Review Article

Phronesis and the Knowledge–Action Gap in Moral Psychology and Moral Education:

A New Synthesis?

Dr Catharine Darnell[1], Dr Liz Gulliford[2], Professor Kristján Kristjánsson[1], Dr Panos Paris[1]

[1] Jubilee Centre for Character and Virtues, School of Education, University of Birmingham, UK

[2] Department of Psychology, University of Northampton, UK

RUNNING HEAD: *Phronesis*: A New Synthesis?

Corresponding author:

Professor Kristján Kristjánsson

Deputy Director, Jubilee Centre for Character and Virtues

School of Education

University of Birmingham

Edgbaston, Birmingham B15 2TT, UK

Tel: 0121-4144877

Email: k.kristjansson@bham.ac.uk

***Phronesis* and the Knowledge–Action Gap in Moral Psychology and Moral Education:**

A New Synthesis?

Abstract

This article has two aims. First, to offer a critical review of the literatures on two well-known single-component solutions to the problem of a gap between moral knowledge and moral action: *moral identity* and *moral emotions*. Second, to take seriously the rising interest in Aristotle-inspired virtue ethics and character development within the social sciences: approaches that seem to assume that the development of *phronesis* (practical wisdom) bridges the gap in question. Since *phronesis* is a multi-component construct, the latter part of this article offers an overview of what those different components would be, as a necessary precursor to operationalising them if the *phronesis* hypothesis were to be subjected to empirical scrutiny. The idea of a neo-Aristotelian multi-component solution to the 'gappiness problem' invites comparisons with another multi-component candidate, the neo-Kohlbergian *four-component model*, with which it shares at least surface similarities. Some space is thus devoted to the proposed theoretical uniqueness of a *phronesis*-based multi-component model vis-à-vis the neo-Kohlbergian one. Our main conclusion is that – weaknesses in its developmental psychological grounding notwithstanding – operationalising the *phronesis* model for the purposes of instrument design and empirical inquiry would be a feasible and potentially productive enterprise.

Key words: gappiness problem; moral identity; moral emotions; *phronesis*; neo-Kohlbergian four-component model

Phronesis: A New Synthesis?

'I do not understand what I do. For what I want to do, I do not do. But what I hate, I do.' The Apostle Paul (Romans, 7:15) neatly sums up here the perennial gap between moral knowledge and moral action that continues to haunt moral psychologists and moral educators..

This article has two aims. The first aim is to offer a critical review of the literatures on two well-known single-component solutions to the 'gappiness problem' that emerged after Kohlberg's well known single-component solution of moral reasoning: the *moral identity* and the *moral emotions* solutions, respectively. The second aim is to take seriously the rising interest in Aristotle-inspired virtue ethics and character development within the social sciences, approaches which seem to suggest that the gap in question is bridged by the development of *phronesis* (practical wisdom). Since *phronesis* is a multi-component construct, the latter part of the article offers an overview of what those different components would be, as a necessary precursor to operationalising them if the *phronesis* hypothesis were to be subjected to empirical scrutiny. The idea of an Aristotelian (or neo-Aristotelian) multi-component solution to the 'gappiness problem' invites comparisons with other multi-component candidates, in particular the neo-Kohlbergian *four-component model*, and some space will thus be devoted to the proposed theoretical uniqueness of a *phronesis*-based multi-component model.

While we take the two aims of the article to be *motivationally* linked – in that the potential inadequacies of a single-component solution may drive theorists to look for multi-component alternatives – we consider them to be *logically* separate. Since no unified critical review of the moral identity and the moral emotions contenders exists, to the best of our knowledge – at least not one which juxtaposes those with a multi-component solution – we hope that this article will be seen as useful even for those sceptical of, or simply not familiar with, Aristotelian philosophy. Indeed, we do not assume here that the basic Aristotelian insights are true. We will

not argue that Aristotelian *phronesis* definitely *can* provide a robust answer to the 'gappiness problem' or that obeisance to all of Aristotle's conceptual tenets is required. Our motivation is rather exploratory: we are interested in examining what a *phronesis* solution really amounts to and how it could potentially be operationalised for the purposes of instrument design and empirical research. Similarly, we hope that the latter part of the article will provide followers of Aristotle-inspired virtue ethics and character development with salient food for thought, even if those followers happen to have scant interest in the single-component solutions reviewed in earlier sections. This is what we mean by saying that the aims of this review article are logically separate, although we happen to be motivated to pursue both at the same time.

We are well aware both of the dangers of reading modern concerns into ancient accounts and of imposing a philosophical concept on psychological research in order to solve empirical lacunae. Philosophising the social sciences can appear as revanchist, even reactionary (cf. Kristjánsson, 2018, chap. 10). However, it must be noted here that the spur to the current project is social scientific rather than philosophical. The recent two decades have witnessed repeated calls from within social science to introduce the construct of *phronesis* into psychological inquiry (Fowers, 2005; Schwartz & Sharpe, 2010), educational discourse (Carr, 1995; Kristjánsson, 2015a), and even as nothing less than a comprehensive research paradigm for the whole of social science (Flyvbjerg, 2001; Flyvbjerg, Landman, & Schram, 2012). Allusions to *phronesis* are also prominent in current literatures on professional ethics where a *phronesis*-centred virtue ethics is gradually becoming the theory of choice in sub-fields as diverse as nursing ethics (Varghese & Kristjánsson, 2018) and business ethics (Huo & Kristjánsson, 2018). However, there is no single understanding of *phronesis* at work in those literatures. A MacIntyrean conception of *phronesis* (MacIntyre, 1981) is more common than an Aristotelian one in professional ethics, and even for those who favour an Aristotelian conception, arguments linger on about this intellectual virtue being either universalist or relativist, generalist or

particularist, painful in its execution or anguish-relieving (Kristjánsson, 2015b). While many of the arguments made by philosophers about *phronesis* may seem obscure to social scientists and involve special pleading with respect to Aristotle's authority – which we will avoid – there is still no alternative consensual *phronesis* model in social science. The best bet of trying to satisfy the current social scientific interest in the construct of *phronesis* therefore still seems to be – in the first instance at least – to try to distil such a construct from the original source.

Notice that although this article will, by necessity, cover a lot of ground, it does not propose to offer a sweeping review of all recent developments in moral psychology and how those compare or contrast with an Aristotelian model. There are formidable theories, such as 'moral domain theory' (Turiel, 1983) and 'triune ethics' (Narvaez, 2008), that are mostly left out of consideration here (although the former is briefly brought to bear on our critique of Aristotelian moral development). The focus of this article is solely on theories that aim *explicitly* at solving the gappiness problem and on *phronesis* as a potential competitor to those theories.

Historical Backdrop

In order to contextualise the aims of this article, a quick historical rehearsal is in order. Once upon a time, moral psychology and moral education provided a safe haven for hard moral rationalists. For such rationalists, moral judgements can be justified independently of our sentiments and preferences, and those judgements can be grounded in reason alone (with emotions hindering rather than helping that process), as 'no moral principle is based […] on any feeling whatsoever' (Kant, 1964, p. 33). Moreover, once correctly tracked, the moral judgements are seen as strongly motivating, for 'he who knows the good chooses the good' (Kohlberg, 1981, p. 189; this position is known as 'motivational internalism'). Moral education is then all about helping young people learn to justify moral claims in the right, rational ways,

and develop logical strategies to draw the right inferences from them in dealing with moral quandaries (Kohlberg, 1981).

It was actually Piaget's stage theory of development that provided the basis for Kohlberg's famous rationalist model of moral development. It ought to be acknowledged, however, that Piaget himself was less interested in the development from thought to action than he was in that from action to thought (Bergman, 2002, p. 105). Children act in the social world first. This crystallises into new moral understanding after the fact: 'Thought always lags behind action and cooperation has to be practiced for a very long time before its consequences can be brought fully to light by reflective thought' (Piaget, 1997, p. 64). Thus the 'gap' between thought and action was not an issue for Piaget who, in effect, conceived of this relationship the other way around.

Influenced by Kant's rationalism (which he distilled mainly through the work of his fellow Harvard professor John Rawls) and Piaget's cognitivism, Kohlberg proposed that new ways of thinking (cognitive 'operations') opened the door to entertaining new courses of moral action. Kohlberg had, however, a more subtle view of the interplay between cognition and emotion than Kant, acknowledging that 'the development of cognition and the development of affect have a common structural base' (1969, p. 389). Yet, inspired by the basic insights of rationalism, Kohlberg failed to adequately disentangle the complex relations between cognition, emotion, identity, and motivation – assimilating them in the end to a global stage theory. Kohlberg thus argued that moral reasoning goes through six sequential stages of development – in the same order for everyone although not at the same speed, and with most people not advancing past Stage 4 (Kohlberg, 1969; 1981). To determine an individual's level of moral reasoning, Kohlberg created the 'moral judgement interview' (Kohlberg, 1958), a semi-structured interview incorporating moral dilemmas, the most famous of which is the

Heinz dilemma about a man who faces the choice of stealing an expensive drug as the only way to save his wife's life. To gauge a participant's level of moral reasoning against the six-stage schema, interviewees are asked a series of questions about what they consider the right course of action to be in the circumstances of the dilemma and why (i.e., what their moral justification is). These responses are scored and an overall assessment of an individual's moral development is calculated across the vignettes.

However, Kohlberg's approach was challenged empirically in seminal papers by Augusto Blasi (1980; 1983) in which he reported that moral reasoning only accounts for 10% of the variance in moral behaviour (Walker, 2004). The inevitable corollary was to accept that some other factor (or factors) must be at work. The ensuing new proposals called an exclusive focus on moral reasoning into question. At all events, Kohlberg's legacy in turning moral psychology into a respectable sub-discipline and attempting to provide theoretical gravitas to practices of moral education should not be underestimated.

Despite significant departures from hard rationalism in the two approaches that we explore presently, namely about the role of moral identity formation and moral emotions, both retain an assumption about the essential *reason-responsiveness* of moral commitments. It thus tends to be assumed that young people can be taught to reason well about what sort of a moral identity they wish to adopt; and their emotions (in virtue of the cognitive component in emotions) are typically considered to be amenable to some reason-guided cultivation and coaching. However, recent times have seen more radical departures from any form of rationalism – be it 'hard' or 'soft' (see an overview of those options in Kristjánsson, 2018, chap. 2) – towards forms of hard sentimentalism (Haidt, 2001) or moral situationism (Doris, 2002). According to the former, our moral responses *qua* emotional responses are genetically pre-programmed in non-cognitive ways (with the role of reason reduced to justificatory afterthoughts). According to the latter,

moral responses are essentially swayed one way or another by situational forces that have nothing to do with reason-informed decisions. In the case of either the currently popular sentimentalism or situationism, the very idea of moral reason-responsiveness has virtually been done away with.

At the same time, however, we have seen a dramatic upsurge of interest in Aristotle-inspired virtue ethics (e.g. Annas, 2011). Although most of the relevant literature is philosophical in a narrow sense, some of it strays quite unabashedly into practical areas of virtue-based moral psychology (e.g. Fowers, 2005), the education of virtuous character in young students (e.g. Kristjánsson, 2015a), and virtue-based professional ethics education (e.g. Schwartz & Sharpe, 2010). Moreover, given the empirically friendly methodological naturalism animating these approaches, many social scientists see neo-Aristotelians as a group of philosophically grounded theorists they can finally do business with (e.g. Lapsley & Narvaez, 2008). Of particular interest for present purposes is the fact that although the neo-Aristotelians are not hard but soft rationalists – because they see moral facts as not only being tracked by emotions but some of those facts as being essentially constituted by emotions – they typically consider the pendulum of latter-day moral psychology and moral education to have swung too far away from reason. Notice that they will not even be content with the sort of minimal reason-responsiveness still assumed by the moral identity and moral emotions models. Rather they will insist that reason, as instantiated by the intellectual virtue of *phronesis*, plays a much more immediate and profound role in helping people figure out what to do in morally charged and complex situations.

Given that *phronesis* constitutes a multi-component construct, which in many ways incorporates the insights of both the moral identity and moral emotions models (as we indicate below), neo-Aristotelians may also point out that the natural conclusion to draw from empirical

research on the contributions of moral reasoning, moral identity, and moral emotions to moral behaviour is that while *each* of these elements is involved in moral behaviour, no *one* element can bridge the gap on its own. If that is what they argue, however, the question arises what the *phronesis* multi-component model offers that other models of that kind do not. In the latter part of the article, we tussle with this question, as well as suggesting ways in which *phronesis* might be operationalised: supplying the background, motivation, and rationale for such an undertaking. Prior to that, however, we need to look at the available single-component options.

Moral Identity

Whereas Kohlberg held that the essence of morality is commitment to moral principles, Blasi emphasised the importance of fidelity to one's sense of self – one's moral identity: 'Integrity and its failure cannot be studied without taking seriously into account the self and related constructs, such as self-definition, self-organization, self-awareness, and sensitivity to internal inconsistency' (1980, p. 41). This certainly seems right on an intuitive level, for as Bergman (2002, p. 120) points out, not betraying one's moral identity is likely to have more motivational power in keeping people on the straight and narrow than not betraying an abstract moral principle. Thus, one alternative to Kohlberg's rationalism is to bridge the theoretical gap between knowing the good and doing the good by appeal to the concept of moral identity.

Moral identity is a complex concept (Hardy & Carlo, 2005); yet there is general consensus that it reflects the 'degree to which being a moral person is important to one's sense of self' (Hardy & Carlo, 2011, p. 212). As such, if individuals feel, for instance, that moral virtues define who they are, then they have a strong moral identity. For the past three decades, various theories and models have been posited to explain the mechanisms behind moral identity as a source of moral motivation (e.g. Blasi, 1983; Colby & Damon, 1992; Gibbs, 2003; Narvaez & Lapsley,

2005). The first and indeed most influential of these is Blasi's (1983) Self-Model of moral functioning (see Walker, 2004).

Blasi's Self-Model links moral judgement and moral action via three components: judgement of responsibility, moral identity, and self-consistency. Blasi (1983) suggests that before embarking on a moral action, a moral judgement is filtered through a *judgement of responsibility* to decide if the action is necessary. Whether the individual feels obligated to carry out the judgement in action is dependent upon her *moral identity* and the extent to which she sees being moral as central to her selfhood. The drive to be *self-consistent* and act according to one's moral self then acts as a motivator to enact the moral action. Thus, moral judgements are more likely to predict moral actions if they are first categorised by a responsibility judgement based on moral identity and motivated into action via a drive for self-consistency (Hardy & Carlo, 2005). As Bergman writes: 'People sometimes fail to act on their moral beliefs because those beliefs are not really their own. Moral "oughts" may then seem oppressive and refusal to abide by them liberation' (2002, p. 115).

Colby and Damon (1992) have built on the Self-Model, emphasising the unity between the moral and self-systems (see also Damon, 1984). They suggest that moral identity reflects the integration of the moral and self-systems into a unified system. Individuals who are highly moral see themselves in moral terms so that their personal goals are unified with their sense of morality. Acting morally accords with what they most want to do. Thus, it is not a failure of moral reasoning which lets us down in our attempt to bridge the gap between knowing what is right and doing what is right. Rather, it is a question of how important internalised moral beliefs are to individuals personally, and possibly this sense of importance has been established through a series of existential decisions that the person takes, say, during early–late adolescence

about who she wants to be, as well as through the influence of earlier upbringing. Becoming moral is therefore essentially an existential rather than a rational task.

Two main limitations have been raised in relation to the Self-Model (Hardy & Carlo, 2005; see also Aquino & Freeman, 2009). First, it is hard to apply the model to moral behaviours that are automatic or less deliberate and even possibly genetically pre-programmed (Haidt, 2001). Second, it does not account for when and under what circumstances a particular identity will be experienced (Hardy & Carlo, 2005), hence underestimating the effects of contextual and situational factors (Doris, 2002). Recent socio-cognitive approaches have been advanced to try to explain why some moral behaviours can be tacit and automatic (Narvaez & Lapsley, 2005) and how an individual may display different aspects of selfhood across different situations (Aquino & Reed, 2002). The key aspect of a socio-cognitive approach is that the centrality of an individual's moral identity is related to the accessibility of so-called schemas (Aquino & Reed, 2002; Aquino et al., 2009; Lapsley & Narvaez, 2004; Lapsley & Hill, 2009). Schemas are conceptualised as knowledge structures stored in memory, consisting of values, traits, goals, and behavioural scripts (Cantor, 1990). Easily accessible schemas, guiding attention to relevant features of a situation and life tasks that are compatible with these schemas, are more likely to be chosen or sought, further reinforcing dispositional tendencies which align with the schema. Behaviours related to these schemas become highly practised and thus provide an almost 'automatic plan of action' relating to the schema (Cantor, 1990, p. 738). These mechanisms seem to correspond substantially to what neo-Aristotelians call 'habituated virtue' (Kristjánsson, 2015a). The schema-dependent characteristics can also be understood in terms of knowledge activation or activation potential. The more readily accessible schemas are, the greater influence they have on behaviour.

From this perspective, an individual with a strong moral identity is an individual with a chronically accessible and easily activated moral schema or perhaps a network of readily available moral schemas (Aquino & Freeman, 2009; Lapsley & Narvaez, 2004). For a moral person, moral identity would be central to her self-concept *and* these moral schemas would be the ones that are most easily accessible for interpreting the social landscape (Lapsley & Narvaez, 2004). There may, however, be individual differences with how central these moral schemas are to the sense of self, as well as situational differences in how easily accessible they are (Aquino et al., 2009). As such, while a socio-cognitive approach would agree that moral identity is fairly stable over time, akin to a trait-based approach (Blasi, 2004, Colby & Damon, 1992), it also suggests that moral identity may be more salient in some situations than others (Aquino & Freeman, 2009; Aquino et al., 2009). In other words, the motivational effect of moral identity may be influenced by situational cues.

Over the past 35 years there has been growing empirical support for the suggestion that an individual with a strong moral identity would engage more frequently in moral action, a suggestion relying on a variety of methods and approaches (for reviews see Hardy & Carlo, 2005; 2011; Hertz & Krettenauer, 2016). One method of exploring moral identity examines moral commitment in moral exemplars: individuals selected by expert panels (such as philosophers, scholars, theologians, community and religious leaders) who epitomise what it is to be a moral person (e.g. Colby & Damon, 1992; Hart & Fegley, 1995; Matsuba & Walker, 2004). Colby and Damon (1992) conducted in-depth interviews with adult moral exemplars and found that 'their own interests [are] synonymous with their own goals' (p. 299). Individuals who are dedicated to moral causes appear to demonstrate a unity between their self and moral goals, in that there is a clear integration between their moral principles and their own commitments and interests.

Interestingly, Colby and Damon (1992) reported that many of the moral paragons they examined did not attain the highest levels of reasoning in the Heinz dilemma according to Kohlberg's criteria, suggesting that other factors must be implicated in reaching moral maturity. They proposed that *the kind of self we want to be* (our ideal moral self) is perhaps more important in translating moral thinking into moral action. Hart and Fegley (1995) found that adolescent moral exemplars were more likely to describe aspects of their self, personality, and goals using moral personality traits than a non-exemplar comparison group (see also Reimer, DeWitt Goudelock, & Walker, 2009). Similarly, research using life stories in emerging adults (Pratt, Arnold, & Lawford, 2009) showed that moral identity (measured by investment in the needs and rights of others) was linked to prosocial behaviours (such as community service) and generative concern (desires, actions, and commitments related to caring for future generations).

Researchers have also examined the relationship between moral identity and moral behaviour using correlational research (e.g. Aquino & Reed, 2002; Aquino et al., 2009; Barriga et al., 2001; Hardy, 2006). Pratt and colleagues (2003) carried out a longitudinal study on adolescents investigating the correlates of the moral self. Adolescents were given a moral self-scale and rated how important non-moral and moral traits were to their lives, also rating how frequently they were involved in four different prosocial behaviours (community, political, responding, and helping activities). Pratt and colleagues (2003) found higher moral self-scores to be associated with more prosocial behaviours across each of the categories. Aquino and Reed (2002) found positive correlations between moral identity and volunteerism in adults as well as positive attitudes towards out-group members (cf. Reed & Aquino, 2003). Strong moral identity has also been shown to have a negative relationship with anti-social behaviour in adolescents, with higher levels of reported moral self-relevance being associated with lower scores on both parent and self-report measures of anti-social behaviour (Barriga et al., 2001).

As a matter of fact, moral rationalists Kohlberg and Candee (1984) had already found that the action–judgement relationship was stronger in participants who somehow intuited or identified with the choice of high-stage reasoners although they did not reason at that level themselves.

While moral identity seems a persuasive candidate for bridging the thought/action gap, it could be criticised for opening up a different sort of epistemological (Moshman, 2004) or ontological (Kristjánsson, 2010, chap. 2) gap. People could construct false moral identities that do not accurately represent who they really are. A person may even possess a completely coherent and non-deceptive (as distinct from non-*self*-deceptive) self-identity that is nevertheless false. In his challenging paper, Moshman (2004) notes that false identities can easily be maintained through self-serving manipulations. He even claims that we may all have false moral identities. Notice that moral identity does not refer to 'an actual self' that we possess (Kristjánsson, 2010); rather it is about our own *theory* of what that self is. Moral identity, then, is a self-theory, and identity formation is theory formation. But as Moshman correctly notes, theories (and thus identities) can be evaluated with respect to truth and may turn out to be false.

In a series of studies conducted by Batson and colleagues, which seem to corroborate Moshman's insights, individuals were shown to be motivated to 'appear moral while, if possible, avoiding the cost of being moral' (Batson & Thompson, 2001, p. 54). In one study, participants were told to assign themselves and another participant to two tasks, one task where they would win tickets for a raffle (positive consequence) and the other task where no tickets could be won (neutral consequence). Participants were then given written instructions which emphasised that the fairest way to assign the tasks would be to flip a coin. While in retrospect participants agreed that this would be the most moral thing to do, only around 50% of participants actually chose to do so. Of those participants who chose to flip the coin, significantly more participants assigned themselves to the positive consequence task (option of

winning raffle tickets) than would be expected by chance. So if the coin did not land on the positive consequence outcome, participants seemed to ignore the coin flip and follow their self-interest (Batson et al., 1999).

Batson (2011) suggests that these studies demonstrate that individuals are often not motivated by moral integrity but rather by 'moral hypocrisy'. Similarly, Perugini, and Leone (2009) found that while self-report measures of moral identity predicted responses to moral dilemmas, they did not predict responses to a 'live' moral dilemma (whether or not participants returned a 'mistaken' extra payment for their research participation). Thus, our moral identity could simply constitute our own overt self-theories *qua* self-confabulations or self-deceptions that may bear little resemblance to how we actually behave in the world.

The debate about false or true moral identities notwithstanding, in a recent meta-analysis of the moral identity literature, Hertz and Krettenauer (2016) demonstrated that despite moral identity showing a positive predictive relationship with moral behaviour, this predictive effect was only shown to be small to moderate in size (similarly to moral reasoning). Based on these findings, Hertz and Krettenauer (2016, p. 136) concluded that 'it seems more appropriate to consider moral identity in a broader conceptualised framework where it interacts with other personological and situational factors to bring about moral action'. The upshot is that, if considered in isolation as a single-component construct, moral identity does not offer a definitive solution to the gappiness problem.

Moral Emotions

While Blasi's (1980) paper inspired a turn towards moral identity as a contender for addressing the gappiness problem, another candidate also appeared on the stage. Exponents suggest that an affective factor supplies the underlying motivational force to bridge the thought/action gap.

Most frequently, the term 'moral emotion' in the gappiness literature is used to refer to the affective states of empathy, sympathy, and compassion (Montada, 1993; Hoffman, 2000). Eisenberg and Miller (1987) define empathy as 'an affective state that stems from the apprehension of another's emotional state that is congruent with it' (p. 91). In contrast, sympathy is defined as 'an emotional response stemming from another's emotional state that is not identical to the other's emotion but consists of feelings of sorrow or concern for another's welfare' (p. 91). While they were fully aware of the conceptual disarray in the field, Eisenberg and Miller's definition of empathy is ambiguous between two common understandings of empathy: as *experiencing* the same emotion as another, or being able to *understand* another's perspective with respect to that emotion. To add to the conceptual confusion, which can be traced all the way back to 18th century philosophical accounts (see e.g. Hume, 1978), both Hoffman (2000) and Batson (1991) sometimes use the term 'empathy' when referring to 'sympathy'. We try to overlook these ambiguities as much as possible in what follows, as they do not subvert the main point of the moral emotion solution, which is that a set of 'fellow-feelings' bridges the gap under discussion.

Central to theories of moral emotion as bridging the gap is the idea that experiences of empathy can engender either sympathy or personal distress: a feeling of anxiety based on the recognition of another's emotional state (Batson, 1991; Eisenberg & Fabes, 1990). While sympathy is associated with the other-orientated motive of helping the needs of others, personal distress is associated with the self-orientated motive of reducing one's own feeling of anxiety (Batson, 1991; Eisenberg & Fabes, 1990). For moral emotion to be a predictor of *moral* behaviour, feelings of sympathy rather than personal distress must therefore be produced.

In Batson's (1991) empathy-altruism hypothesis, sympathy plays a pivotal role and is seen as providing the impetus for engaging in prosocial behaviour. Similarly, the role of sympathy in

motivating moral action is emphasised by Hoffman (2000) who extended Batson's (1991) hypothesis, suggesting that abstract moral principles, learned in 'cool' didactic contexts (lectures, sermons), lack motivational force. 'Empathy's contribution to moral principles is to transform them into prosocial hot cognitions – cognitive representations charged with empathic affect', thus giving them motivational force (Hoffman, 2000, p. 239). Sympathy for an individual occurs alongside and is intensified by the judgement of having a responsibility to care about the individual's predicament. From this socio-cognitive perspective, the motivational force of sympathy (moral emotion) on moral action is likely moderated by moral judgement (Hoffman, 2000; Miller et al., 1996).

More recently, research has also begun to focus on moral emotion attributions (MEAs). MEAs are defined as moral emotions that individuals 'attribute to an actor as a consequence of a morally relevant action' (Arsenio, Gold, & Adams, 2006, p. 397; Malti & Kretteneur, 2013). MEAs are therefore considered as the emotions individuals expect to feel following a moral action, and those can include both negatively and positively valenced moral emotions. For example, an individual may feel the MEA of guilt or shame over a moral transgression or the MEA of pride over a prosocial deed (Malti & Krettenauer, 2013). MEAs are classified as self-conscious moral emotions (with one's own self as the emotions' intentional and attitudinal object) as they are felt when individuals reflect upon and evaluate the consequences of a moral action in relation to their own moral standards as well as those of others (Eisenberg, 2000; Tangney, Stuewig, & Mashek, 2007; Malti et al., 2009). Researchers have suggested that sympathy and MEAs may be conceptually related, with sympathy giving rise to MEAs, for instance (sympathy-based) guilt (Daniel et al., 2014; Malti & Ongley, 2014). As a motivator for moral action, MEAs may thus help individuals predict the outcomes of moral actions and adjust their behaviour accordingly (Malti & Latzko, 2010).

Given that sympathy and empathy are thought to orientate individuals towards the feelings and needs of others (Batson, 1991; Hoffman, 2000), it is perhaps not surprising that moral emotions have been linked to prosocial behaviour. In an early meta-analysis, Eisenberg and Miller (1987) reported a positive relationship between empathy and prosocial behaviour, with numerous studies since supporting this conclusion (Carlo, 2006). Unlike the relationship between moral identity and moral behaviour (typically thought to take shape in adolescence), the link between moral emotions and moral behaviour has been shown to occur much earlier, with some studies reporting correlations between moral emotions and moral behaviour in subjects as young as 2 years of age (see, Eisenberg, Spinrad, & Sadovsky, 2006; Spinrad & Eisenberg, 2017).

Trommsdorff, Friedlmeier, and Mayer (2007) used an experimental paradigm where 5-year olds' sympathy and prosocial behaviours were observed during a manipulated play situation. They found that 5-year olds who demonstrated more sympathy to a distressed adult also showed more prosocial behaviours towards the adult. Similarly, observed facial sympathy has been linked to teacher reports of prosocial behaviour (Eisenberg et al., 1999) as well as observed helping behaviours (Trommsdorff & Friedlmeier, 1999), with teacher and parent reports of sympathy also being linked to higher scores on prosocial behaviour questionnaires (Malti et al., 2009).

This relationship between sympathy and pro-social behaviour has also been shown to be fairly stable across time (Eisenberg et al., 1999). In a longitudinal study, spontaneous sharing in the early years was shown to predict later pro-social behaviours and empathy-related responding up to 17 years later (Eisenberg et al., 1999). Importantly, sympathy was also found to mediate the link between early spontaneous sharing and later prosocial behaviours, suggesting those children who were more likely to share spontaneously were prone to sympathy from an early age (Eisenberg et al., 1999). Batson's research (1991) showed that adults with heightened

levels of sympathy were more likely to engage in helping behaviours even when it would be easy to avoid providing such help. Similarly, Davis and colleagues (1999) found adults with higher levels of sympathy to be more likely to engage in volunteering (see also Penner, 2002).

As well as providing evidence for a relationship between sympathy/empathy and moral behaviours, recent research has also shown an association between MEAs and prosocial behaviour. For example, Menesini and Camodeca (2008) looked at ratings of shame and guilt in 9–11 year olds in hypothetical situations involving intentional or non-intentional harm. Children who had been identified by their peers as prosocial (e.g. children most likely to help or comfort others) were more likely to report higher levels of shame and guilt in the intentional hypothetical harm situations than children identified as bullies or bystanders. Those children who were seen in the classroom as prosocial were also more likely to feel guilt and shame when imagining committing a moral transgression. In a recent meta-analysis of 42 studies, Malti & Krettenauer (2013) found that MEAs were predictive of higher levels of prosocial behaviour and lower levels of antisocial behaviour across development (4–20 years of age).

However, while it is clear from the meta-analysis by Malti and Krettenauer (2013) and other empirical evidence that moral emotions have a role in motivating moral behaviour, the predictive relations between them still tend to be small to moderate in magnitude (Eisenberg & Miller, 1987; see Hardy, 2006). Thus, there seems to be need for an integrated approach, particularly between moral emotions and non-emotional moral cognitions (see Arsenio, Gold, & Adams, 2006; Malti & Latzo, 2010). The suggestion that these components may be interconnected when it comes to motivating moral behaviour is not a novel one. Using a range of self-report questionnaires, Hardy (2006) found all three sources of moral motivation (identity, reasoning, and emotion) to have a predictive effect on prosocial behaviour in adults when different forms of prosocial behaviour were considered. Similarly, in children, research

has shown that the predictive effect of sympathy on moral behaviour is moderated by the role of moral reasoning (Miller et al., 1996). Likewise, researchers have demonstrated links between the predictive effects of moral motivation (as measured by MEAs and their justifications after a moral transgression) and sympathy on moral action in adolescents (Malti et al., 2009), with the suggestion that these associations between moral judgement and moral emotion may form the basis of moral identity development (Bergman, 2002; Krettenauer, Malti, & Sokol, 2008; see also Krettenauer et al., 2014). However, although the existing evidence suggests that these components may be related, it is not clear how they develop or indeed how or if they relate to each other when predicting moral action. In any case, the upshot is that moral emotions alone do not hold the key to a solution of the gappiness problem – while they may do so in conjunction with other components.

The discussion so far indicates that the logical step to take in the search for factors bridging the knowledge–action gap in moral psychology and education is to look for multi-component constructs. Neo-Aristotelians think they have identified the right one, and they call it *phronesis*.

Can *Phronesis* Solve the Gappiness Problem?

In the interest of shortness and theoretical parsimony, we will only be concerned with an Aristotelian conception of *phronesis* in this article (but not, for example, a MacIntyrean one, see MacIntyre, 1981); and we believe that the best way to explicate the Aristotelian construct is to go back to the original source. The other option would be to try to extract a *phronesis* model from recent social scientific accounts, but as explained in the opening section, those tend to go in different directions and involve conflicting interpretations. The only thing they all seem to share is the historical allegiance to Aristotle's original concept and the desire to draw on its basic insights. In explicating the original concept, we will be referring to a number of purely philosophical works. However, while philosophical arguments may at times seem to follow a

different logic and methodology from social scientific ones, the underlying questions that the relevant authors are interested in here – insofar as those are substantial rather than just exegetical – are essentially the same as those we have been extracting from the psychological literature: what is this construct and how does it account for moral decision making?

What Is Aristotelian *Phronesis*?

Most of Aristotle's discussion of *phronesis* takes place in *Nicomachean Ethics,* Book VI. Although it has been suggested that Aristotle's remarks on *phronesis* are not always particularly illuminating, especially from a contemporary developmental and/or educational perspective (e.g. Kristjánsson, 2015a, pp. 88–89), it does seem possible to derive from those texts a general account of *phronesis* that emphasises its diverse *functions*. Moreover, it suggests the elicitation of a componential conception of *phronesis* and its background conditions, which would tally with a componential account of specific individual virtues as those have been most serviceably developed into psychological instruments (see e.g. Morgan, Gulliford, & Kristjánsson, 2017, on gratitude).

To properly understand *phronesis*, a word is in order on Aristotle's conception of the human soul. According to Aristotle, the soul comprises two parts, the rational and the non-rational, though the non-rational itself comprises a part which can obey reason, and one which is wholly independent thereof (2002, 1098a4-6; 1102b11-14). Virtues of character are excellences of the non-rational part of the soul that is reason-responsive. However, their full possession is dependent upon the possession of *phronesis*, which is an excellence of the rational part of the soul: an intellectual virtue. Yet the possession of *phronesis*, in turn, requires possession of what Aristotle calls 'natural virtues': a tailoring of the non-rational part of the soul toward the right objects – or, as we might put it today, the prior cultivation of affective and motivational

dispositions toward things that are good, or value(s), even before the agent has understood how or why they are good.

Phronesis is one of two central intellectual – as opposed to what we would call 'moral' – virtues, the other being *sophia*, sometimes translated as 'theoretical wisdom'. Whereas *sophia* is preoccupied with what is universal and unchanging (i.e., with the realm of necessity and so with theoretical reasoning), *phronesis* taps into the changing world of contingents, and is concerned with practical reasoning about particulars, the end of which is action. In other words, whereas theoretical wisdom concerns the truth and falsity of things that are unchanging and contributes to systematic knowledge, *phronesis* deals with the sphere of human action, which 'can be otherwise' (2002, 1139a8-9). This is because, according to Aristotle, *phronesis* properly yields decisions (*prohairesis*), each of which embodies a correct prescription or right reason for a given set of circumstances, which are context-sensitive, that is, they vary with the features of the situation and the individual experiencing the situation.

Phronesis is also distinct from other intellectual virtues, including technical expertise (*techne*), which is excellence in a skill. Skill is concerned with making, rather than doing, and hence with the product, as opposed to the process whereby the product comes about; thus excellence in skill is traceable to the quality of the product regardless of the productive process. By contrast, in the sphere of action, it is the activity, or the process underlying the bringing about of a certain state of affairs, that is crucial. Skills tend to have a limited domain of application, so that when the expert person deliberates, she deliberates in light of what is good for such-and-such a practical undertaking. By contrast, the *phronimos*' deliberation aims at the unqualified good, or what is good all things considered.

Aristotle also distinguishes *phronesis* from mere cleverness (*deinotes*), which is a more general intellectual virtue of means-end reasoning, because although cleverness is important for

phronesis, it can promote bad, as well as virtuous, ends; or, to put it differently, unlike *phronesis*, *deinotes* can be possessed by someone who lacks 'natural virtue' so that her dispositions are not tailored to appropriate ends. For this reason, Aristotle basically defines *phronesis* as a combination of *cleverness* and *natural virtue*. Cleverness greatly contributes to the deliberation and carrying out of practical decisions that are the core output of *phronesis*, whilst natural virtue ensures that such decisions are tailored to appropriate ends.

However, none of these remarks offers a detailed picture of what *phronesis* is or how it could possibly be measured, and it is true that Aristotle says very little about this issue. He tells us that in thought about theoretical and abstract matters, good and bad consist in truth and falsity; but he contrasts to this '*practical* thought', the function of which is 'truth in agreement with the correct desire' (2002, 1139a30). Elsewhere we learn from Aristotle that in practical matters, where things are *not* unchanging and we come to confront particulars (often held in a delicate balance, obscured by, and connected to, many other complex particulars), reasoning cannot be too precise. In this context, he suggests that the virtuous agent's response cuts through extremes and aims at just the best, like an archer's arrow aimed at a bull's eye. These extremes, moreover, are couched in terms of excess or deficiency; and it is as a medial state in between such extremes that one can understand each virtue and the corresponding behaviours; for instance, courage consists in a medial state between cowardice and foolhardiness. Similarly, temperance is not a matter of never indulging in worldly pleasures, nor of constantly doing so, but of doing so sometimes, when it would be appropriate to do so. So being 'medial' is not always the same as being 'moderate'.

While there is some scepticism concerning whether all the virtues adequately fit this account (the 'doctrine of the mean'), seen in this light natural virtue accompanied by *phronesis* can be understood as a disposition to decide and respond in accordance with the mean, which is in

turn determined by the *phronimos'* deliberation and is relative both to the context and the person. On this interpretation, the function of *phronesis*, which natural virtue alone fails to perform, turns out to be the determination of this mean through reasoning, understanding, and experience. The briefest definition of *phronesis* would thus be excellence in ethical deliberation about the mean.

What Aristotle's remarks about *phronesis* seem to imply, then, is the following. First, there can be no *phronesis* without some sort of good habits, or, as we might put it today, some espousal of moral values and habituation into ways of expressing these, such as a general tendency to be honest, kind, thoughtful, compassionate, and the like, and to see these as one's ends. This is basically what natural virtue roughly looks like, and such virtue is a prerequisite for *phronesis*. Moreover, habituation would mean that one has also developed certain affective patterns of response to objects, recognitions, and appraisals that are, at least for the most part, appropriate. In other words, one's emotions are fitting to their objects.

In addition to these, the core deliberative component of *phronesis* is said to be that which enables the *phronimos* to hit the mean, responding in the way that is best overall. That requires that one can identify salient reasons for responding in certain ways to a situation, and seeing those reasons that are most weighty as such, which is only possible against a conception of the good life (or, again, perhaps a more modern way of putting it may refer to a hierarchy of values or priorities), however rough and ready, incomplete, and unsophisticated this may be. For otherwise, in a given situation, where one sees reasons both for and against, say, doing the brutally honest thing, one will have no way of deciding whether doing the brutally honest thing would be best in such a situation, as opposed to, say, acting compassionately.

All this said, debates rage about how to understand Aristotelian *phronesis*. Those debates are either exegetical, substantive, or both (see e.g. Burnyeat, 1980; Sherman, 1989; Russell, 2009).

The present context does not allow for an overview of these debates (cf., however, Kristjánsson, 2015b, on the conceptual debates within contemporary applied ethics and social science). Moreover, such debates need not preoccupy us in the psychological task of operationalising *phronesis*, provided we have adequately grasped its most important *functions* and that we remain reflective and aware of the limitations of any such undertaking and its openness to revisions in light of interpretative challenges.

One debate that cannot be ignored with impunity in a review article on *phronesis*, however, concerns *phronesis*' strategic place with respect to Aristotle's well-known unity-of-virtues thesis: namely, the thesis that full possession of one virtue entails possession of all the others (see Russell, 2009, for a thorough discussion). The main source of attraction to this view is conceptual. Given Aristotle's conception of the virtues as psychological dispositions to deliberate well and be motivated to behave accordingly in particular areas of human life such as in the face of danger, or in contexts where truth-telling is at stake, and so on, and his account of *phronesis* in terms of excellent deliberation in all situations in accordance with the good in general, it would seem that someone who possesses one virtue in full could not go astray, and hence would be virtuous in all other respects. This conceptual observation seems, however, to fly in the face of everyday evidence of people being strong in one virtue (say, compassion) but weak in another (say, honesty). Although it is plausible that some virtues 'hunt in packs' and share closer affinities with one another than others, as Gulliford and Roberts (2018) argue, say compassion and gratitude, the idea that one virtue being well-guided by *phronesis* entails all virtues being guided in that way seems empirically unrealistic.

However, there are ways of understanding the possession of *phronesis* and other virtues probabilistically and this, arguably, offers the most empirically adequate way of thinking about them. On this construal, possession of any given virtue is a matter of degrees, and how virtuous

one happens to be is best understood – at least from an empirically-minded perspective – as a matter of the probability that someone will respond in a way that is predictable and intelligible by appeal to the virtue in question, taking into consideration such matters as how unusual or difficult the situations are vis-à-vis deciding how to respond (see e.g. Adams, 2007, pp. 122–125; also cf. Paris, 2017). Accordingly, the degree to which one is a *phronimos* is a matter of the probability (or frequency, if we are observing one's behaviour and monitoring one's responses) that one will respond in a given situation in the best way and in accordance with the best reasons available to them. The virtues are not fully unified, moreover, for the same reason. Although *phronesis* offers the rational basis for possessing all virtues, some people may have more or less experience in different areas, and may have developed some of their capacities more or less than others, such that, insofar as virtues are largely dependent on situations and pick out certain sensitivities and sensibilities, one may be more or less likely to exhibit a certain virtue and to prioritise some concerns over others, without thereby losing warrant of the title *phronimos*. This, moreover, is relevant to developing an empirically realistic and adequate account of how *phronesis* develops (cf. Ferkany, 2018) and can, potentially, be measured via operationalisations of its essential components.

Aristotelian Moral Development

Prior to identifying the precise components of *phronesis*, as derived from its presumed functions, something must be said about the way in which *phronesis* presumably fits into an overall Aristotelian theory of moral development. The word 'presumably' is necessary here because Aristotle himself is fairly reticent about the nuts and bolts of *phronesis* development, as we see below. According to Aristotle, virtue is developed from early childhood through role-model-guided habituation into ways of responding to moral situations, which in turn mould one's affective and motivational structure into patterns that are in accordance with how people

ought to behave, or how people who have the virtues behave (2002, 1103a23-1103b2). However, this sort of habituation is not sufficient for fully possessing virtue (2002, 1105a18). Instead, as explained earlier, having developed appropriate habits and a virtuous affective-cum-motivational structure only amounts to having what Aristotle calls 'natural virtue'. To possess virtues in a complete sense, it is necessary that the habits in question are also undergirded by a robust intellectual foundation, which includes good understanding and reasoning in practical matters. As Aristotle puts it, virtues, and behaviours issuing from them, such as justice and temperance, do not qualify as fully virtuous unless the agent 'does them knowingly', 'decides to do them, and decides to do them for themselves' (2002, 1105a30-33).

This is where *phronesis* enters the picture, which (as we have already seen) Aristotle defines as excellence in practical deliberation, that is deliberation about what to do, issuing in decisions to do it. Apart from its theoretical significance, this condition placed upon complete virtue has wide-ranging practical ramifications, as it excludes the possibility that complete virtue can be acquired mechanistically, for instance through behavioural conditioning or indoctrination. It also gives rise to the hypothesis – which we are presently exploring – that what really bridges the gap between thought and action is the development of *phronesis*, rather than the development of moral identity or emotions, viewed in isolation. *Phronesis* is meant to crown, as it were, virtuous habits with a cluster of intellectual abilities and experience that are both necessary and sufficient for ensuring that these habits will not go awry, will be reliable both over time and across different situations, and will be put into practice in a way that is reflective and motivationally robust.

Although Aristotle spends considerable time discussing how natural virtues are acquired, he does not dwell much on the development of *phronesis* in moral education (cf. also Swanton's salient 2016 complaint about neo-Aristotelians' lack of engagement with developmental

psychology). Not only that; the contours of his overall discussion do not bear scrutiny in light of findings in contemporary developmental psychology, especially about early-years moral development, which is much more complex and sophisticated than Aristotle seems to have imagined (see e.g. Dahl, 2018). Aristotle does assert that *phronesis* comes largely from teaching (2002, 1103a15-17), and that it also requires ordinary life experience (Hursthouse, 2006), but he does not elaborate on what this sort of teaching would look like, when it should take place in an ideal developmental and/or educational trajectory, how long it should last, and at which stage, if ever, an agent's teaching is complete so that she will count as a *phronimos*. It is answers to questions like these, however, that would be of most practical use to parents and educators.

In summary, the standard Aristotelian picture goes somewhat as follows. Children must in the first instance develop habits, both behavioural and emotional, that are in accordance with virtue – that is virtuous behaviour (and affective-cognitive patterns of response to stimuli, more generally) must become dispositional in them. Once at an appropriate developmental stage, the child also – if all is well with its development and education – gradually acquires rational capacities that serve to undergird these habits. This latter developmental benchmark refers to the development of *phronesis*. The question remains how we transition from the formation of good habits all the way to the sophisticated virtuous agency that Aristotle envisages. How can role-model-guided habituation, which in the way Aristotle describes it would be mostly uncritical (or, in more modern jargon, heteronomous), prepare students for the autonomous critical engagement required for *phronesis*? The question also remains at what age this radical transformation is meant to materialise.

The classic two-stage answer, proposed by Burnyeat (1980), is that first-stage habituation 'prepares' agents psycho-morally for becoming virtuous in the full-blown sense, which

includes *phronesis*. In contrast, Sherman (1989) suggests that habituation is not a non-cognitive process of mere imitation and repetition. What she adds to Burnyeat's account is the idea that habituation itself gradually engages one's cognitive and rational capacities. It seems plausible that once one comes to see that others whom one imitates offer reasons for their behaviour, appear to experience conflicts, and sometimes do not behave as would be expected, one comes to reflect similarly about oneself regarding one's related habits. In this way, affect and intellect intertwine in moral development, from habituation into patterns of behaviour and affect, to those being accompanied by *phronesis*, without any clear transition from a first to a second stage. One might think that an obvious answer to the question of how *phronesis* can be developed seems in fact to be: read Aristotle's ethics. In other words, one might think that a character development programme which involves being taught basic reasoning skills and core ethical texts, as well as studying literature as a way of looking into the human psyche and of probing particular characters in the grips of highly detailed ethically salient situations, may furnish just enough of a basis from which *phronesis* can develop with the help of gradually accumulating worldly experience. This, at least, might be a first shot at trialling teaching interventions in the modern sense, once we have come to better understand how *phronesis* develops from early childhood (or later) onwards.

The caveat at the end of the preceding paragraph is important because *phronesis* interventions would have to build on some credible account of how *phronesis* actually develops. The accounts suggested by Burnyeat and Sherman above are just conjectures from the philosophical armchair about how to understand Aristotle – uninformed by any contemporary developmental psychology on early moral developmental trajectories. Although we would argue that we are not forced to reject a model of moral decision making simply because its original author had outdated views on moral development, it is fair to give readers an indication of some of the

difficulties that we would encounter if we tried to bring the under-explained Aristotelian developmental story into alignment with contemporary developmental psychology.

Consider, for example, the insight from moral domain theory that the development of children's judgements about morality, issues of social convention and personal matters follow independent courses of development rather than being stage-based (Turiel, 1983; Smetana, Jambon, & Ball, 2014). The problem here is not so much that Aristotle would disagree with this view (or that neo-Aristotelians should), but rather that Aristotelian theory lacks the conceptual repertoire to draw lines between these three domains (and he did not seem to see reason to invent one from scratch). Although Turiel (1983, p. 35) is right to point out that Aristotle does make a distinction between forms of justice grounded in universal characterological features (e.g. pain at undeserved outcomes and pleasure at deserved ones), on the one hand, and social conventions (relative to constitutions), on the other, this distinction does not amount to one between morality and social conventions in the modern sense. Generally speaking, there is no distinction in Aristotle between the 'moral' and 'non-moral'; indeed, he had no concept of 'the moral' at his disposal (Kraut, 2006). More than that, there is no distinction to be drawn from Aristotle's works between (moral) character and (non-moral) personality; ancient Greek had no specific word for 'personality' (Reiner, 1991). Aristotelian developmental theory thus lacks the relevant resources to engage in some of the elementary debates about issues that divide contemporary developmental moral psychologists.

On a more positive note, there is a strong emphasis in recent psychological literatures on how contextualised and domain-specific moral development is (Turiel & Nucci, 2018). This tallies with the basic Aristotelian insight that *phronesis* is a capacity that develops through experiential engagement with specific situations (developing *qua* 'excellence of learning', cf. Segvic, 2009, p. 169), and that *phronesis* may differ between individuals depending on their

environmental/societal conditions, professions, and general context-specific life experiences. As we explain later (cf. also Grossman, 2017), this feature distinguishes *phronesis* as *practical* wisdom from the global decontextualised wisdom construct that typically features in psychological research. Moreover, there is a constructivist undercurrent in the *phronesis* concept, which may appeal to many current developmental psychologists (see e.g. Dahl, 2018), in that *phronesis* ideally becomes a lens through which young people learn to construct their understanding of the ethical world. So, although the developmental story behind *phronesis* is presently its weakest link, there is hope that exploring the development of *phronesis* with the tools, concepts, and methods of contemporary psychology might elevate it to the status of a respectable construct within developmental science.

A Four-Component Model of *Phronesis*

After this foray into the murky territory of Aristotelian moral development, we can now return to the question about the different functions and components of *phronesis.* To cut a long story short, we will be offering a four-component model of *phronesis* below. Drawing on Aristotle's insights, we need to figure out what a *phronimos* would look like in real life if we are to operationalise *phronesis* in a psychologically serviceable way, in order not only to identify the *phronimoi* (or those 'more *phronimoi*' than the next person), but also envisage ways in which to trace the development of *phronesis*, and thereby form better informed hypotheses and predictions concerning how it may be acquired and subsequently taught. To complicate matters, the components of *phronesis* delineated below will have complex and varied developmental histories. At any rate, what is clear for Aristotle is that full possession of virtue, including *phronesis*, will involve a combination of non-rational affect, conation, and practical rationality. While perhaps no one will have a fully worked out vision of the good life, complete with justifications and ways of realising it, we can assume that someone possessing *phronesis*

has a sufficiently developed idea of what the good life of *eudaimonia* means for her in order to count as possessing a 'moral identity' in the contemporary sense.

As we have already seen, Aristotle defines *phronesis* as excellence in practical or ethical deliberation, that is, deliberation about what to do. This reveals a lot about what we should expect from the *phronimos*, and so what *phronesis* enables one to do. Kristjánsson (2015a, p. 96) and others (e.g. Curzer, 2012, p. 359) have singled out two particularly important functions that *phronesis* performs for its possessor.

(i) Constitutive function. This is the ability, and eventually cognitive excellence, which enables an agent to perceive what the salient features of a given situation are from an ethical perspective, and to see what is required in a given situation as reason(s) for responding in certain ways. In the *phronimoi* this means that, after having noted a salient moral feature of a concrete situation calling for a response, they will be able to weigh different considerations and see that, say, courage is required when the risk to one's life is not overwhelming but the object at stake is extremely valuable; or that honesty is required when one has wronged a friend (cf. Russell, 2009, p. 21).

(ii) Integrative function. This component of *phronesis* involves integrating different components of a good life, especially in dilemmatic situations where different ethically salient considerations or virtues appear to be in conflict. Imagine, for instance, a situation in which honesty calls for revealing to a dying friend their partner's life-long unfaithfulness, while compassion pulls in the opposite direction, with perhaps specific features of the friend's personality and considerations stemming from your relationship to them further complicating the matter. In a situation like this, it may be unclear even for the relatively practically wise person what should be done. But, the thought is, it is *she* who will be best-placed to weigh such considerations in a way that manifests due concern for all of them and to integrate them

alongside everything else that she deems valuable in life overall. This is what the integrative function of *phronesis* enables one to do (cf. Russell, 2009, pp. 22, 262). This function is highly situation-specific, which means that traditional wisdom research in psychology, which homes in on more global capacities, is mostly irrelevant to the derivation of a *phronesis* construct. A notable exception here, however, is the recent Situated Wise-Reasoning Scale (SWIS), developed by Brienza and colleagues (2017). The SWIS operationalises the elements of wise-reasoning, by shifting from global, decontextualised reports to state level reports about concrete situations (cf. also Grossman, 2017).

However, these two features alone will not suffice for *phronesis*. For, on the one hand, one can possess abilities that perform both the integrative and constitutive functions, and yet be vicious. But as we saw above, the *phronimos* must already possess good habits, or at least will not be *phronimos* until she has such habits and has tailored her practical reasoning, understanding, and motivation to them and the values that they underscore. On the other hand, an implication of this, insofar as emotions are our prime motivational anchors, is that the *phronimos*' emotions are in harmony with her rational judgement and virtuous outlook and that they motivate her to behave accordingly. That is, she sees the dangerous as fearsome, is horrified by injustice, pained by others' undeserved suffering, and so on, and these emotions are felt in due proportion to their object and in turn offer reasons for responding in certain ways. Whether or not these features of the virtuous are conceptually best regarded as components or background conditions of *phronesis* is not important for our purposes; what is crucial is that absent such basis, *phronesis* cannot be present. We thus propose that an adequate operationalisation of *phronesis* should also incorporate a component of what can be called a 'blueprint' of the good life and another of 'emotional regulation'.

(iii) Blueprint. By a blueprint, we have in mind more what one might call 'moral identity', on the earlier-explained accounts, than a full-blown grand-end outline of the good life. *Phronetic* persons possess a general conception of the good life (*eudaimonia*) and adjust their moral identity to that blueprint, thus furnishing it with motivational force. This does not mean that each ordinary person needs to have the same sophisticated comprehension of the 'grand end' of human life as a philosopher or an experienced statesperson might have, in order to count as possessing *phronesis*. Rather the sort of grasp of a blueprint of the aims of human life informing (and informed by) practical wisdom is within the grasp of the ordinary well-brought-up individual and reflected in ordinary acts (cf. Broadie, 1991, esp. pp. 198–202). It draws on the person's standpoint of life as a whole and determines the place that different goods occupy in the larger context and how they interact with other goods (Segvic, 2009, p. 105). This blueprint is ideally 'on call' in every situation of action (Segvic, 2009, p. 158).

(iv) Emotional regulation. *Phronesis* requires, and contributes to, the agent's emotions being in line with her construal of a given situation, moral judgement, and decision (as explained above), thereby also offering motivation for the appropriate response. This is both because she will have already acquired natural virtues, that is, have shaped her emotions in ways that motivate her to behave as the virtuous person would, and also because having formed these habits and consolidated them through understanding and reasoning, she will have a robust intellectual basis for them; hence, enabling her to be emotionally intelligent. Notice that emotional regulation must not be understood here in terms of emotional suppression or policing, but rather as the infusion of emotion with reason, which calibrates the emotion in line with the morally and rationally warranted medial state of feeling, and the subsequent harmony between the two (Kristjánsson, 2018, chap. 9).

From a psychological viewpoint, investigating whether *phronesis* can help solve the gappiness problem is contingent on the development of a measure which allows *phronesis* to be empirically tested. Given the practical bent in Aristotle's ethical theory, and the recent resurgence in character education with an Aristotelian twist, as well as burgeoning interest in psychology for those matters and for research into such notions as wisdom, it is curious that no one has as yet sought to conceptualise *phronesis* with a view to carrying out psychological research on it: understanding its psychological origins, its development, and laying out potential avenues for its cultivation. Clearly, an instrument to measure *phronesis* would need to be a multi-faceted one where each part would either have to be designed from scratch or some existing measures – approximating each component – would have to be identified. In any case, what needs to be operationalised are the functions of moral sensitivity *qua* relevant-virtue recognition, moral adjudication *qua* virtue-conflict resolution, moral identity *qua* blueprint adherence, and emotion regulation *qua* proper reason-infusion of moral affect.

The present authors happen to be working on a potential *phronesis* instrument: a work that is still in the early stages of construct creation and trialling. For present purposes, however, a salient question beckons. There already exists in the moral psychology literature a widely discussed neo-Kohlbergian four-component model of moral functioning, which also has the aim – if not always explicitly stated – of solving the gappiness problem. Is there any potential value-addedness in a *phronesis*-based four-component model vis-à-vis the standard one?

Comparing the Four-Component Model of *Phronesis* with the Neo-Kohlbergian Four-Component Model of Moral Functioning

Kohlberg's enduring significance for moral education continued through the 'neo-Kohlbergians', especially James Rest, Darcia Narvaez, Stephen Thoma, and Muriel Bebeau (Rest et al., 2000). They developed a four-component model of moral functioning (sometimes

also referred to as 'Rest's model'; cf. Rest, 1984) that is particularly germane to the current article. While other multi-component constructs exist (see e.g. Nucci, 2017), which could serve as potential reference points for our proposed four-component model of *phronesis*, we will confine our attention here to the neo-Kohlbergian model, both for reasons of space and because of its prominence in the history of moral psychology. Notice that we are solely interested in this model here as one of moral decision making. Developmentally, the model is still rooted in the Kohlbergian assumption that moral development is the gradual natural ascendance of principled morality over convention. This flies in the face, for example, of the insights of moral domain theory (Turiel, 1983), mentioned earlier. We take no stand on that debate here, as our interest for present purposes is simply in how *phronesis*, once developed, functions.

The neo-Kohlbergians critiqued and refined Kohlberg's approach, taking some of his central elements on board while augmenting his work to include other dimensions of acting morally beyond Kohlberg's focus on moral judgement. According to Narvaez and Rest (1995), there are four psychological components of acting morally. These are: moral sensitivity, moral judgement, moral motivation, and implementation – with cognition and affect being intertwined within each component. The failure to bring moral action to fruition can lie in deficiencies in any of these four components, either individually or collectively. For example, *moral sensitivity*, defined as the ability to identify and attend to moral issues, could miscarry because of an individual's failure to draw inferences about how others might be affected by courses of moral action and a failure to feel empathy for them. *Moral judgement*, the ability to reason about and justify the morally ideal course of action, fails where reasoning abilities are compromised or perhaps simply remain undeveloped. *Moral motivation* 'implies that the person gives priority to the moral value above all other values and intends to fulfil it' (Narvaez & Rest, 1995, p. 386). A person who can perceive the relative merits of various goals but does *not* select the morally ideal choice will fail in moral action as a result of this deficiency in moral

motivation. Narvaez and Rest (1995) identify a fourth component of acting morally as '*implementation*', alternatively labelled '*character*'. This component is, however, not moral in itself: it consists rather of qualities that enable the actor to stay on (moral) task, such as ego-strength and social and psychological skills (Narvaez & Rest, 1995). Thus, in the absence of such abilities, moral action also miscarries.

The neo-Kohlbergian model postulates that there may be one or more separate reasons for moral failure. The corollary of the model is that any attempt to predict moral behaviour from one component – and here one might have in mind Kohlberg's emphasis on moral judgement – is insufficient on its own. The pedagogical implications of the model are that moral education needs to address all four components if the goal of implementing moral action is to be realised (Bebeau, Rest, & Narvaez, 1999). More recently, Nucci (2017) drew similar pedagogical conclusions from his understanding of character as a multifaceted developmental system, also consisting of four components.

Although componential models have proved persuasive from a theoretical point of view, their empirical testing has only taken place in a limited way. So while the moral judgement component of the neo-Kohlbergian model has been subjected to extensive testing via well-known DIT and ICM instruments (Thoma, 2014: Thoma, Derryberry, & Crowson, 2013), only one attempt seems to have been made to design an instrument homing in on all the components. You and Bebeau (2013) thus operationalised the four components in a self-report instrument designed to measure dentists' moral skills (cf. Chambers, 2011, for a more rudimentary version). However, this instrument captures the four components in a specific applied professional context only, not in a more general way. This means that a potential instrument designed on the basis of a four-component *phronesis* model could not be compared with an existing neo-Kohlbergian instrument in terms of incremental validity in predicting moral

action. What we can do, however, is to reflect on the way in which the components in these two models overlap or contrast theoretically.

First, we defined the 'constitutive function' of *phronesis* as the ability to notice a given situation as ethically salient and identify the relevant virtue(s) germane to that situation. This maps onto the component of moral sensitivity in the neo-Kohlbergian model, defined as 'the receptivity of the sensory perceptual system to social situations and the interpretation of the situation in terms of what actions are possible, who and what would be affected by each of the possible actions, and how the involved parties might react to possible outcomes' (Narvaez & Rest, 1995, p. 386). While the neo-Kohlbergian model is not couched in the language of virtue, it seems fair to suggest that the constitutive function of *phronesis* and moral sensitivity in this model are saliently similar, in that both fulfil the function of attending to, noticing, or perceiving a given situation as involving moral concerns.

Second, the 'integrative function' of *phronesis* (viz. the ability to weigh or adjudicate the relative priority of virtues in complex, dilemmatic situations) is arguably comparable with 'moral judgement' in the neo-Kohlbergian model. Narvaez and Rest (1995, p. 386) describe this component as enabling the agent to '[decide] which of the possible actions is most moral. The individual weighs the choices and determines what a person ought to do in such a situation.' Though neo-Aristotelians will no doubt point out that the neo-Kohlbergian model has its theoretical origins in a deontological approach to ethics, whereas the *phronesis* model presupposes a virtue-based approach, the two seem to be substantively equivalent here, insofar as it is the task of this second component both to weigh, evaluate, and adjudicate over different actions or virtues, respectively.

Third, we identified one more function of *phronesis* as that of possessing a blueprint of the good life that enables individuals to adjust their own moral identity to accord with the blueprint,

thereby furnishing it with motivational force. This component can be compared with 'moral motivation' in the neo-Kohlbergian model. However, while 'giving priority to the moral value above all other values and intending to fulfil it' (Narvaez and Rest, 1995, p. 386) may be functionally similar to having a blueprint of the good life (as *eudaimonia*) which orders moral priorities, the notion of a blueprint of what counts as a life well lived suggests a different theoretical function than simply securing the overridingness of moral value. The good life could, in some cases, demand giving priority to non-moral values (theoretical, aesthetic, etc.). The idea of the overridingness of morality is very much a deontological one that does not find a comfortable home in Aristotelian theory. Again, however, one could argue that what the neo-Kohlbergian model and the Aristotelian *phronesis* model share is a similar *function* in the moral sphere of human association (ordering moral priorities), such that they may be practically, if not theoretically, equivalent in terms of outcomes in most relevant cases of, say, everyday moral dilemmas.

Fourth, in turning to the final component of the two models, a more significant difference seems to emerge. For whereas the *phronesis* model speaks specifically of emotion regulation (fine-tuning the emotions motivating virtuous action in the given situation), the neo-Kohlbergian model's fourth component of 'implementation' emphasises ego-strength and social and psychological skills which combine in order to carry through the chosen course of action, with no specific mention made of emotion generation or regulation. Such general executive abilities would be identified by neo-Aristotelians as performance skills: those 'character traits that have an instrumental value in enabling the intellectual, moral and civic virtues' (Jubilee Centre for Character and Virtues, 2017, p. 5). For Aristotle, *phronesis* presupposes that the agent already wants the good and does not need to force herself to attain it. What is required is, rather, the infusion of emotions with reason so that the relevant feelings can be fine-tuned as needed. In this respect, the neo-Kohlbergian and *phronesis* models differ significantly. It will be recalled,

however, that the former model incorporates both cognitive and affective elements across all of its four components (Narvaez & Rest, 1995, p. 387). As such, it might be argued that this model will not be seen to stand in need of a discrete emotion component. On occasions, neo-Kohlbergians refer to the fourth component as 'character' (for example, Narvaez & Rest, 1995, p. 396), which would align the model with a fairly narrow, if common, understanding of the term 'character' as having to do with performance skills only. In that sense, Nucci's conception of character as a 'multifaceted dynamic developmental system' (2017, p. 2) has more affinities with an Aristotelian conception, although Nucci rejects understanding character as made up of 'virtues' in an Aristotelian sense (2017, p. 2).

As long as the two models under discussion here have not been operationalised and subjected to empirical testing, comparisons and contrasts between them can only take place at a level of theoretical abstraction – and remain fairly speculative. Theoretically inclined academics will no doubt insist on the significant differences between the two models in terms of their underlying philosophical provenance and orientation. Those are clearly grounded in different moral ontologies and epistemologies. Moreover, the components of the neo-Kohlbergian model are to be seen as 'internal processes necessary to produce a moral *act*' but not 'as personality traits or virtues' (Narvaez & Rest, 1995, p. 386). Of course, neo-Aristotelians will not claim that the components of *phronesis*, viewed in isolation, constitute virtues, but they will insist that as a combined 'ensemble of processes' (Narvaez & Rest, 1995, p. 387), they capture the psychological mechanisms underlying the virtue of *phronesis*.

More practically minded academics may observe, however, that at the functional level, the similarity between the two models is abundant. The 'constitutive function' of *phronesis* and the component of 'moral sensitivity' in the neo-Kohlbergian model are substantively equivalent since both fulfil the function of attending to, noticing, or perceiving a given situation as one

which involves moral concerns. The task of the second component of both models (the 'integrative function' or 'moral judgement' components) is to weigh up and adjudicate different virtues or actions. Third, the neo-Kohlbergian model and the *phronesis* model share the task of ordering moral priorities, although they are grounded in different theoretical assumptions. However, the fourth component of the two models differs substantively, as we observed above, and that is where the neo-Kohlbergian model would need much more than a modest revision from the perspective of Aristotelian *phronesis*.

It is outside the purview of this article to adjudicate whether a deontological approach or a virtue-based approach to morality is more adequate, or to hypothesise whether an instrument based on the neo-Kohlbergian model would give a better account than a *phronesis*-based instrument of how the knowledge–action gap can be bridged. The ideal situation would seem to be one in which both sorts of instruments existed and could be compared in terms of conceptualisations and findings. The present authors are currently working on one part of that task: namely, the development of a multi-component *phronesis* measure.

Conclusion

We have reviewed the literatures which have developed in the wake of the finding that moral reasoning alone only moderately predicts moral behaviour. Unfortunately, the other main contenders, moral identity and moral emotions, only predict moral behaviour moderately themselves, at least when examined independently. The logical conclusion seems to be to focus attention on multi-component constructs as potential solutions to the gappiness problem.

Because of the burgeoning interest in Aristotelian virtue ethics across various sub-areas of social science, for example within moral psychology and moral education, with *phronesis* often given pride of place as a meta-virtue of moral adjudication, it seemed to be a worthwhile enterprise to offer an account of what a *phronesis*-solution of the gappiness problem might

look like. We identified four components of *phronesis* and elaborated on those in order to offer hints about how those might be operationalised. In view of (at least) surface similarities with the well-known neo-Kohlbergian four-component model, the key elements of this model were compared with our *phronesis* model. Everything that we have said so far indicates that operationalising the *phronesis* model for the purposes of instrument design would be a feasible and potentially fruitful enterprise – but so would operationalising the neo-Kohlbergian model. It is, in our view, a pity that the latter model has so far mostly been mined for its moral judgement component only.

While we talked about two logically independent aims of this article in the opening section, our overarching aim – integrating the two – has been to introduce what seems to be a theoretically promising way of bridging the gap between knowing what is good and reasoning well, and doing what is good *for the right reasons*. Drawing on the relevant psychological theories as well as Aristotle's moral philosophy, we examined what a multi-component construct of *phronesis* might look like.

In sum, we consider *phronesis* a promising psycho-moral developmental construct, although it may appear fairly late in the developmental trajectory, and we believe that analysing it as a potential model of moral decision making is a useful enterprise. That said, we acknowledged earlier that most of the little that Aristotle himself said about the development leading up to *phronesis* requires some serious modern overhaul. Current neo-Aristotelians have unfortunately not provided us with revised, empirically grounded, accounts of *phronesis* development. Yet, despite the paucity of Aristotelian theory on how *phronesis qua* intellectual virtue is (best) developed, nurtured, and sustained, we hope that we have at least succeeded in introducing the concept of *phronesis* into the moral psychology literature on the gappiness

problem, shown its potential relevance there, and indicated what further research needs to be undertaken to gauge whether its potential is specious or real.

References

Adams, R.M. (2007). *A theory of virtue: Excellence in being for the good*. Oxford: Oxford University Press.

Annas, J. (2011). *Intelligent virtue*. Oxford: Oxford University Press.

Aquino, K., & Reed, A.II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83*, 1423–1440.

Aquino, K., & Freeman, D. (2009). Moral identity in business situations: A social cognitive framework for understanding moral functioning. In D. Narvaez & D.K. Lapsley (Eds.), *Personality, identity and character: Explorations in moral psychology* (pp. 375–395). Cambridge: Cambridge University Press.

Aquino, K., Freeman, D., Reed, A.II, Lim, V.K.G., & Felps, W. (2009). Testing a social cognitive model of moral behaviour: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology, 97*, 123–141.

Aristotle (2002). *Nicomachean ethics*. C. Rowe (Trans.) and S. Broadie (Ed.). Oxford: Oxford University Press.

Arsenio, W.F., Gold, J., & Adams, E. (2006). Children's conceptions and displays of moral emotions. In M. Killen & J.G. Smetana (Eds.), *Handbook of moral development* (pp. 581–609). Mahwah, NJ: Lawrence Erlbaum Associates.

Barriga, A.Q., Morrison, E.M., Liau, A.K., & Gibbs, J.C. (2001). Moral cognition: Explaining the gender difference in anti-social behaviour. *Merrill-Palmer Quarterly, 47*, 532–562.

Batson, C.D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: Erlbaum.

Batson, C.D. (2011). What's wrong with morality? *Emotion Review, 3*, 230–236.

Batson, C.D., & Thompson, E.R. (2001). Why don't moral people act morally? *Motivational Considerations, 10*, 54–57.

Batson, C.D., Thompson, E.R., Seuferling, G., Whitney, H., & Strongman, J.A. (1999). Moral hypocrisy: Appearing moral to oneself without behaving being so. *Journal of Personality and Social Psychology, 77*, 525–537.

Bebeau, M.J., Rest, J.R, & Narvaez, D. (1999). Beyond the promise: A perspective on research in moral education. *Educational Researcher, 28*, 18–26.

Bergman, R. (2002). Why be moral? A conceptual model from developmental psychology. *Human Development, 45,* 104–124.

Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin, 88*, 1–45.

Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective. *Developmental Review, 3*, 178– 210.

Blasi, A. (2004). Moral functioning: Moral understanding and personality. In D.K. Lapsley & D. Narvaez (Eds.), *Moral development, self and identity* (pp. 335–347). Mahwah, NJ: Erlbaum.

Brienza, J.P. Kung, F.Y.H., Santos, H.C., Bobocel, D.R., & Grossman, I. (2017). Wisdom, bias and balance: Toward a process-sensitive measurement of wisdom-related cognition. *Journal of Personality and Social Psychology*, in press. Retrieved July 26, 2018, from http://psycnet.apa.org/doiLanding?doi=10.1037%2Fspp0000171

Broadie, S. (1991). *Ethics with Aristotle*. Oxford: Oxford University Press.

Burnyeat, F.M. (1980). Aristotle on learning to be good. In A.O. Rorty (Ed.), *Essays on Aristotle's ethics* (pp. 69–92). Berkeley, CA: University of California Press.

Cantor, N. (1990). From thought to behaviour: 'Having' and 'doing' in the study of personality and cognition. *American Psychologist, 45*, 735–750.

Carlo, G. (2006). Care based and altruistically based morality. In M. Killen & J.G. Smetana (Eds.), *Handbook of moral development* (pp. 551–579). Mahwah, NJ: Lawrence Erlbaum Associates.

Carr, W. (1995). *For education: Towards critical educational inquiry*. Buckingham: Open University Press.

Chambers, D. W. (2011). Developing a self-scoring comprehensive instrument to measure Rest's four-component model of moral behavior: The moral skills inventory. *Journal of Dental Education, 75*, 23–35.

Colby, A., & Damon, W. (1992). *Some do care: Contemporary lives of moral commitment*. New York: The Free Press.

Curzer, H. (2012). *Aristotle and the virtues*. Oxford: Oxford University Press.

Dahl, A. (2018). New beginnings: An interactionist and constructivist approach to early moral development. *Human Development* (in press).

Damon, W. (1984). Self-understanding and moral development from childhood to adolescence. In W.M. Kurtines & J.L Gewirtz (Eds.), *Morality, moral behavior, and moral development*. New York: John Wiley.

Daniel, E. Dys, S.P., Buchmann, M., & Malti, T. (2014). Developmental relations between sympathy, moral emotion attributions, moral reasoning and social justice values from childhood to early adolescence. *Journal of Adolescence, 37*, 1201–1214.

Davis, M., Mitchell, K., Hall, J., Lothert, J., Snapp, T., & Meyer, M. (1999). Empathy, expectations and situational preferences: Personality influences on the decision to participate in volunteering helping behaviours. *Journal of Personality, 67*, 469–503.

Doris, J. (2002). *Lack of character: Personality and moral behavior*. Cambridge: Cambridge University Press.

Eisenberg, N. (2000). Emotion, regulation and moral development. *Annual Review of Psychology, 51,* 665–697.

Eisenberg, N., & Fabes, R.A. (1998). Prosocial development. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology, vol. 3: Social emotional and personality development* (pp. 701–778). New York: Wiley.

Eisenberg, N., Guthrie, I.K., Murphy, B.C., Shepard, S.A., Cumberland, A., & Carlo, G. (1999). Consistency and development of prosocial dispositions: A longitudinal study. *Child Development, 70*, 1360–1372.

Eisenberg, N., & Miller, P.A. (1987). The relation of empathy to prosocial and related behaviours. *Psychological Bulletin, 101*, 91–119.

Eisenberg, N., Spinrad, T.L., & Sadovsky, A. (2006). Empathy related responding in children. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 517–549). Mahwah, NJ: Erlbaum.

Ferkany, M. (2018). A developmental theory for Aristotelian practical intelligence. *Journal of Moral Education*, in press. Retrieved July 31, 2018, from https://www.tandfonline.com/doi/pdf/10.1080/03057240.2018.1461081?needAccess=true

Flyvbjerg, B. (2001). *Making social science matter*. Cambridge: Cambridge University Press.

Flyvbjerg, B., Landman, T., & Schram, S. (Eds.) (2012). *Real social science: Applied phronesis*. Cambridge: Cambridge University Press.

Fowers, B. (2005). *Virtue and psychology: Pursuing excellence in ordinary practices*. Washington, D.C.: American Psychological Association.

Gibbs, J.C. (2003). *Moral development and reality: Beyond the theories of Kohlberg and Hoffman*. Thousand Oaks, CA: Sage Publications.

Grossman, I. (2017). Wisdom in context. *Perspectives on Psychological Science, 12*, 233–257.

Gulliford, L. & Roberts, R.C. (2018). Exploring the 'unity' of the virtues: The case of an allocentric quintet. *Theory & Psychology, 28*, 208–226.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*, 814–834.

Hardy, S.A. (2006). Identity, reasoning and emotion: An empirical comparison of three sources of moral motivation. *Motivation and Emotion, 30*, 207–215.

Hardy, S.A., & Carlo, G. (2005). Identity as a source of moral motivation. *Human Development, 48,* 232–256.

Hardy, S.A., & Carlo, G. (2011). Moral identity: What is it, how does it develop and is it linked to moral action? *Child Development Perspectives, 5*, 212–218.

Hart, D., & Fegley, S. (1995). Prosocial behaviour and caring in adolescence: relations to self-understanding and social judgement. *Child Development, 66*, 1346–1359.

Hertz, S.G., & Krettenauer, T. (2016). Does moral identity effectively predict moral behaviour? A meta-analysis. *Review of General Psychology, 20,* 129–140.

Hoffman, M.L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge: Cambridge University Press.

Hume, D. (1978). *A treatise of human nature*. Oxford: Clarendon Press.

Huo, Y., & Kristjánsson, K. (2018). Why is there lack of growth in character virtues? An insight into business students across British business school. In D. Carr (Ed.), *Cultivating moral character and virtue in professional practice* (pp. 207–221). London: Routledge.

Hursthouse, R. (2006). Practical wisdom: A mundane account. *Proceedings of the Aristotelian Society, 106*, 285–309.

Jubilee Centre for Character and Virtues (2017). *A Framework for Character Education in Schools*, Birmingham: Jubilee Centre for Character and Virtues. Retrieved July 26, 2018 from:

http://www.jubileecentre.ac.uk/userfiles/jubileecentre/pdf/charactereducation/Framewo rk%20for%20Character%20Education.pdf

Kant, I. (1964). *Metaphysics of morals.* M.J. Gregor (trans.). New York: Harper & Row.

Kohlberg, L. (1958). The development of modes of thinking and choices in years 10 to 16. Ph.D. Dissertation, University of Chicago.

Kolhberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In D.A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347–480). Chicago: Rand McNally.

Kohlberg, L. (1981). *Essays on moral development, vol. 1: The philosophy of moral development*. San Francisco: Harper & Row.

Kohlberg, L., & Candee, D. (1984). The relationship of moral judgment to moral action. In W.M.Kurtines & J.L. Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 53–73). New York: Wiley.

Kraut, R. (2006). Doing without morality: Reflections on *Dein* in Aristotle's *Nicomachean Ethics*. *Oxford Studies in Ancient Philosophy, 30*, 159–200.

Kristjánsson, K. (2010). *The self and its emotions*. Cambridge: Cambridge University Press.

Kristjánsson, K. (2015a). *Aristotelian character education*. London: Routledge.

Kristjánsson, K. (2015b). *Phronesis* as an ideal in professional medical ethics: Some preliminary positionings and problematics. *Theoretical Medicine and Bioethics*, *36*, 299–320.

Kristjánsson, K. (2018). *Virtuous emotions*. Oxford: Oxford University Press.

Krettenauer, T., Colasante, T., Buchman, M., & Malti, T. (2014). The development of moral emotions and decision-making from adolescence to early adulthood: A 6 year longitudinal study. *Journal of Youth Adolescence, 43*, 583–596.

Krettenauer, T., Malti, T., & Sokol, B. (2008). The development of moral emotion expectancies and the happy victimiser phenomenon: A critical review of theory and application. *European Journal of Developmental Science, 2*, 221–235.

Lapsley, D.K., & Hill, P.L. (2009). The development of moral personality. In D. Narvaez & D.K. Lapsley (Eds.), *Personality, identity and character: Explorations in moral psychology* (pp. 185–213). Cambridge: Cambridge University Press.

Lapsley, D.K., & Narvaez, D. (2004). A social-cognitive approach to the moral personality. In D.K. Lapsley & D. Narvaez (Eds.), *Moral development, self and identity* (pp. 1–20). Mahwah, NJ, Lawrence Erlbaum.

Lapsley, D.K., & Narvaez, D. (2008). 'Psychologized morality' and its discontents, or, do good fences make good neighbours? In F. Oser & W. Veugelers (Eds.), *Getting involved: Global citizenship development and sources of moral value* (pp. 279–292). Rotterdam: Sense Publishers.

MacIntyre, A. (1981). *After virtue*. London: Duckworth.

Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behaviour: A meta-analysis. *Child Development, 84*, 397–412.

Malti, T., & Latzko, B. (2010). Children's moral emotions and moral cognition: Towards an integrative perspective. *New Directions for Child and Adolescent Development, 129*, 1–10.

Malti, T., Gummerum, M., Keller, M., & Buchmann, M. (2009). Children's moral motivation, sympathy and prosocial behaviour. *Child Development, 80*, 442–460.

Malti, T., & Ongley, S.E. (2014). The development of moral emotions and moral reasoning. In M. Killen & J.G. Smetana (Eds.), *Handbook of moral development* (pp. 163–183). New York: Psychology Press.

Matsuba, M.K., & Walker, L.J. (2004). Extraordinary moral commitment: Young adults involved in social organisations. *Journal of Personality, 72*, 413–436.

Menesini, E., & Camodeca, M. (2008). Shame and guilt as behaviour regulators: Relationships with bullying, victimization and prosocial behaviour. *British Journal of Developmental Psychology, 26*, 183–196.

Miller, P.A., Eisenberg, N., Fabes, R.A., & Shell, R. (1996). Relations of moral reasoning and vicarious emotions to young children's prosocial behaviour towards peers and adults. *Developmental Psychology, 32*, 210–219.

Montada, L. (1993). Understanding oughts by assessing moral reasoning or moral emotions. In G.G. Noam & T. E. Wren (Eds.), *The moral self* (pp. 292–203). Cambridge, MA: MIT Press.

Morgan, B., Gulliford, L., & Kristjánsson, K. (2017). A new approach to examining moral virtue: The multi-component gratitude measure. *Personality and Individual Differences 107*, 179–189.

Moshman, D. (2004). False moral identity: Self-serving denial in the maintenance of moral self-conceptions. In D. K. Lapsley & D. Narvaez (Eds.), *Moral development, self, and identity* (pp. 83–110). Mahwah: Lawrence Erlbaum Ass.Narvaez, D. (2008). Triune ethics: The neurobiological roots of our multiple moralities. *New Ideas in Psychology, 26*, 95–119.

Narvaez, D., & Lapsley, D.K. (2005). The psychological foundations of moral expertise. In D.K.Lapsley & F.C. Powers (Eds.), *Character psychology and character education* (pp. 140–165). Notre Dame, IN: University of Notre Dame Press.

Narvaez, D., & Rest, J. (1995). The four components of acting morally. In W. Kurtines & J. Gewirtz (Eds.), *Moral behavior and moral development: An introduction* (pp. 385–400). New York: McGraw-Hill.

Nucci, L. (2017). Character: A multifaceted developmental system. *Journal of Character Education, 13,* 1–16.

Paris, P. (2017). Scepticism about virtue and the five-factor model of personality. *Utilitas, 29*, 423–452.

Penner, L. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues, 58*, 447–467.

Piaget, J. (1997). *The moral judgement of the child*. New York: Free Press.

Perugini, M., & Leone, L. (2009). Implicit self-concept and moral action. *Journal of Research in Personality, 43*, 747–754.

Pratt, M.W., Arnold, M.L., & Lawford, H. (2009). Growing towards care: A narrative approach to prosocial moral identity and generativity of personality in emerging adulthood. In D. Narvaez & D.K. Lapsley (Eds.), *Personality, identity and character: Explorations in moral psychology* (pp. 295–315). Cambridge: Cambridge University Press.

Pratt, M.W., Hunsberger, B., Pancer, S.M., & Alisat, S. (2003). A longitudinal analysis of personal value socialisation: correlates of moral self in adolescence. *Social Development, 12,* 563–585.

Reed, A.II., & Aquino, K.F. (2003). Moral identity and the expanding circle of moral regard towards out-groups. *Journal of Personality and Social Psychology, 84*, 1270–1286.

Reimer, K. Dewitt Goudelock, B.M., & Walker, L.J. (2009). Developing conceptions of moral maturity: Traits and identity in adolescent personality. *The Journal of Positive Psychology, 4*, 372–388.

Reiner, P. (1991). Aristotle on personality and some implications for friendship. *Ancient Philosophy, 11*, 67–84.

Rest, J. (1984). The major components of morality. In W.M. Kurtines & J.L Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 24–40). New York: John Wiley.

Rest, J., Narvaez, D. Thoma, S.J., & Bebeau, M.J. (2000). A neo-Kohlbergian approach to morality research. *Journal of Moral Education, 29*, 381– 395.

Russell, D.C. (2009). *Practical intelligence and the virtues*. Oxford: Oxford University Press.

Schwartz, B., & Sharpe, K.E. (2010). *Practical wisdom: The right way to do the right thing*. New York: Riverhead Books.

Segvic, H. (2009). *From Protogoras to Aristotle: Essays in ancient moral philosophy*. Princeton: Princeton University Press.

Sherman, N. (1989). *The fabric of character: Aristotle's theory of virtue*. Oxford: Oxford University Press.

Smetana, J., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 23–45). New York: Psychology Press.

Spinrad, T.L., & Eisenberg, N. (2017). Compassion in children. In E.M. Seppala, E. Simon-Thomas, S.L. Brown, M.C. Worline, C. Daryl-Cameron, & J.R. Doty (Eds.), *The Oxford handbook of compassion science* (pp. 53–63). Oxford: Oxford University Press.

Swanton, C. (2016). Developmental virtue ethics. In J. Annas, D. Narvaez, & N.E. Snow (Eds.), *Developing the virtues: Integrating perspectives* (pp. 116–134). Oxford: Oxford University Press.

Tangney, J.P., Stuewig, J., & Mashek, D.J. (2007). What's moral about the self-conscious emotions? In J.L. Tracy, R.W. Robins, & J.P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 21–37). New York: Gulliford Press.

Thoma, S. (2014). Measuring moral thinking form a neo-Kohlbergian perspective. *Theory and Research in Education, 12*, 347–365.

Thoma, S., Derryberry, W.P., & Crowson, H.M. (2013). Describing and testing an intermediate concept measure of adolescent moral thinking. *European Journal of Developmental Psychology, 10*, 239–252

Trommsdorff, G., & Friedlmeier, W. (1999). Motivational conflict and prosocial behaviour of Kindergarten children. *International Journal of Behavioural Development, 23*, 413–429.

Trommsdorff, G., Friedlmeier, W., & Mayer, B. (2007). Sympathy, distress, and prosocial behavior of preschool children in four cultures. *International Journal of Behavioral Development, 31*, 284–293.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge: Cambridge University Press.

Turiel, E., & Nucci, L. (2018). Moral development in contexts. In A. Dick & U. Mueller (Eds.), *Advancing developmental science: Philosophy, theory and method (*pp. 95–109). London: Routledge.

Varghese, J., & Kristjánsson, K. (2018). Experienced UK nurses and the missing u-curve of virtue-based reasoning. In D. Carr (Ed.), *Cultivating moral character and virtue in professional practice* (pp. 151–165). London: Routledge.

Walker, L.J. (2004). Gus in the GAP: Bridging the judgment-action gap in moral functioning. In D.K. Lapsley & D. Narvaez (Eds.), *Moral development, self and identity* (pp. 1–20). Mahwah, NJ, Lawrence Erlbaum.

You, D., & Bebeau, M. J. (2013). The independence of James Rest's components of morality: Evidence from a professional ethics curriculum. *Ethics and Education, 8*, 1–15.