such as social pressure, but instead focus on the value for its own sake.

I also mentioned in section one a study that looked at goal activation through focusing on past failures.[26] Cultivating humility and being wary of becoming too confident in one's ability to be unprejudiced may be one good way of avoiding manifestation of implicit bias. One way for health professionals to regulate their implicit attitudes may thus be to focus on past occasions where they were unable to successfully do so. Group meetings to reflect on experience that foster a supportive environment where professionals feel able to admit to failure in this regard would be one good way to do this.

A further possible method for health professionals to try to regulate their implicit attitudes involves 'implementation intentions'. Implementation intentions are intentions that are tied to specific environmental cues and more specific than a general 'I will try to be less prejudiced'. They are thought to be more effective at changing habitual behaviour than more general intentions. A good one for Sheena would be: 'When I see a female colleague at work, I will

[25] Op. cit. note 17, p. 836.

[26] Op. cit. note 18.

think "competence"'. Research has shown that implementation intentions can have an effect on implicit attitudes.[27]

Exposure to counter-stereotypical exemplars is another way that has been shown to combat implicit bias. Counter-stereotypical exemplars are people of a stigmatised group who do not fit the stereotype, such as a successful female engineer. If health professionals find they have implicit biases against stigmatised groups – something that is highly probable – one way to combat these is to regularly hold in mind a counter-stereotypical exemplar. Research shows that even just thinking about, say, a successful black person, appears to decrease levels of implicit bias, as can exposure to counter-stereotypical members of the groups.[28] This will be easier to do if health professionals regularly encounter counter-stereotypical exemplars so inviting them to give grand rounds or to speak at professional meetings would be a good start.

The goal in cultivating awareness of implicit attitudes is not to make health professionals feel bad or guilty, but to enable their consciences to function well and thus for them to live in accordance with their values. In the final section, I will suggest that my recommendations fit with one training method currently used.

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[27] Stewart, B. & Payne, B. 2008. Bringing automatic stereotyping under control: implementation intentions as efficient means of thought control. *Personality and Social Psychology Bulletin*, 34: 1332-1345.

[28] Blair, I. 2002. The malleability of automatic stereotypes and prejudice. *Personality and Social Psychology Review*, 3: 242-261 (pp. 248-9).

3. Implications for health professional ethics education

The ethical training necessary to ensure that health professionals develop and maintain a well-functioning conscience should involve cultivation of awareness of implicit attitudes and should emphasise the importance of social and relationship skills as aids in self-interpretation. The method of reflective practice has gained some popularity in health professional education and provides one good way to do this.

Reflective practice aims to engage health professionals in critical reflection on their professional experience to identify learning needs, enable integration of personal beliefs and values into professional practice, build an integrated knowledge base and develop into a self-aware professional.[29] Many of the methods of reflective practice could be successfully employed to cultivate awareness of implicit attitudes and to encourage professionals to develop strategies for mitigating those implicit attitudes that do not accord with their conscience. The topic of implicit attitudes can touch on sensitive issues and the methods of reflective practice are particularly suited to this because they typically involve small group discussions, keeping private journals or portfolios, or developing a relationship with a mentor.

[29] Mann, K., Gordon, J. & MacLeod, A. 2007. Reflection and reflective practice in health professions education: a systematic review. *Advances in Health Sciences Education*, 14: 595–621 (p. 596)

Dedicated workshops to raise awareness of the general issue of implicit bias could be combined with reflective practice methods.[30] Workshops could involve encouraging health professionals to take implicit bias tests, such as the IAT, provided this is done in a safe and supportive environment and the results are strictly confidential. These tests should not be considered tests of the genuineness of health professional's ethical convictions, but rather tools for helping them to develop their consciences so that they can learn to regulate their implicit attitudes in addition to their explicit attitudes.

There is at least one indication that this kind of training might be received positively. In the study cited in section one where physicians with pro-white implicit bias were less likely to suggest thombolysis as a treatment to a black patient, 75% of the participants agreed that taking the IAT was a worthwhile experience for physicians, and 76% that learning more about unconscious biases could improve the quality of their patient care (Green *et al*., 2007, p.1235).

Conclusion

I have argued that the dominant view of conscience in bioethics neglects an important aspect of a well-functioning conscience. Knowledge of the murky depths of our minds that lie outside the reach of our conscious awareness should be recognised as essential to having a well-functioning conscience. If we are not aware of our implicit attitudes, our conscience may be malfunctioning and not flagging occasions where we behave in ways that are not consistent with our

[30] For guidance on how such a workshop might be constructed: Stone, J. & Moskowitz, G. 2011. Non-conscious bias in medical decision-making: what can be done to reduce it? *Medical Education*, 45: 768-776 .

values. A healthy dose of self-interpretation, conducted as a social process with the help of others, are thus essential to developing and maintaining a well-functioning conscience.

As a consequence, the ethical training of health professionals should aim to develop self-awareness and provide tools for self-interpretation. This could be done through the existing methods of reflective practice in combination with dedicated workshops on implicit attitudes.