

UNIVERSITY OF
BIRMINGHAM



THE
JUBILEE CENTRE
FOR CHARACTER & VIRTUES

PHRONESIS:

DEVELOPING A CONCEPTUALISATION AND AN INSTRUMENT

RESEARCH REPORT

KRISTJÁN KRISTJÁNSSON
CATHERINE DARNELL
BLAINE FOWERS
FRANCISCO MOLLER
DAVID POLLARD

with
STEPHEN THOMA

www.jubileecentre.ac.uk



Jubilee Centre for Character and Virtues

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Phronesis:

Developing a Conceptualisation and an Instrument Research Report

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Foreword

We live in challenging times. On the one hand, incredible technological and medical advances unfold in front of our eyes. On the other hand, there is an increasing understanding that mere knowledge and technological sophistication may not be sufficient to combat increasingly acute world problems, such as social unrest and polarisation, ecological disasters and epidemiological catastrophes. To master such challenges, social critics have increasingly called for greater appreciation of ethics-bound wisdom.

The increasing interest in the topic of practical wisdom has led to an exponential growth of an academic community and the general public interested in the topic. On amazon.co.uk alone, there are over 50,000 books on the topic of wisdom. Notably, the scientific evidence lags behind the popular, folktale-esque recommendations encompassed in such series as the 'Chicken Soup for the Soul'.

The science of wisdom started to emerge in the 1970s and has experienced a range of transformations over the last four decades. At the beginning, the field was mostly interested in the domain of aging and societal beliefs about wisdom. Next, the cognitive revolution caught up with the science of wisdom and the 1990s were dominated by a cognitive paradigm of focussing on knowledge and reflection. At the dawn of new millennium, a personality-oriented perspective took over, aiming to understand characteristics attributed to wise persons. However, when approaching the second decade of the 21st century, it became increasingly evident that fuller understanding of a 'wise personality' requires appreciation of the cultural and social context: depending on the situation, one's wisdom may look different.

Curiously, this increasingly contextualised perspective on wisdom in empirical sciences is surprisingly consistent with some interpretations of the classic Aristotelian writings on this topic. From the Aristotelian perspective, practical wisdom or *phronesis* is the capacity of knowing what cognitive, emotional and motivational strategies to enact across different circumstances in one's life. In other words, it is about identifying the fit of one's behavioural repertoire to the demands of the situation at hand.

The present Jubilee Centre report represents a critical advance in this body of literature, as it is among the first attempts to directly target the topic of practical wisdom from a rigorous empirical perspective, simultaneously integrating foundational Aristotelian insights and methods of developmental psychology. The target of the report is to identify ways to assess *phronesis*-like virtues in the youth – an admirable goal given the dearth of robust empirical literature on this topic. The second goal of the project involved addressing the 'gappiness problem' of moral psychology research – ie, the frequent lack of correspondence between virtuous intentions and actual behaviour.

The report presents results from two preliminary studies on this topic, evaluating psychometric characteristics of a multi-faceted *phronesis* measure, as well as its relationship to morality and social behaviour. Though further work is needed to comprehensively evaluate the nuances of the assessment instrument, the initial results are promising in terms of the data fit to the theoretical model and the predicted outcome-related markers. Through this fundamental effort, research on practical wisdom has moved one step closer toward having a scientific understanding of the 'gappiness problem' and identifying a valid measure of practical wisdom.

As the science of wisdom gains momentum, and scholars start to devote more attention to the topic of measurement of virtuous qualities, the next natural step involves identifying the best tools to foster this virtue across challenging contexts youths and adults experience in their lives. Though the current Jubilee Centre report does not yet address this question, a proof-of-concept intervention for fostering practical wisdom among the youth is ongoing. Notably, evaluation of the success of an intervention requires robust and valid assessment tools, suggesting the bidirectional relationship between the present and the forthcoming intervention project from the Jubilee Centre team.

Whether practical wisdom can help us combat the problems societies face today remains a critical question at the forefront of scientific research. With the Jubilee Centre project on *phronesis*, the science of wisdom has come one step closer toward addressing this question.

Professor Igor Grossmann,
Professor of Psychology
University of Waterloo, Canada

Executive Summary

According to Aristotelian character developmental theory, young people who have acquired the right moral traits through habituation and role modelling need gradually to develop the intellectual virtue of *phronesis*, or practical wisdom, to guide their decision-making; otherwise, their moral life will be fragmented, uncritical and lacking in intrinsic value. The upsurge of interest in neo-Aristotelian forms of character education have thus led to a renewed interest in understanding the workings of *phronesis*.

At the same time, social scientists, educationists and professional ethicists have turned their attention to the role that *phronesis* plays in the education and practice of professionals in fields such as teaching, medicine, nursing, law and business, as well as to the more general role of *phronesis* in helping agents to navigate their social worlds.

Despite some consensus on the nature of *phronesis* as an integrative, intellectual meta-virtue, no rigorous measurable conceptualisation of *phronesis* exists, and no psychological instrument has yet been designed to measure it. That said, instruments to measure wisdom, more generally, may offer some potential overlaps, as well as measures of meta-cognition and critical thinking. However, these tend to be grounded in different philosophical assumptions from those underpinning *phronesis*. It does not help that Aristotle himself was fairly reticent about the specific features of *phronesis* and how it develops. There is currently a mismatch, therefore, between the interest in *phronesis* and serious attempts to specify and evaluate it.

This report is the result of research motivated, firstly, by the hypothesis that Aristotle may have been on the right track in suggesting that *phronesis* bridges the gap between moral knowledge and action in duly developed moral agents (typically referred to in contemporary moral psychology as the ‘gappiness problem’). No one to date has, however, explored this hypothesis empirically. Secondly, therefore, it is incumbent upon Aristotle-inspired psychologists and educationists to take on the task of designing

an instrument that measures *phronesis* and its development, as well as to test the aforementioned hypothesis by seeing how well *phronesis* predicts moral behaviour and how it fares *vis-à-vis* other candidates. Such instrument design requires the preliminary conceptual work of operationalising the construct of *phronesis*.

This report:

- Explores the conceptual contours of *phronesis* and proposes a four-componential model based on four functions of *phronesis* as constitutive, integrative, drawing on a blueprint of the good life and overseeing emotion regulation;
- Describes two empirical pilot studies (one conducted with an adult sample and the other with an adolescent sample) to test this model via a newly designed *Phronesis* Inventory. The studies were conducted to investigate whether the proposed *phronesis* model is a suitable frame through which to investigate the relevant features of morality and their relation to prosocial behaviour;
- Discusses and contextualises the new conceptualisation and instrument in the context of current research in moral psychology;
- Paves the way for further practical research and recommends next steps for academics and practitioners interested in *phronesis*.

Key findings

- A critical review of the literature established that the proposed four-componential construct of *phronesis* is well grounded in Aristotle’s own texts, while also going beyond them by drawing on research in modern moral psychology. Specifically, it captures the core functions that *phronesis* scholars have typically considered this virtue to perform.
- In both the pilot studies it was found that the hypothesised *phronesis* model fits the data well. Previously validated measures that were predicted to be good approximations of the components of the *phronesis* model were found to structurally relate to the predicted latent components in all but one case.

- Most importantly, the latent components were found to be structurally related to a predicted latent *phronesis* variable and, promisingly, this variable was found to predict the latent prosocial behaviour variable.
- Furthermore, the findings also suggested that the proposed *phronesis* model may have validity in both adult and adolescent samples, which has important implications for solving the ‘gappiness problem’.

Key recommendations

The report recommends that:

- Researchers continue to develop and nuance a conceptual specification of *phronesis*, especially one that resonates with the needs and expectations of adolescents and young adults (for instance, students of professional ethics where *phronesis* is crucial);
- Greater clarification be provided on the distinction between an Aristotelian concept of *phronesis* and other related constructs of practical wisdom, for example that of Alasdair MacIntyre, as well as various wisdom concepts in psychology;
- The conceptual specification of *phronesis* developed in this report be brought into line with state-of-the-art theorising in developmental psychology;
- Potential *phronesis*-enhancing interventions be trialled at both school and university levels;
- Further collaboration be sought between psychologists, philosophers and educationists in order to pool the various resources available to academics interested in *phronesis* research.

1 Purpose of the Report

The initial motivation behind this project was to investigate how young people learn to bridge the gap between virtue literacy and moral reasoning about their virtues, on the one hand, and virtuous moral action, on the other. Aristotelian and neo-Aristotelian virtue ethics, which forms the theoretical basis of work in the Jubilee Centre for Character and Virtues (2017), has long assumed that the gradual development of the intellectual virtue of *phronesis* (or practical wisdom) in young people plays a fundamental role in the bridging of this moral 'gap', in particular as a means of adjudicating potential virtue conflicts. However, this assumption, although robust and respectable philosophically, has so far been underexplored psychologically and educationally. The main purpose of the *Phronesis* Project was to understand and begin to fill in these lacunae in the literature. More specifically, the current report focusses on the development of a measurable construct of *phronesis* and the design of an inventory to assess this measurement.

The research questions that initially guided the research work were:

- How can *phronesis* be conceptualised in a way that is reasonably faithful to its Aristotelian provenance but also potentially useful from a current psychological perspective?
- Is it, in principle, possible to measure *phronesis*, and can a new *Phronesis* Inventory be developed?
- When and how does *phronesis* develop?
- Can *phronesis* bridge the gap between moral thought and action?

This report does not purport to offer definitive answers to all these questions. Nevertheless, significant strides have been made since the initiation of the research project, and an extensive overview paper about a possible conceptual model of *phronesis*, written by the research team (Darnell *et al.*, 2019), has already garnered lively interest and several academic citations. Some of the theoretical findings of that paper are elaborated upon

in the Background section of this report. Moreover, a pilot study was conducted, reported upon in Sections 3–5, which tested a new inventory designed by the research team. As will become apparent in due course, these tests bode well for the further development of the inventory and seem to confirm the Aristotelian hypothesis that *phronesis* may, indeed, play a role in resolving the proverbial 'gappiness problem'.

This report offers initial insights into the findings of structural equation modelling performed on the pilot study data. In a sense, then, this report gives readers a synopsis of the first phase of the project and considers the likely future direction of this work.

‘NOR IS *PHRONESIS* ABOUT UNIVERSALS ONLY. IT MUST ALSO COME TO KNOW PARTICULARS, SINCE IT IS CONCERNED WITH ACTION AND ACTION IS ABOUT PARTICULARS.’



Aristotle, *Nicomachean Ethics*, 1141b

In addition to the purpose of reporting on the *Phronesis* Project specifically, this report may be seen as a contribution to a wider discourse, increasingly popular in current psychology, about the role of *wisdom* in human life. Admittedly, *phronesis* is quite a narrowly circumscribed capacity and perhaps not sufficient to account for what ordinary people refer to when they talk about someone (say, an old sage) as possessing bountiful world wisdom. Since psychologists are typically more interested in lay constructs – what those mean and how they are correlated with psychosocial outcomes – than technical concepts that play a role only within specific



academic language games, they have tended to cast their net wider in search for wisdom than simply focussing on the contours of *phronesis* (see Kristjánsson, 2020). Although the current report does not address the wider psychological concept of wisdom, it is worth bearing in mind that in the most up-to-date work on that concept, Igor Grossmann, with various colleagues, has developed a model that is meant to be more sensitive than standard psychological models to how variable wisdom seems to be across situations (Grossmann, 2017). The outcome is a recent instrument (Brienza *et al.*, 2018) that is meant to situate wisdom and wisdom exemplars within particular individual, educational, material-specific, situational and cultural contexts: an instrument that, in a way, closes the circle of wisdom research by bringing it back into the fold, or at least close to the fold, of *phronesis*. This report and the pilot study, however, constitute an even more decisive move toward Aristotelian *phronesis*.

In addition to moving the specific discourse on *phronesis* forward within moral psychology and moral education, the present researchers hope that the findings reported on here also offer some more general enlightenment on the role of wisdom in the good (understood as the flourishing, virtuous and well-rounded) life.

‘*PHRONESIS... IS ABOUT HUMAN CONCERNS, ABOUT WHAT IS OPEN TO DELIBERATION.*’

⊗ Aristotle, *Nicomachean Ethics*, 1141b



2 Background

Phronesis is a key concept in Aristotelian and Aristotle-inspired theories of moral and character education (Kristjánsson, 2015a). 'Character education' here refers to the cultivation of positive individual traits that are conducive to and constitutive of human flourishing, individually and societally (Jubilee Centre, 2017), and Aristotelians refer to those traits as 'virtues'. In short, *phronesis* refers to the capacity of knowing and enacting the right course of (moral) action through a process of identifying and deliberating between competing values, emotions and alternatives. It:

- is a virtue of autonomous, critical thinking;
- deals with human action;
- consists of both instrumental cleverness and already habituated virtues;
- involves excellence in practical deliberation.

To be more accurate, Aristotle defines *phronesis* as an intellectual meta-virtue that guides the moral virtues. Feeding on character traits cultivated in the young through habituation, *phronesis* – after it comes into play – re-evaluates those traits critically, allowing them to share in reason. One of its core functions is to assess the relative weight of competing values, courses of action and emotions with respect to human flourishing (*eudaimonia*): the ultimate good and unconditional end of human beings. It adjudicates the relative weight of different virtues in conflict situations and enables us to reach a measured verdict about what to feel and do. The idea here is this: we all possess different sets of virtues – moral, civic, intellectual and performative (Jubilee Centre, 2017). However, the demands of these virtues often come into conflict with one another, between sets or within sets. For example, it is difficult enough to learn how to be honest. It is even more difficult, however, to know what to do when honesty clashes with considerateness. It is then that we need *phronesis* for arbitration.

2.1 THE *PHRONESIS* BANDWAGON: SOME LOOSE WHEELS¹

Over the last 30 years or so, *phronesis* has not only been studied with more rigour in philosophy than ever before, it has also become something of a buzzword within areas of social science; both socio-political theory and psychology. It has also acquired a status within formidable recent approaches of the virtue ethical kind to professional ethics, especially in the so-called 'people professions', such as nursing, law, business/management, social work, teaching, psychotherapy and medicine (Fowers, 2005; Schwartz and Sharpe, 2010; Kristjánsson, 2015b; Darnell *et al.*, 2019; Arthur *et al.*, 2020). It remains a cause for surprise and disappointment, however, why so little has been written on *phronesis* in the context of primary and secondary education, even by Aristotle-inspired educationists, given that *phronesis* is nothing less than the glue that keeps Aristotelian character education together. Here are a few possible explanations for this lacuna:

- Most of the literature on Aristotelian character education is geared towards younger learners who need to be 'habituated' into the good, and many theorists interpret Aristotle as saying that *phronesis* is not developed until early adulthood, or even later. However, this creates the apparent educational paradox of habituating young students uncritically into ultimately becoming critical choosers.
- It is easier to design school interventions using service learning or role modelling than methods that develop critical thinking, and it is easier to focus on individual virtues, such as compassion or gratitude, than complex virtue-conflict scenarios. However, adolescence is precisely the age of moral virtue conflicts.
- Aristotle was not transparent himself about when and how *phronesis* is to be cultivated.

All in all, then, although there is clearly a *phronesis* bandwagon within pockets of academia, the concept is still underdeveloped conceptually; the relevant psychological dynamics (eg, in potentially building a

bridge between moral knowledge and moral action) are mostly uncharted territory; no instrument exists to measure the construct; and educational interventions to enhance *phronesis* have mostly been theoretically under-motivated and unsystematic. *Phronesis* is, therefore, currently a bandwagon with various loose wheels.

Phronesis refers to the capacity of knowing and enacting the right course of (moral) action through a process of identifying and deliberating between competing values, emotions and alternatives.

2.2 THE KNOWLEDGE–ACTION GAP IN A HISTORICAL CONTEXT

Historically, it is a staple of Aristotelian virtue ethics, as well as neo-Aristotelian theories of character education, that *phronesis* is an essential intellectual virtue, which is necessary (and possibly sufficient) for the possession of other virtues, and which enables its possessor to navigate through difficult moral situations. *Phronesis* is purportedly what differentiates those who have merely been brought up in good habits from those who are truly virtuous, because the latter have reflected on those habits, have acquired practical reasoning skills and can act or refrain from acting on the basis of appropriate reasons available in a given situation.

At the same time, modern moral psychology, less influenced by Aristotelian insights, has been struggling with the question of what mediates moral action and thought. According to the well-known Kohlbergian tradition, all that is required for moral action is that the agent has knowledge of the good. However, since Augusto Blasi's seminal papers suggested that knowing the good is at best a modest predictor of moral behaviour (see below), the question has arisen: what bridges the remaining gap between knowing the good and enacting the good?

¹ For a more detailed elaboration of the content of sections 2.1–2.7, see Darnell *et al.*, 2019.



To understand the historical context motivating the whole discourse on the 'gappiness problem', a few words are needed about moral epistemology. According to moral rationalism, the dominant view in moral psychology and education for many decades, moral facts exist independently of our sentiments and preferences, and those facts can be tracked by reason alone (with emotions hindering rather than helping that process), as 'no moral principle is based [...] on any feeling whatsoever' (Kant, 1964: 33). Moreover, once correctly tracked, the moral facts are seen as strongly motivating, for 'he who knows the good chooses the good' (Kohlberg, 1981: 189). Moral education is then all about helping young people learn to identify and record moral facts in the right, rational ways and develop logical strategies to draw the right inferences from them in dealing with moral quandaries.

Drawing on the moral psychological theories of Piaget, Kohlberg proposed that new ways of thinking (cognitive 'operations') opened the door to entertaining new courses of moral action. Kohlberg argued that moral reasoning goes through six sequential stages of development in the same order for everyone, although not necessarily at the same speed, and with most people not advancing past Stage Four (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 faced 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 were asked a series of questions about what they considered the right course of action to be in the circumstances of the dilemma and why (their moral justification). These responses were scored and an overall assessment of an individual's moral development was calculated across the vignettes.

However, Kohlberg's approach was seriously challenged by Augusto Blasi (1980; 1983) when he reported that moral reasoning only accounts for ten percent of the variance in moral behaviour (Walker, 2004). Although Blasi himself did suggest that perhaps the field has not figured out how to assess the judgement and action relationship in a thorough enough way, most readers of his papers drew the conclusion that an exclusive focus on moral reasoning cannot adequately mediate moral thought and action, and so some other factor (or factors) must be at work. Yet, as shall be presently suggested, the alternative explanations of what might bridge the knowledge–action gap have only performed statistically on a par with the outcome that Blasi established for moral reasoning (Hardy, 2006).

2.3 MORAL IDENTITY AS A POSSIBLE SOLUTION

Whereas Kohlberg held that the essence of morality is commitment to moral principles, Blasi (1980: 41) 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.' This certainly seems right on an intuitive level, for as Bergman (2002: 120) pointed out, the prospect of betraying one's moral identity was likely to have more motivational power in keeping people on the straight and narrow than that of 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 and 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 and Carlo, 2011: 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 (eg, Blasi, 1983; Colby and Damon, 1992; Gibbs, 2003; Narvaez and Lapsley, 2005).

Moral identity seems, however, to fare no better than moral reasoning in predicting moral behaviour. In a recent meta-analysis of the moral identity literature, Hertz and Krettenauer (2016) identified 81 studies that directly investigated moral identity as a predictor of moral action. When comparing effect sizes across these studies and controlling for moderating variables (eg, age, study type, culture, moral identity measure), it was shown that moral identity does have a positive predictive relationship with moral behaviour. Yet, as was the case with moral reasoning, this predictive effect was only shown to be small to moderate in size. Based on these findings, Hertz and Krettenauer 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' (2016: 136). 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'.

2.4 MORAL EMOTIONS AS A POSSIBLE SOLUTION

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 may supply the underlying motivational force to bridge the thought/action gap. The idea here is that moral emotions (such as compassion), or more general emotional capacities (such as empathy), which need to be cultivated from an early age, alone provide the mechanism motivating people to turn their moral knowledge into action.

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 and Fabes,

1998). 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 and Fabes, 1998). For moral emotion to be a predictor of moral behaviour, feelings of sympathy rather than personal distress must therefore be produced.

Once again, however, while a meta-analysis of the moral emotions literature (Malti and Krettenauer, 2013), as well as other empirical evidence, show 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 and 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 *et al.*, 2006; Malti and Latzko, 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 independent predictive effects on prosocial behaviour in adults when different forms of prosocial behaviour were considered. Research has similarly shown in children that the positive association between sympathy and moral behaviour is moderated by the role of moral reasoning (Miller *et al.*, 1996). Furthermore, researchers have demonstrated positive links between moral motivation and sympathy upon adolescents' moral action (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 *et al.*, 2008; see also Krettenauer *et al.*, 2014). However, while the existing evidence suggests that these components may be related, it is not clear how they develop or indeed how/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.

‘PHRONESIS, THIS EYE OF THE SOUL, CANNOT REACH ITS FULLY DEVELOPED STATE WITHOUT VIRTUE.’

 Aristotle, *Nicomachean Ethics*, 1144a

2.5 THE TURN TO MULTI-COMPONENT CONSTRUCTS

The discussion so far indicates that the logical step to take in the search for factors bridging the knowledge–action gap is to look for multi-component constructs. A good example of such constructs is the so-called Four-Component Model (Narvaez and Rest, 1995). In seeking to accommodate the insights of Kohlberg with theories of moral identity and moral emotions, the Four-Component Model posits that moral action requires that four distinct components are all properly operative and, consequently, that agents can fail to act morally if any of these is operating less than well. The four components are *moral sensitivity*, which refers to the ability to identify and attend to moral issues; *moral judgement*, which is the ability to reason about and justify morally ideal courses of action; *moral motivation*, which refers to an agent's prioritising moral over other values and being motivated to pursue it; and *character*, which refers to qualities that allow an agent to perform what she intends.

There is considerable merit to the Four-Component Model, not least because it reflects the need to appeal to a multi-component model in order to solve the 'gappiness problem'. Moreover, it contains the plausible suggestion that affect and cognition are intertwined and that their concurrence is essential to moral action. Unfortunately, it is not possible to assess the empirical viability of the Four-Component Model, since there are no available measures rigorously designed to measure *all* four components, except narrowly circumscribed profession-specific ones. So, neither is it possible to know the extent to which it predicts moral behaviour, though one would certainly expect it to fare better than single component alternatives.

2.6 ARISTOTLE ON 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 (eg, Kristjánsson, 2015a: 88–89), it does seem possible to derive a general account of *phronesis* from those texts that emphasise 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 virtues as those have been most serviceably developed into psychological instruments in previous Jubilee Centre work (see eg, Morgan *et al.*, 2017, on gratitude).

To properly understand *phronesis*, a word is in order on Aristotle's conception of the human soul (*psyche*). 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 are 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. The possession of *phronesis*, nevertheless, requires possession of correctly habituated virtues: a tailoring of the non-rational part of the soul toward the right objects. We might refer to this today as the prior cultivation of affective and motivational dispositions toward things that are good, even before the agent has understood how or why they are good.

Phronesis is one of two central intellectual – as opposed to characterological or moral – virtues, the other being *sophia*, sometimes translated as 'theoretical wisdom'. Whereas *sophia* is preoccupied with theoretical reasoning and knowledge, *phronesis* is concerned with practical reasoning and

culminates in action (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.

Phronesis is one of two central intellectual – as opposed to characterological or moral – virtues, the other being sophia, sometimes translated as “theoretical wisdom”.

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. Excellence in a skill is thus 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 also tend to have a limited domain of application, so that when expert persons deliberate, they do so in light of what is good for such-and-such a practical undertaking. By contrast, the deliberation of the *phronimos* (the person who has acquired *phronesis*) aims at what is good, all things considered.

What Aristotle's remarks about *phronesis* seem to imply, then, is the following. First, there can be no *phronesis* without some 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 what habituated 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 respond in the way that is best overall in any given situation. That requires that one can identify salient reasons for responding in certain ways to a situation, and that she sees those reasons that are most weighty as such, which is only possible against a view of the good life. For otherwise, in a given situation, where one sees reasons both for and against, say, being honest, one will have no way of deciding whether being honest would be best in such a situation, as opposed to, say, being compassionate.

All this said, debates rage about how to understand Aristotelian *phronesis*. Those debates are either exegetical, substantive or both. The present context does not allow for an overview of these debates (see Kristjánsson, 2015b). Moreover, such debates need not preoccupy us in the psychological task of conceptualising *phronesis* with a view to measuring it, 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.

2.7 A PRACTICAL CONCEPT OF PHRONESIS

Aristotle defines *phronesis* as excellence in practical deliberation, that is, deliberation about what to do. Kristjánsson (2015a: 96) and others (eg, Curzer, 2012: 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 perceive that 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: 21). This sensitivity function is highly situation-specific, meaning 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 (as already mentioned in Section 1), is the recent Situated Wise-Reasoning Scale (SWIS), developed by Brienza and colleagues (2018). The SWIS assesses the elements of wise-reasoning, by shifting from global, decontextualised reports to state level reports about concrete situations.

(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 different sorts of virtue, 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 one's relationship to them, further complicating the



matter. In a situation like this, it may be unclear, even to 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 in light of what one deems good, 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: 22, 262).

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 a *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 vital for our purposes; what is crucial is that without such a basis, *phronesis* cannot be present.

The current research thus proposes that an adequate conceptualisation for instrument design, aimed at measuring *phronesis*, should also incorporate a measure of what can be called a 'blueprint' of the good life and some measure of 'emotional regulation'.

(iii) *Blueprint*. By a blueprint, consider 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 living well (*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 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. 198–202).

(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 habituated 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 the right reason and the subsequent harmony between the two.

2.8 OVERALL EVALUATIVE GOALS

The view that a multi-component construct is required to bridge the moral knowledge–action gap is not new, as already indicated above. What is new, however, is the attempt to figure out how *phronesis* actually fares in this context. It was because of the above-mentioned lack of measurement instruments and empirical studies on the neo-Kohlbergian Four-Component Model, and drawing on the Aristotle-inspired philosophy of the Jubilee Centre (2017), that the research team decided not to concentrate on designing a measure for the existing Four-Component Model, but to look instead to *phronesis* for a multi-component construct that potentially bridges the moral thought–action gap. The working hypothesis behind the present report aligns with the Aristotelian assumptions introduced earlier, according to which the gap between moral knowledge and action is bridged by the acquisition of *phronesis*. Yet whether *phronesis* is an empirically viable concept, how we can measure it for empirical investigation, and how, if at all, it predicts moral behaviour are important questions that have never been addressed conclusively. This project, therefore, set out to address the core questions that were introduced in Section 1.

However, motivating this project were wider and more profound evaluative goals that had to do both with the viability of Aristotelian moral psychology and character education, and the future directions of moral psychology, insofar as it wrestles with the famous puzzle posed by the Apostle Paul, in saying: 'I do not understand what I do. For what I want to do, I do not do. But what I hate, I do' (Romans, 7:15). In answering the question of what bridges the gap between moral knowledge and behaviour, it seems that the proposed answer holds the key to a rounded, effective and unified account of moral education. If Aristotle's theory provides the answer, then, as Aristotelians have long insisted, it is his theory that offers us the best chances of bringing up virtuous individuals.

At the same time, the research at issue puts Aristotelian moral psychology to the test: is Aristotle's concept of *phronesis* an empirically viable notion, or is it a high-flown philosophical fiction, as a critic of Aristotle-inspired moral psychology might suggest? If, as the present study hypothesises, *phronesis* turns out to be an empirically valid concept that at the same time could contribute towards a solution of the 'gappiness problem', then not only is Aristotelianism potentially shown to be our best bet for character education, but also as ameliorating a lacuna in contemporary moral psychology. Finally, having addressed the questions about conceptualisation, instrument design and measurement, the second phase of the project (not included within this report) aimed to trial interventions to cultivate *phronesis*.

‘VIRTUE MAKES US REACH THE END IN OUR ACTION, WHILE *PHRONESIS* MAKES US REACH WHAT PROMOTES THE END.’

 Aristotle, *Nicomachean Ethics*, 1145a

3 Methods

Two pilot studies were conducted, one with an adult sample and the other with an adolescent sample.

3.1 STUDY 1

3.1.1 Rationale

Study 1 was designed to investigate whether standardised psychological tests can be used as a proxy of the four components hypothesised in the above-explained model, and whether such a four-component model would predict a second order factor positively associated with prosocial behaviour in a sample of adults.

3.1.2 Participants

The adult sample consisted of 285 participants (*females*=143), aged between 18 and 50 years (*mean*=27.69, *SD*=10.02), recruited via a research participation scheme for an undergraduate Psychology course at the University of Birmingham and a crowd-sourcing research participation website in the UK. All participants were completing a college or University course/degree and received either course credit or £2 for completing the study.

3.1.3 Measures

A number of standardised measures to assess the four components of *phronesis*: Moral Reasoning (via both the constitutive and integrative functions), Moral Emotion (the emotion-regulation function) and Moral Identity (the blueprint function) were used (Darnell *et al.*, 2019). These components were related to a measure of prosocial tendencies, which served as a proxy of prosocial behaviour (Carlo *et al.*, 2010). The Big Five Inventory was also included as a control measure of personality (John and Srivastava, 1999). Given the wide age range, the questionnaires used in the study were selected because they had at least moderate construct validity (ie, they measure what they purport to) in adult populations, and all scales showed acceptable reliability in the adult sample (Table 1), except in the compliant subscale of the Prosocial Tendencies-Revised Score (Cronbach's α = -2.17; discussed in Section 4.1.1).

Table 1:
Cronbach's Alphas for the Adult Sample

Variable	Cronbach's α
IRI-Empathic Concern Scale	0.75
IRI-Perspective-Taking Scale	0.59
Moral Self-Relevance Measure	0.85
Contingencies of Self-Worth	0.86

3.1.3.1 Moral Reasoning

The two hypothesised components of Moral Reasoning (Perception and Adjudication) were measured via a series of newly designed tasks and questionnaires centred on two dilemmas selected from the Adolescent Intermediate Concept Measure (AD-ICM) of moral reasoning (Thoma *et al.*, 2013). Each dilemma describes a situation in which a specific virtue concept (eg, courage) is in play. The two dilemmas chosen for the current study emphasised *honesty* (what to do when friends cheat in a test) and *justice* (whether to dismiss a friend who is the weakest worker). These dilemmas were chosen by the research team due to the relevance of the scenarios to both the younger and older participants. Participants were asked to answer all the questions as if they were the protagonist in the story (eg, 'If you were Nikki in this situation, what would you do?').

3.1.3.1.1 Moral Perception

Moral Perception was assessed with three novel tasks: Virtue Identification, Virtue Selection and Virtue Relevance, based on modifications of the Adolescent Intermediate Concept Measure (AD-ICM) (Thoma *et al.*, 2013). Virtue Identification assesses whether participants can identify a conflict within a dilemma, Virtue Selection assesses whether individuals can select the most pertinent virtues in the situation and Virtue Relevance assesses whether the virtues selected are relevant to the participants' initial description of the problem.

Virtue Identification: Participants were required to identify a conflict presented

in the dilemma, and scored points for the degree to which their responses recognised a conflict similar to experts' judgements, relating the conflict to virtue and explaining the conflict with reference to virtue-based justifications. Two independent raters scored all participant responses.

Virtue Selection and Virtue Relevance:

Following the Virtue Identification task, participants were presented with a list of eight virtues (honesty, compassion, loyalty, justice, respect, gratitude, humility, integrity) and asked to indicate which qualities they thought were most relevant to the protagonist in the dilemma. Participants' virtue-selection choices were compared against the virtues selected as most appropriate for the dilemma by an expert panel. To secure inter-coder reliability, independent raters then determined whether the virtues selected by participants were relevant to their descriptions of the conflict in the Virtue Identification task.²

3.1.3.1.2 Moral Adjudication

Situated Wise Reasoning Scale (SWIS)

(Brienza *et al.*, 2018): The SWIS is a 21-item questionnaire, reflecting five interrelated facets of wise reasoning:

- Recognition of others' perspectives (four items, eg, 'Took time to get the other people's opinions on the matter before making a decision');
- Consideration of change and multiple ways a situation may unfold (four items, eg, 'Believed the situation could lead to a number of different outcomes');
- Intellectual humility/recognition of the limits of one's knowledge (four items, eg, 'Double checked whether my opinion on the situation might be incorrect');
- Consideration of compromise/importance of conflict resolution (five items, eg, 'Considered first whether a compromise was possible in resolving the situation') and
- View of an event from the vantage point of an outsider (four items, eg, 'Wondered what I would think if I was somebody else watching the situation').

² The panel consisted of two psychology professors and a research fellow working in the field of moral psychology and one philosophy professor and research fellow working in the field of virtue ethics. This included one of the authors of the ICM (Thoma *et al.*, 2013).

Typically, the SWIS asks participants to respond to the items based on a personal situation they have experienced. However, as the aim here was for participants to reflect on the dilemmas presented, participants were told to imagine themselves as the protagonist in each of the two dilemmas before answering the questions on a five-point scale from 'Not at all' to 'Very much'.

Adolescent Intermediate Concept Measure (AD-ICM) (Thoma *et al.*, 2013): The AD-ICM measures adolescents' moral thinking, specifically their 'intermediate concepts' (ie, the transition from thinking based on personal interests to conventional thinking). For each story, participants were asked to rate (on a five-point scale from 'I strongly believe this is a bad choice' to 'I strongly believe this is a good choice') a list of action choices, which reflected actions the protagonist might carry out based on the dilemma (eg, 'Danielle should send an anonymous note to the teacher about what happened'). Following this, participants were asked to rank the three *best* and two *worst* action choices. Participants then repeated the same procedure for a list of reasons that the protagonist may use as possible justifications for the actions (eg, 'Those that received information were not likely to remember it anyway'). These were rated on a five-point scale from 'I strongly believe this is a bad reason' to 'I strongly believe this is a good reason'. Participants then ranked the three *best* and two *worst* justifications. For the AD-ICM scoring, participants' scores were calculated based on their responses to the ranked items and whether these responses were categorised as 'acceptable', 'unacceptable' or 'neutral' by an expert panel (see Thoma *et al.*, 2013). *Best choices* and *justifications* that were categorised as acceptable by an expert panel received the highest scores while *best choices* and *justifications* that were categorised as unacceptable received the lowest scores. Similarly, *worst choices* and *justifications* categorised as unacceptable by an expert panel received the highest scores, while *worst choices* and *justifications* that were categorised as acceptable received the lowest scores.

3.1.3.2 Moral Emotions

Interpersonal Reactivity Index (IRI) (Davis, 1983): The IRI measures four aspects of empathy (perspective taking, fantasy, empathic concern and personal distress). The subscales can be used separately to measure the individual aspects of empathy (Keaton, 2017). As such, participants completed the perspective taking (unplanned adoption of others' points of view, eg, 'I sometimes try to understand my friends better by imagining how things look from their perspective') and empathic concern (an individual's feelings of compassion and concern for others, eg, 'I am often quite touched by things that I see happen') subscales, as these items best reflected the features of an Aristotelian definition of moral emotion. Participants rated how well each statement described them on a five-point Likert scale ranging from 'Does not describe me very well' to 'Describes me very well'.

3.1.3.3 Moral Identity

Moral Self-Relevance (MSR) Measure (Patrick and Gibbs, 2012): The MSR measure asks participants to rate how important moral and non-moral qualities are to their sense of self and consists of two sections. First, participants rated on a five-point scale (from 'Not important to me' to 'Extremely important to me') how important 16 qualities are to their sense of self. These 16 qualities consist of eight moral (eg, honest, kind, fair) and eight non-moral items (eg, imaginative, cautious, athletic). Then participants chose from eight qualities from a list of 32 that they felt were most important to them as a person. The 32 qualities consisted of the same eight moral qualities (eg, generous, helpful, sincere) and 24 non-moral qualities (eg, popular, talkative, strong). The MSR is the sum of the two transformed scores from each section.

Contingencies of Self-Worth (CSW)

(Crocker *et al.*, 2003): The CSW measures seven sources of an individual's self-esteem. Participants completed only the 'Virtue' subscale from the CSW as this subscale specifically focusses on the importance of virtuous living to

one's self-esteem. Participants rated five items (eg, 'My self-esteem depends on whether or not I follow my moral/ethical principles') on a seven-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree'.

Aspects of Identity (Cheek *et al.*, 2002):

Participants completed one item from the 'Personal Identity Orientation' subscale of the Aspects of Identity questionnaire. On a five-point scale, they rated how important 'my personal values and moral standards are...' from 'Not at all important to my sense of who I am' to 'Extremely important to my sense of who I am'.

3.1.3.4 Control Variables

Big Five Inventory Scale (BFI-44) (John and Srivastava, 1999): The BFI-44 assesses Neuroticism, Extraversion, Openness, Conscientiousness and Agreeableness. Participants rated the degree to which each item described them accurately on a five-point scale from 'Disagree strongly' to 'Strongly agree' and the item mean for each of the five personality dimensions was calculated.

3.1.3.5 Prosocial Tendencies

The Prosocial Tendencies-Revised Scale (Carlo *et al.*, 2010): is a 21-item measure of prosocial behaviour with six subscales: Public (three items, eg, 'When other people are around, it is easier for me to help others in need'); Anonymous (four items, eg, 'I think that helping others without them knowing is the best type of situation'); Dire (three items, eg, 'It is easy for me to help others when they are in a bad situation'); Emotional (five items, eg, 'I respond to helping others best when the situation is highly emotional'); Altruism (four items, eg, 'One of the best things about doing charity work is that it looks good on my resume') and Compliant (two items, eg, 'When people ask me to help them, I don't hesitate'). Participants rate how accurately each statement describes them on a five-point scale from 'Does not describe me at all' to 'Describes me greatly'.

3.1.4 Procedures

All data were collected online, with participants completing the battery of questionnaires in a single one-hour session. The order remained the same for each participant with the questionnaires completed in the order listed in the measures section above. Consent was obtained for all participants prior to completing the questionnaire.

3.1.5 Analytic Strategy

Structural equation modelling (SEM) was used to examine the relationship between the measures that approximate the four components of *phronesis* and the measure of prosocial tendencies as a proxy for prosocial behaviour. A model was first tested to check that four latent factors, which reflect the components of *moral emotion*, *moral identity*, *moral adjudication* and *moral perception*, were being respected by the respective measurement.

- **Moral Emotion** was comprised of the observed measures of Empathy and Perspective Taking (Davis, 1983).
- **Moral Identity** was constituted by the Moral Self-Relevance (Patrick and Gibbs, 2012), Contingencies of Self-Worth (Crocker *et al.*, 2003) and Aspects of Identity (Cheek *et al.*, 2002) scales.
- **Moral Adjudication** included the Total Action and Total Justification scores from the AD-ICM (Thoma *et al.*, 2013) and the SWIS total score (Brienza *et al.*, 2018).
- **Moral Perception** was comprised of the Virtue Identification, Virtue Selection and Virtue Relevance ratings.

Next, a model was tested to examine if a higher order latent factor, which was expected to be representative of *phronesis*, was related to all four of the distinguishable latent factor components at the lower order level. Once confirming acceptable factorial structure in this model, the hypothesised model was tested to see if prosocial behaviour was related to the higher order *phronesis* factor, which was explained by the four component factors. The prosocial behaviour latent variable factor was approximated by the Prosocial Tendencies-

Revised Scale (Carlo *et al.*, 2010). This hypothesised model allows for the discernment of latent variables that share common variance: in this case, the four components of *phronesis*, *phronesis* itself and prosocial behaviour. Using this model, one can investigate whether these latent variables explain variance in the data and how they relate to each other.

Each model was evaluated to clarify if the solution was well-defined, the direction of the regression paths was conceptually plausible and model fit indices were acceptable. The indices used for estimating goodness of fit of the models were the Standardised Root Mean Square Residual (SRMR < 0.06), Root Mean Square Error of Approximation (RMSEA < 0.08; along with 90% confidence intervals), Comparative Fit Index (CFI > 0.90), and chi-square difference tests (Hu and Bentler, 1999). The primary objective of the phase of research reported here was simply to clarify whether the hypothesised model was reasonably consistent with the present

data and measurements used. The size and direction of all path coefficients, which are indicative of the strength of relationship between the latent factors, will be presented in forthcoming work from the project and those are not depicted in the present models (although the direction of these paths are indicated in the Findings and Discussion sections of this report).

‘GOOD DELIBERATION IS CORRECTNESS THAT REFLECTS WHAT IS BENEFICIAL, ABOUT THE RIGHT THING, IN THE RIGHT WAY AND AT THE RIGHT TIME..’

⊗ Aristotle, *Nicomachean Ethics*, 1142b



3.2 STUDY 2

3.2.1 Rationale

Study 2 was designed to investigate whether the relationships between the components of *phronesis* showed the same pattern in an adolescent population.

3.2.2 Participants

The sample consisted of 207 adolescents attending full time secondary school education (*females*=112), aged between 15 and 17 years (*mean*=15.59, *SD*=1.2), recruited from 15 UK secondary schools. Secondary schools were offered presentations on psychology and character education for their students' participation in the study.

3.2.3 Measures

The same measures and scoring calculations used in Study 1 were used in Study 2. Questionnaires used in this study were selected because they had at least moderate construct validity (ie, they measure what they purport to) in adult populations, and all scales bar the IRI-Perspective-Taking scale showed acceptable reliability in the adolescent sample (Table 2). Although the IRI-PT had a Cronbach's alpha below an acceptable threshold, it was retained in the model to maintain consistency with Study 1.

Table 2:
Cronbach's Alphas for the Adolescent Sample

Variable	Cronbach's α
IRI-Empathic Concern Scale	0.77
IRI-Perspective-Taking Scale	0.47
Moral Self-Relevance Measure	0.79
Contingencies of Self-Worth	0.7

3.2.4 Procedure

Participants completed the questionnaires either online or in a paper format, depending on the preference of the school. The procedure and content remained the same for either format, and participants completed the questionnaires in the same order as the adult sample. Parental consent was obtained from parents/caregivers and assent was obtained from all adolescents prior to completing the questionnaires. Questionnaires were completed in one session at school during a form period (approximately one hour).

3.2.5 Analytic Strategy

The analytic strategy for Study 1 was employed again in Study 2.

3.2.6 Limitations of the Research

These studies do not constitute a direct attempt at solving the 'gappiness problem' as these two studies did not employ a direct measure of moral action (only a proxy) and did not test for differences between the adult and adolescent groups. Hence, large questions about the development of *phronesis* remain unanswered.

Furthermore, *phronesis* has not been conceptualised in this way before; therefore, the propriety of the proposed measures should be treated as a first step only towards testing for measures of the suggested components of *phronesis*, not to mention *phronesis* as a discrete construct in itself. As such, these initial findings should be interpreted as an early attempt to measure the theorised components of *phronesis* and to explore the explanatory power of the *phronesis* model. A full statistical analysis of all the project's findings related to the new measure is outside the purview of the present report but will be published in a prospective peer-reviewed article in due course.

3.2.7 Ethical Considerations

Ethical approval was granted for the research by the University of Birmingham Ethics Committee and informed consent was obtained for all participants. In the case of the adolescent sample, informed parental opt-in consent was sought. Consent was required from both the parent and child for the child to take part in the experiment.

‘PARTICULARS BECOME KNOWN FROM EXPERIENCE, BUT A YOUNG PERSON LACKS EXPERIENCE, SINCE SOME LENGTH OF TIME IS NEEDED TO PRODUCE IT.’

 Aristotle, *Nicomachean Ethics*, 1142a

4 Findings³

4.1 STUDY 1

4.1.1 Preliminary Analyses

The adult sample was first tested for univariate normality and multicollinearity. These analyses were conducted with SPSS 25. Histograms, skewness and kurtosis analyses indicated that the variables did not violate the assumption of normality, and variable inflation values indicated that the variables used in the analysis were not too highly correlated.

As described in Section 3.1.4, an unusual Cronbach's α was found for the compliant subscale in the Prosocial Tendencies-Revised Scale (Carlo *et al.*, 2010). Having studied the original factor analysis that birthed the six-factor structure of the scale, it was found that the six-factor structure was only a marginally better fit than the four- or five-factor configurations, and that all six factors are moderately to strongly correlated. On this basis and due to the unusual Cronbach's α for the compliant subscale within the present analysis, the project team came to the conclusion that the evidence for the original six-factor structure was weak and re-evaluated the measure with its own exploratory factor analysis prior to the implementation of the model. This was achieved by conducting a principal axis factor analysis to investigate which factors emerged from participant responses to the measure. The analysis produced a three-factor solution that accounted for 48.04% of the variance. The three factors represented Anonymous, Altruistic and Emotional prosocial tendencies.⁴

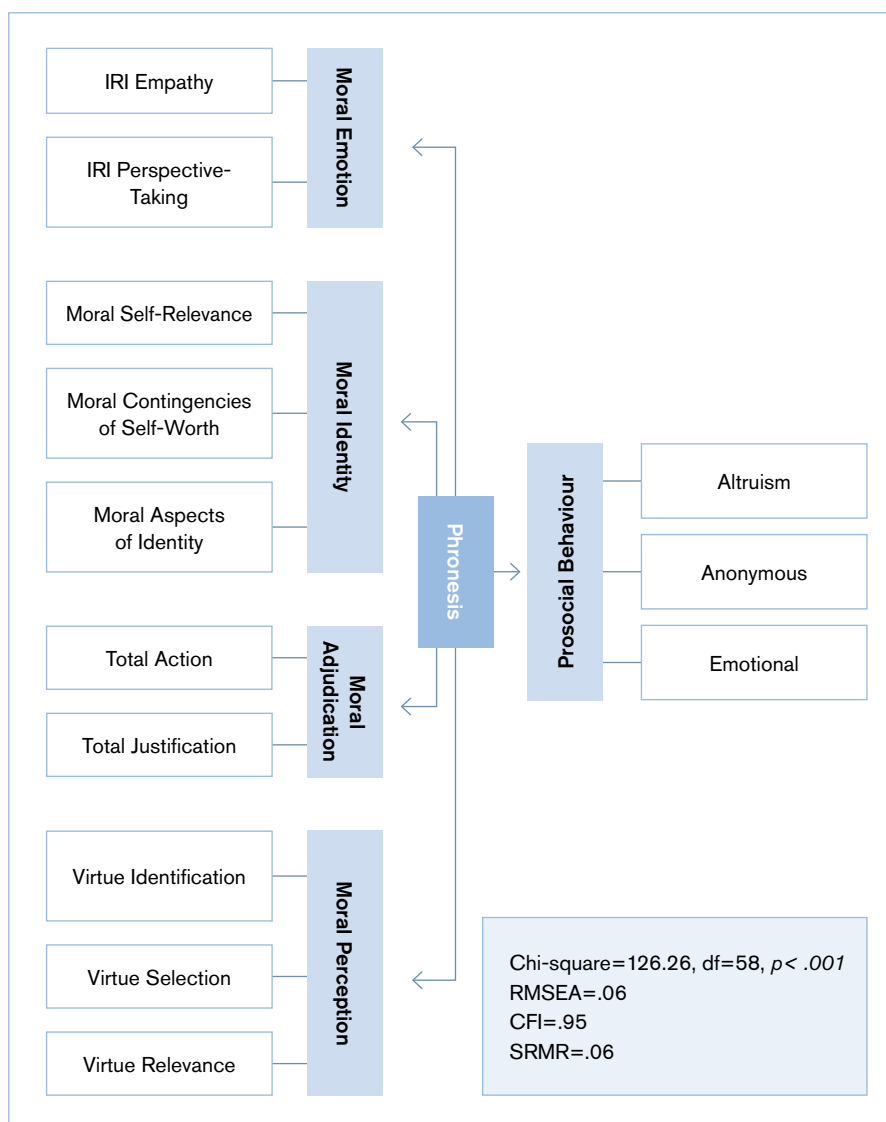
4.1.2 Structural Equation Modelling

The research team predicted a second order **Phronesis** latent factor with first order latent variables of **Moral Perception** (Virtue Identification, Virtue Selection, Virtue Relevance), **Moral Adjudication** (SWIS, Total Action, Total Justification), **Moral Emotion** (Empathy, Perspective Taking) and **Moral Identity** (Moral Self-Relevance, Contingencies of Self-Worth, Moral Aspects of Behaviour). The research team expected the **Phronesis** latent to predict the **Prosocial** latent (Prosocial Tendencies-Revised Scale). All SEM analyses were maximum likelihood analyses conducted with Mplus 7.11 (Muthén and Muthén, 2015).

Examination of the preliminary models revealed that the SWIS variable was found to be the source of negative variance in the Moral Adjudication latent factor, meaning that the inclusion of the SWIS variable in this model was not appropriate for the data. Consequently, the SWIS was removed from the model. Modification indices also suggested allowing covariance between the observed variables of Virtue Identification and Virtue Relevance and the observed variables of Contingencies of Self-Worth and Moral Self-Relevance. Since these pairs of variables

were within the same latent variables (Moral Perception in the former case and Moral Identity in the latter), it was decided that these variables could share variance. The final structural model, which regressed **Prosocial Behaviour** on to **Phronesis** produced a good fit as can be seen in Figure 1 ($\chi^2(58)=126.26$, $p<.001$, CFI=.95; SRMR=.06; RMSEA=.06, 90% CI [.05-.08]). Another model that included BFI-44 personality scales as a control variable did not improve the model fit and did not adversely affect the **Phronesis–Prosocial Behaviour** relationship.

Figure 1: SEM Model of **Phronesis** in the Adult Sample (*latent variables are in bold*)



4.2 STUDY 2

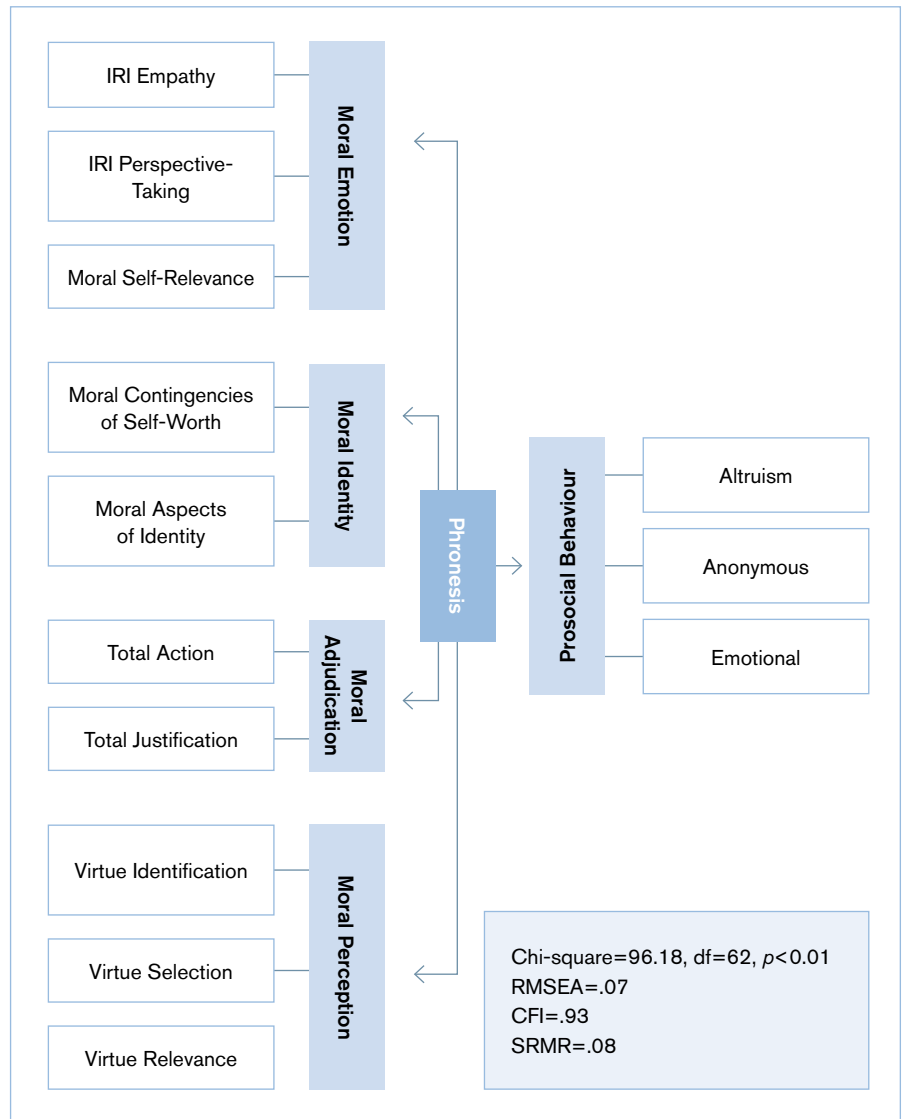
4.2.1 Preliminary Analysis

As in Study 1, analyses revealed that the variables did not violate the assumption of normality and were not too highly correlated. Additionally, the same three-factor solution (Anonymous, Altruistic and Emotional) for the Prosocial Tendencies-Revised Scale was employed for this study in order to maintain a parsimonious set of dependent variables and consistency between the analyses. For the adolescent sample, the three-factor solution explained 39.43% of the variance.

4.2.2 Structural Equation Modelling

The same model was used for the adolescent sample as with the adult sample, ie, the same latent variables and no SWIS variable. The initial model indicated that the structure was not appropriate, and that the Moral Self-Relevance variable had cross-loaded on to **Moral Emotion** rather than **Moral Identity**. While in the adult sample Moral Self-Relevance was related to **Moral Identity**, in the adolescent sample this variable was related to **Moral Emotion**. Therefore, the model was changed accordingly, relating Moral Self-Relevance to **Moral Emotion**. The final model fit reasonably well as can be seen in Figure 2 ($\chi^2(62)=96.18, p<.01, CFI=.93; SRMR=.08; RMSEA=.07, 90\% CI [.04-.09]$). Another model that included BFI-44 personality scales as a control variable did not improve the model fit, and did not adversely affect the **Phronesis-Prosocial Behaviour** relationship.

Figure 2: SEM Model of *Phronesis* in the Adolescent Sample (*latent variables are in bold*)



³ The present report does not contain the full statistical analysis of the project's findings as further analysis was ongoing at the time of publication. However, findings are presented in sufficient detail here to give an account of all significant initial findings and the status (in April 2020) of work on the *Phronesis* Inventory. A fuller analysis is forthcoming in a prospective peer-reviewed article, to be first-authored by Dr. Catherine Darnell.

⁴ The present authors are not claiming that this factor structure for the Prosocial Tendencies Measure-Revised is definitive in general. The interest in prosocial behaviour in this study is simply as a criterion measure for *phronesis*. Further research on the most appropriate structure for the Prosocial Tendencies Measure-Revised seems warranted.

5 Discussion

The present section offers some reflections on the findings of the project, the state of play at the time of writing, and future possibilities. The section begins by highlighting some of the most significant findings of the pilot study and their potential relevance for the background literature on the 'gappiness problem' in moral psychology. The discussion then turns to wider issues relating to the place of the new *Phronesis* Inventory within the general landscape of multi-component constructs, in particular as a potential advancement upon the historic neo-Kohlbergian Four-Component Model. The section ends with some reflections on a potential *phronesis* intervention for schools.

5.1 ELABORATING UPON THE FINDINGS

The research team ran two studies to investigate whether the *phronesis* model is a suitable frame through which to investigate morality and its relation to prosocial behaviour in adults and adolescents. In both studies, it was found that the hypothesised *phronesis* model fits the data well. Standardised measures that were predicted to be good approximations of the components of the *phronesis* model were found to structurally relate to the predicted latent components (Moral Emotion, Moral Identity, Moral Adjudication and Moral Perception) in all but one case. Importantly, these latent components were found to be structurally related to a predicted latent *phronesis* variable and this variable was found to be associated with the latent prosocial behaviour variable.

These findings are significant but very preliminary steps towards investigating the power of this model. While the selected standardised measures may need trimming down to a more efficient overall measure of something like *phronesis*, the selected measures do seem to effectively approximate the hypothesised components of *phronesis* and a global *phronesis* construct itself. Furthermore, they also suggest that the *phronesis* model may have validity in both adult and adolescent samples, which has important implications for the 'gappiness



problem'. If these findings were to be replicated and supported by complementary research, this model could be an important tool for investigating differences between adolescents and adults in the gaps between their moral thoughts and moral actions. It may even be possible to directly investigate which components contribute most to these gaps. Although it is not possible to deliver a final verdict on the suitability of the model as a framework for measuring *phronesis* in this report, these are indeed promising early results that will be further explored and described in future published research.

5.2 THE WIDER CONTEXT OF MULTI-COMPONENT AND OTHER PSYCHOLOGICAL CONSTRUCTS

Two critical commentaries on the research team's model have already appeared in print (Lapsley, 2019; Krettenauer, 2019). Those are helpful in prompting further discussions about the role of the model within the larger scheme of things in contemporary moral psychology and in giving the current authors the chance to respond to some possible misunderstandings about the intentions and assumptions behind the model.

It should be made clear that the focus on *phronesis* as a potential solution to the 'gappiness problem' does not involve 'a special plea for psychologists to use the Aristotelian

lexicon' (Lapsley, 2019). The authors of this report hope that it will be seen as useful even for those sceptical of, or simply not familiar with, Aristotelian philosophy. Indeed, it is not assumed here that the basic Aristotelian insights are true (cf. Darnell *et al.*, 2019). The positive findings in Section 4 notwithstanding, the aim has not been to 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. The motivations behind this project have rather been exploratory. Given the interest that already exists in the concept of *phronesis* – historically within the moral education literature from Aristotle, through Aquinas, into modernity, and in recent times particularly within professional ethics literature (Schwartz and Sharpe, 2010) – it is an intrinsically interesting question what a *phronesis* solution to the 'gappiness problem' would involve. Given Aristotle's own specifications (however rudimentary), how could *phronesis* potentially be operationalised for the purposes of instrument design and empirical research?

Notably, posing this question is not to cast aspersions on various other theories and paradigms within contemporary moral psychology that possibly contain within them, individually or in tandem, answers to the 'gappiness problem'. Lapsley (2019) mentions a host of those, ranging from schema theory (in various forms), to general social-cognitive

and meta-cognitive mechanisms and, more specifically to individual models such as CAPS and KAPA. (Various recent theories of wisdom could also be mentioned here as contenders, although Lapsley does not do so, see eg, Grossmann, 2017.) Questions about the extent to which those models overlap with Aristotelian *phronesis*, do most of the work that *phronesis* was meant to do, or even go beyond *phronesis* in offering better explanations of how the knowledge–action gap can be bridged, all merit scrutiny, either theoretical, practical or both. Most of those models have not been tested in the same way that the current study has aimed to do with the *phronesis* model, however, and no definitive findings from those models are currently available that somehow make the *phronesis* model redundant from the outset. So not having offered comparison of the *phronesis* model to all those potential competitors does not mean that the motivations of the Jubilee Centre in this area are confined to resuscitating an Aristotelian model out of sheer historical or ideological interest. The aim of the current project was to test one possible piece in the big jigsaw puzzle of moral development, thus implicitly acknowledging Lapsley’s (2019) insight that virtue ethicists and character educationists have so far been overly hesitant to subject their theorising to psychological scrutiny, especially of the developmental kind (as also acknowledged by the virtue ethicist Swanton, 2016).

That said, the original paper fleshing out the *phronesis* model (Darnell *et al.*, 2019) did contain theoretical comparisons with one contemporary model that, at first sight at least, seems to contain the most conspicuous areas of overlap with the current model: the neo-Kohlbergian Four-Component Model (Narvaez and Rest, 1995). As explained in Section 2.5, comparisons between the two will need to remain at the theoretical level because no well validated instrument to measure collectively all the four components of the neo-Kohlbergian model currently exists, outside of narrow professional contexts (You and Bebeau, 2013).

First, recall that the ‘constitutive function’ of *phronesis* was defined as the ability to notice

a given situation as ethically salient and identify the relevant virtue(s) germane to that situation. This maps onto 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 and Rest, 1995: 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 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’ (1995: 386). Although 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 to weigh, evaluate and adjudicate different actions or virtues respectively. Krettenauer (2019) is right that potential comparisons of the *phronesis* model with other models, such as the neo-Kohlbergian one, are complicated by the divergent moral theoretical assumptions of deontology and virtue ethics (and one could, in some cases, throw utilitarianism into the mix, given current psychological interest in subjective well-being as a denominator of the ultimate aim of human life).

Third, the *phronesis* model 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: 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 that priority be given 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, 2017: 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 and Rest, 1995: 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 and Rest, 1995: 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: an understanding explicitly rejected by Aristotelian virtue ethics and character education (Kristjánsson, 2015a).

Two final considerations merit a quick discussion here, motivated by comments made in Krettenauer's (2019) and Lapsley's (2019) commentaries on the original *phronesis* model (Darnell *et al.*, 2019). Krettenauer suggests that the way the *phronesis* model approaches the 'gappiness problem' is akin to a dual-systems view of morality, with a reflective System 2 (here in the guise of *phronesis*) gradually replacing the intuitive, non-reflective and a rational System 1. Lapsley notes, more critically, that the *phronesis* model rejects the interdependence of cognition and emotion by suggesting that *phronesis* helps to cognitively regulate (presumably non-cognitive) emotional thrusts.

Aristotle, however, was not a Two-System dualist on a par with Jonathan Haidt (2001) although Haidt has appeared eager to co-opt Aristotle to the social intuitionist camp. While Aristotle somewhat misleadingly uses the term 'natural virtue' for what has been referred to above as 'habituated virtue', in the Aristotelian scheme of things virtues are the product of nurture, not nature. There is no such thing as 'natural moral intuition', later to be rationalised by intellectual capacities. 'Habituated virtue' contains reason and reflection within it; the only problem is that it is supplied by the moral educator, not the moral agent, which makes it amoral with respect to the latter. So what happens, with *phronesis* development, is not

that raw, arational intuition is replaced by reason (let alone by mere *post hoc* rationalisations, as in Haidt's system), but rather that the agent's own reason replaces that provided by the educator; the *phronimos* has internalised the reason, subjected it to her own scrutiny through critical thinking and made it her own. It is true that this account leaves an educational 'gappiness problem' (commonly referred to as the 'paradox of education', see Section 2.1 above), but it is not a psychological 'gappiness problem' on a par with the one identified by Haidt and his followers.⁵

Something would also be amiss with the *phronesis* model, as a purportedly Aristotelian one, if it presupposed a distinction between non-cognitive emotions and reason. Aristotle was after all the first cognitive theorist of emotion and believed that all emotions – as distinct from mere feelings such as a toothache – contain a cognition (*qua* judgement or thought). So what happens through the presumed emotional regulation component of *phronesis* is not that non-cognitive feelings are suddenly imbued with cognitive reason; it is rather that wrong (non-medial) cognitions are replaced by the appropriate (medial, 'golden-mean') ones, so that emotions become felt in due proportion to their object. More generally, one's affective life becomes regulated and harmonised: non-virtuous emotions become *phronesis*-infused and hence virtuous (Kristjánsson, 2018).

Krettenauer (2019) is right, however, in that it would in many ways be reasonable to understand *phronesis* as a pure intellectual virtue that requires pre-existing affective dispositions: at least if we understand 'reasonable' here to mean 'theoretically pure and parsimonious'. The same could, *mutatis mutandis*, apply to the blueprint function of *phronesis*: it would in many ways be more theoretically economical to see that as a precondition of *phronesis* rather than as part of *phronesis*. On this understanding, *phronesis* would, *qua* intellectual virtue, only contain two components: the constitutive and the integrative; the other two would be seen

as intellectual and affective preconditions, respectively. However, Aristotle was notoriously ambiguous about some variables in his own concept of flourishing; sometimes speaking of variables such as good friends and good health as preconditions of flourishing, sometimes as constituents of flourishing itself. In general, nothing precludes the same item *x* to be, simultaneously, seen as instrumentally and intrinsically related to *y*, when looked at from different perspectives. In developing the *phronesis* model, the research team has adopted a practical psychological lens rather than a pure philosophical, let alone an exegetical, one. What is interesting about *phronesis*, in the context of the 'gappiness problem', are the *functions* that *phronesis* is meant to fulfil. The research team has identified the four functions specified and tested in this report and, with those in mind, referred to its model as a four-component one. Whether two of those 'components' would better be seen as preconditions than actual conceptual parts of *phronesis* is a secondary question from the practical perspective adopted here. The primary consideration, for present purposes, is the incremental explanatory power of the construct.

It may be added here as an afterthought that the publication of this report coincides happily with the publication of a special issue of the *Journal of Moral Education* (March, 2020) drawing on a Jubilee Centre conference held in 2017 on wisdom and character education (see Kristjánsson, 2020, for an overview). Various papers in this special issue carry potential implications for the conceptual model of *phronesis* developed and tested in this report. For example, Ferkany (2020) is critical of Aristotle's idealism that, on some readings at least, sees *phronesis* as necessary and sufficient for a life of full virtue. In general, he considers Aristotle's famous unity-of-virtue thesis (that those who possess *phronesis* possess all the moral virtues) incompatible with the fact of human imperfection. On Ferkany's account, a person's avoidance of keeping tubs of ice cream in her fridge, for fear that she might eat them all at once when

⁵ Obviously, Haidt's and Aristotle's accounts are not the only ones available. A middle-ground alternative explored by Fowers (2017; 2019; Fowers and Anderson, 2018) is that basic, positive moral inclinations (eg, kindness, fairness and loyalty) are natural features of humans that can be cultivated into full virtues with proper training. This avenue involves both System 1 and System 2 processes in its concept of virtue. This approach also avoids the educational paradox, although some Aristotelians might question the existence of natural (non-habituated) moral inclinations.

feeling peckish and frustrated, could be seen as a display of the workings of *phronesis* in her psyche, although on the literal and strict Aristotelian account, being self-controlled in this way is just a poor substitute for being *phronetic*. While reminding us throughout of the usefulness of the *phronesis*-concept, Ferkany asks us to be ready to revise it to bring it into line with psychological realism about the workings of imperfect human beings.

This point links to one of the worries expressed by Lapsley (2019) about an Aristotelian construct of *phronesis* such as the current one: namely, that it involves unrealistic idealisations. In response, it needs to be made clear that the construct developed here does not presuppose a unity-of-virtue thesis or that *phronesis* is an all-or-nothing affair. Rather, it seems more reasonable to consider *phronesis* a 'satis'-concept. For an item *x* to fall under a 'satis' concept *C*, *x* need not be fully *C* but just satisfactorily so. Many core Aristotelian concepts, such as flourishing and virtue, are best understood as 'satis' concepts, and *phronesis* falls naturally into the same category (Russell, 2009; Cokelet and Fowers, 2019), whatever Aristotle's own view may have been. This concession relates to the realistic assumption that very few, if any, full *phronimoi* exist: most people – even if generally considered virtuous – have some blind spots and are, at best, on the way to *phronesis*. That said, research done by the Jubilee Centre indicates that ordinary people often seem to assume that a person who has mastered a moral virtue, say compassion, also has mastered the intellectual skills to know how to apply it – or, more generally speaking, that good character is at the same time moral and intellectual (Arthur *et al.*, 2020).

In his paper in the above-mentioned special issue, Swartwood (2020) directs his animadversions at all psychological approaches to measuring wisdom. He thinks that while all of those are meant to be 'practical', none of them satisfies the three minimal conditions that any account of practical

wisdom needs to satisfy (in order to make coherent the connection between wisdom and performance in actual life decisions): namely, explaining how practical wisdom is a grasp (1) of what one ought to do; (2) all-things-considered; (3) in particular situations. However, for those who might think that Swartwood is simply, as a philosopher, recommending a return from the current psychological approaches to a time-honoured philosophical understanding of wisdom as *phronesis*, there is a further complication. Swartwood does not believe that any simple and comprehensive account of those success conditions, amenable to measurement, is possible. This is because practical wisdom is essentially uncodifiable: 'we cannot boil down the decisions that comprise a well-lived life to a set of rules that an unwise person could use to decide what they ought to do in all the situations they might face'. Obviously, this does not mean that an individual cannot be taught to navigate better the issues that she is facing, given her unique situation and unique characterological make-up and personal history. It simply means that there is no way to measure either *phronesis* or any account that psychologists can come up with of wisdom in a way that can be generalised across groups of different individuals.

To some readers, who understand Aristotle's *phronesis* as an uncodifiable concept, Swartwood's pessimism simply reiterates Aristotle's own point. Others, who – like the authors of the present report – do not subscribe to the uncodifiability assumption, will consider this potentially an unfortunate departure from the aspirations of the scientist Aristotle who liked to measure things, to the extent that the subject matter allows, and make the un-measured measurable.

5.3 FUTURE DIRECTIONS

Having found that the project's *Phronesis* Inventory is structurally related to *phronesis* and its hypothesised components, the next step is to investigate what interventions might be appropriate for improving scores in measures related to the components of *phronesis* (Moral Emotion, Moral Identity, Moral Adjudication and Moral Perception) and *phronesis* itself.

Unfortunately, not much direct guidance can be gleaned from Aristotle himself on exactly when and how *phronesis* develops, except that this happens gradually through teaching and experience (as distinct from methods appropriate to an early age, such as habituation and role modelling). How the teaching is meant to take place is moot. For example, it remains a topic for exegetical debate over what role discussions and dialogue play in Aristotelian teaching for *phronesis* (Kristjánsson, 2015a: chap. 6).

As the present authors are not engaged in Aristotelian exegesis, but are focussed on more practical goals, guidance on this matter is best sought from contemporary developmental psychology. Recent research indicates that small-group discussions can enhance adolescents' social reasoning development (see eg, Lin *et al.*, 2019). Although this research has not been conducted under the aegis of a *phronesis* model, it can serve as a potential blueprint for more targeted *phronesis* interventions. With that in mind, the second phase of the project reported here intends to consider further the design and testing of a *phronesis* intervention with adolescents in the UK.

‘*PHRONESIS IS EVIDENTLY NOT SCIENTIFIC KNOWLEDGE... FOR, AS WE SAID, IT CONCERNS THE LAST THING (IE, THE PARTICULAR): WHAT IS DONE IN ACTION.*’

 Aristotle, *Nicomachean Ethics*, 1142a

6 Conclusions

The main conclusions of this report are that *phronesis* is best understood, with respect to its functions, as a four-componential construct, involving moral perception, moral integration, a blueprint of the good life and emotion-regulation. This model of the construct is reasonably respectful of the concept of *phronesis* as originally suggested by Aristotle but also answerable to contemporary research in moral psychology. Moreover, this model can be brought to bear on the proverbial 'gappiness problem': about the gap between knowing the good and doing the good.

As explained in Sections 4–5 above, the two pilot studies conducted revealed that the hypothesised *phronesis* model fits the data well. Available measures that were predicted to be good approximations of the components of the *phronesis* model were generally found to structurally relate to the predicted latent components. Moreover, these latent components were found to be structurally related to a predicted latent *phronesis* variable and this variable was, promisingly, found to correlate with the latent prosocial behaviour variable.

Given that these two studies were designed as pilot studies, the fit of the data gathered to the *phronesis* model went beyond the original expectations of the researchers. These initial positive findings bode well for further work on the *Phronesis* Inventory as well as paving the way for the development of interventions to cultivate *phronesis*, where the new measure can be used for pre-and-post testing.

“A PERSON IS GOOD IN ONE WAY, BUT BAD IN MANY.”

 Aristotle, *Nicomachean Ethics*, 1106b

6.1 SOME QUESTIONS AND RECOMMENDATIONS

Prior to beginning work on this project, the researchers had noted the same practical questions surfacing whenever the topic of *phronesis* was broached at conferences with teachers and other practitioners, questions such as:

- 1) Does this complicated construct of *phronesis* require explanation to teachers, parents and pupils? What is the best term for it in English: 'practical wisdom'; 'practical intelligence'; 'good sense'?
- 2) Is justification of the blueprint-component of *phronesis* required in a pluralist, liberalist climate that is inimical to any comprehensive doctrine of the good?
- 3) How can school-based interventions be best crafted to cultivate *phronesis*?
- 4) Is it possible to measure the effectiveness of those interventions beyond self-reports or short-term changes in classroom behaviour?
- 5) How can *phronesis* interventions for budding professionals and other university-level students be best crafted?

The present research provides greater confidence than before to answer some of these questions, especially question 4. The intended future direction of the project involves trialling a school-based intervention, so will enlighten readers with regards to question 3. However, the greatest appetite for *phronesis* interventions seems to be at the university-level, especially within the professional education of doctors, nurses, teachers, etc. (Harrison and Khatoon, 2017). Yet, little systematic work has been done in that area.

Aristotle is notoriously quiet and cryptic about how *phronesis* actually develops, apart from some general remarks about how it can be educated through teaching, experience and critical engagement with so-called character friends. Authors who propose *phronesis*

interventions for schools or universities therefore need to be fairly rhapsodic, with respect to Aristotle, and academically creative. To help with such interventions, the authors of this report make the following recommendations:

- 1) Continue to develop and nuance a conceptual specification of *phronesis*, especially one that resonates with the needs and expectations of entry-level students, professional students and other young adults;
- 2) Clarify the extent to which previous writings on practical wisdom actually home in on the Aristotelian concept of *phronesis* and the extent to which other related concepts have been invoked, especially a MacIntyrean concept which seems to hold the fort in various areas of professional ethics (Kristjánsson, 2015b);
- 3) Bring the conceptual specification of *phronesis* developed in this report into line with state-of-the-art theorising in developmental psychology, in order to explore the developmental trajectory of *phronesis*;
- 4) Trial a variety of potential *phronesis*-enhancing interventions at both the school and university levels;
- 5) Encourage further collaboration between psychologists, philosophers and educationists in order to pool the various resources available to academics interested in *phronesis* research.

To conclude, Krettenauer (2019) suggests that the Jubilee Centre considers *phronesis* to be a 'silver bullet' that solves the biggest remaining problem in moral psychology. That may be something of an overstatement. There are many problems remaining in this area and no single construct, instrument or intervention can solve all of them. However, for those sympathetic to an Aristotelian conception of virtue ethics and character education, there is no way to avoid the importance of *phronesis* as an intellectual meta-virtue that enables us to lead moral and flourishing lives.



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Research Team

KRISTJÁN KRISTJÁNSSON

Professor and Principal Investigator,
University of Birmingham

Professor Kristján Kristjánsson is Deputy Director of the Jubilee Centre for Character and Virtues, and Professor of Character Education and Virtue Ethics, University of Birmingham. He is also editor of the *Journal of Moral Education*.

CATHERINE DARNELL

Lecturer, University of Birmingham

Dr. Catherine Darnell is a Lecturer in Cognitive and Development Psychology. She was formerly a Research Fellow at the Jubilee Centre for Character and Virtues (2017–2019). Catherine's research interests focus on developmental psychology. She is particularly interested in the interplay between meta-cognition and decision making, and how this impacts children's learning.

BLAINE FOWERS

Professor of Psychology, University of Miami,
and Honorary Senior Research Fellow,
University of Birmingham

Professor Blaine Fowers is Professor of Counselling Psychology at the University of Miami. He studies virtue and flourishing and has authored five books, most recently *Frailty, Suffering and Vice: Flourishing in the Face of Human Limitations*. He is a Fellow of the American Psychological Association and a recipient of the Joseph B. Gittler Award for contributions to the philosophical foundations of psychology. He is also an Honorary Senior Research Fellow in the Jubilee Centre.

FRANCISCO MOLLER

Research Fellow, University of Birmingham

Dr. Francisco Moller was a Research Fellow in the Jubilee Centre for Character and Virtues (2016–2019). He works as a data analyst and has contributed to projects across the Centre. Francisco has recently completed a PhD at the University of Birmingham, and holds a M.Sc. in Social Research Methods from the London School of Economics.

DAVID POLLARD

Research Fellow, University of Birmingham

David Pollard is a Research Fellow at the Jubilee Centre for Character and Virtues. He was formerly a Visiting Fellow at Vrije Universiteit, Amsterdam. David is studying for a PhD in Psychology at the University of Birmingham, and his thesis focusses on how developing adolescent social cognition impacts economic and moral decision-making.

STEPHEN THOMA

Professor Emeritus, University of Alabama,
and Honorary Senior Research Fellow,
University of Birmingham

Stephen Thoma is Professor Emeritus at the University of Alabama. He is an expert on neo-Kohlbergian theories of moral reasoning. He is also an Honorary Senior Research Fellow in the Jubilee Centre where he used to hold a professorial position.



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For more information about the *Phronesis* project and the Jubilee Centre for Character and Virtues please contact:

Tel: 0121 414 4875

Email: jubileecentre@contacts.bham.ac.uk

www.jubileecentre.ac.uk

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Jubilee Centre for Character and Virtues
12th Floor (West) Muirhead Tower
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B15 2TT, United Kingdom
www.birmingham.ac.uk

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