



ANATTITUDE FOR GRATITUDE

HOW GRATITUDE IS UNDERSTOOD, EXPERIENCED AND VALUED BY THE BRITISH PUBLIC

RESEARCH REPORT

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FOREWORD BY PROFESSOR ROBERT C. ROBERTS



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The University of Birmingham is a top ranking British University. Founded in 1900, it was England's first civic University and was ranked University of the Year 2013–14 by the Times and the Sunday Times.

THE SUNDAYTIMES University of the Year 2013-14

The original Department of Education was founded in 1894 and became the School of Education in 1947. Ranked in the top 50 Schools of Education in the world today, it has a long-standing reputation as a centre of excellence for teaching and research in a wide range of areas of educational practice and policy, with fields of expertise including disability, inclusion and special needs, education and social justice, and professional education.

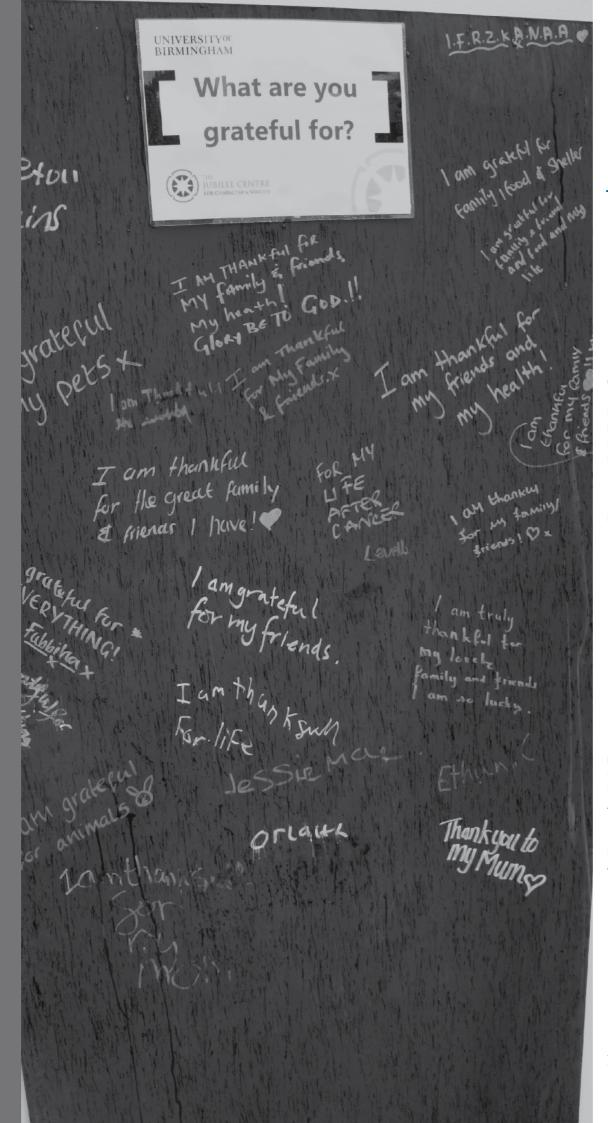
Jubilee Centre for Character and Virtues

The Jubilee Centre for Character and Virtues is a unique and leading centre for the examination of how character and virtues impact on individuals and society The Centre was founded in 2012 by Professor James Arthur. Based at the University of Birmingham, it has a dedicated team of 30 academics from a range of disciplines: philosophy, psychology, education, theology and sociology.

With its focus on excellence, the Centre has a robust and rigorous research and evidence-based approach that is objective and non-political. It offers world class research on the importance of developing good character and virtues and the benefits they bring to individuals and society. In undertaking its own innovative research, the Centre also seeks to partner with leading academics from other universities around the world and to develop strong strategic partnerships.

A key conviction underlying the existence of the Centre is that the virtues that make up good character can be learnt and taught. We believe these have largely been neglected in schools and in the professions. It is also a key conviction that the more people exhibit good character and virtues, the healthier our society. As such, the Centre undertakes development projects seeking to promote the practical applications of its research evidence.

This report was launched by Dr Michael Mosley, British Television Journalist, Presenter and Producer, on the 4th February 2015 at the British Academy, London.



Attitude for Gratitude How gratitude is understood, experienced and valued by the British public

Research Report

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'THE SENTIMENT WHICH MOST IMMEDIATELY AND DIRECTLY PROMPTS US TO REWARD, IS GRATITUDE.'

University of Birmingham 2015 ISBN: 978-0-7044-2850-8

Online Appendices A-O can be found at: http://www.jubileecentre.ac.uk/1556/projects/gratitude-britain/

Foreword Professor Robert C. Roberts

In the ultimate practical interest of sustaining and cultivating the character of UK citizens, the Jubilee Centre for Character and Virtues at the University of Birmingham has undertaken a suite of studies of the UK population. Among the main questions to which they have sought answers are the following: 1) How do British people understand gratitude and when do they think gratitude is properly experienced? For example, do they think it's proper to be grateful if the person who bestowed a benefit on us did so merely in the line of duty? Is it proper to be grateful for a benefit - for example, our high IQ or sunny personality — if we think there is no one who bestowed the benefit on us? What if the favour was well intentioned but ill chosen (out of the goodness of her heart and her own love of dogs, Aunt Nancy has just presented me with a frisky, slobbery Labrador pup)? 2) As part of this research question, the researchers have also explored what Britons associate with the concept of gratitude? For example, are the associations all 'positive' and 'happy,' or do some people associate gratitude with unpleasant things like guilt feelings and awkwardness and burdens? 3) Do Britons differ by age group in their answer to such questions as 1) and 2)? (It turns out that young people seem more likely than older people to be grateful even when the 'benefit' is not valuable to them, and that adults are significantly more likely than adolescents to acknowledge that some dysphoric emotions (feelings of guilt or the burden of indebtedness) can co-occur with gratitude.) 4) Just how important a virtue do the British think gratitude is? Do they think, with Cicero, that it's a master virtue? Should it be ranked above or below honesty, for example? It turns out that British adults tend to think that gratitude is a middling virtue and adolescents that it's a low-ranking virtue. 5) Do the British think that gratitude should be promoted in Britain? It turns out that over 80% think so.

Given the Jubilee Centre's aspiration to promote virtues education and a consequent improvement of British society, the next question would seem to be, What shall we do with these findings? What kind of weight should we give them? For example, does the fact that British citizens associate gratitude more with 'negatively' valued things than US citizens tell us that gratitude has a negative value or can sometimes have such? Or should we think that

either the Americans or the British have been corrupted in this regard and that our educational task is to correct their confusion? Does the fact that the British rate gratitude as a virtue of middling value tell us that gratitude is a virtue of middling value? Or should educators treat this fact as suggesting that the British population needs to be educated about the value of gratitude? How do we decide questions such as these in a scholarly and truth-seeking way?

In my opinion, the Jubilee Centre has been wise to include on its research team not only experts in empirical investigation of people's actual thinking and behaviour, but also experts in normative investigations of virtue- and emotion-concepts - concepts of what people ought to be, to think, and to feel if they are to be well-functioning, virtuous people. Thus the research team includes not only psychologists, sociologists, and anthropologists, but also philosophers. Philosophers are equipped by their historical knowledge and above all by their training in dialectics (argument, rebuttal, comparison, and conceptual analysis) to answer normative questions. As valuable as it may be to know what the British think about gratitude, no amount of such information will settle questions about what gratitude really is, the value of gratitude, or the particular conditions for gratitude's counting as a human excellence. The fruitfulness of the conversation between

empirical-factual and conceptual-normative work is genuinely mutual. Though I have not been officially part of the research team, I have interacted pretty intensely with the work of Liz Gulliford and Blaire Morgan. Through interaction with their empirical investigations, my conceptual work on the nature of gratitude and its status as a virtue has undergone refinement and correction. I would assume that the philosophers on the research team could report similar profit.

In addition to this fruit, the value of the empirical studies presented in this research report seems to me to be, in large part, that we now have a better idea where the British population is 'at' on the questions that have been put to it. Even if the studies do not tell us what the actual grammar of gratitude is, or its actual value, they do seem to tell us much about the character of the population whose education in the virtues the Jubilee Centre aims to facilitate. These studies can be treated as we treat an entrance examination: not as telling us whether the answers given are true (of course some of them may well be true), but as giving an idea what the examinees know and do not know, and thus aiding the discernment of how their education may best proceed.

Professor Robert C. Roberts Baylor University



Executive Summary

There is a growing consensus in Britain that virtues such as honesty, self-control, fairness, gratitude and respect, which contribute to good moral character, are part of the solution to many of the challenges facing society today.

Schools and businesses increasingly understand the need to teach pupils and employees to follow basic moral codes based on such virtues. However, until recently, the materials required to deliver this ambition have been missing in Britain.

The Jubilee Centre for Character and Virtues, which forms part of the University of Birmingham, aims to help solve this challenge. As a world-leader in rigorous academic research into character education, the Centre operates on the basis that teaching good moral character is possible and practicable. It is about equipping children and adults with the ability to make the right decisions. The Jubilee Centre works in partnership with schools and professional bodies on projects that promote and strengthen good moral character within the contexts of family, schools, communities and the wider employment scene.

Research from the Centre suggests that children live and learn better with good moral character and businesses operate better when demonstrating moral integrity. Meanwhile, more specifically to this report, evidence from psychological research has shown that an ability to demonstrate the virtue of gratitude can be linked to well-being², promote social behaviour³, and even improve academic attainment⁴.

The Jubilee Centre's new report, An Attitude for Gratitude, sets about trying to establish the way in which the British public understands, experiences and values gratitude, which was described by Cicero as 'not only the greatest of the virtues, but the parent of all of the others'.

The majority of gratitude research has, to date, been conducted in the USA. However, the Jubilee Centre for Character and Virtues has completed a large scale examination of gratitude in the UK. Over 10,000 people have taken part in the research across a range

of demographic variables, including gender, religiosity, age and ethnic background, and geographical location (England, Scotland, Wales and Northern Ireland).

The report has employed a number of specially-designed survey-based research methods to explore gratitude in the UK. These innovative methods include a new 'Multi-Component Gratitude Measure' (MCGM), which has allowed the Centre to test gratitude-related conceptions, behaviours, emotions and attitudes alongside one another – a world first.

A variety of methods were used with primary and secondary school pupils aged between 8 and 18 years old, students and staff from the University of Birmingham and adults from the general public. The research has examined the following topics:

- What gratitude is, and when and why it is experienced
- The value placed on gratitude by British people
- What British people are grateful for
- The kinds of people that tend to be grateful
- Whether the British public believe gratitude can be promoted across a range of contexts, and if so, how, this might be achieved

KEY FINDINGS

Furthering gratitude in Britain

- It is widely accepted that there is a lack of gratitude in Britain. 80% believe there is a lack of gratitude in society.
- 78% of our sample (N = 554) would like to see more effort spent on promoting gratitude, particularly in educational and workplace contexts. Currently almost 50% believe there is a lack of gratitude in their workplace and over 60% believe that it is lacking in schools.

Findings about gratitude in Britain

In two independent studies of British university students and US-based college students, it was found that the British tend to associate gratitude with negative features more often than the Americans do. When asked which features they associated with gratitude, 29% of UK students cited obligation or indebtedness in comparison

- to 9% in the US. In addition, 17% of UK students cited guilt in comparison to 0% of students in the US.
- When comparing gratitude to other important values such as honesty, fairness, kindness, courage, humility and self-control, the British typically place gratitude around the middle in terms of importance.
- The importance afforded to gratitude appears to alter slightly with age with adults deeming gratitude more important than adolescents or children.
- Younger children are more likely to be grateful for benefits that are self-oriented, whereas older children pick out benefits that have an impact beyond the self.
- The Jubilee Centre's findings show that women report higher levels of gratitude than men. When asked to rank gratitude in terms of its importance, 76% of women ranked it as 'high priority' in comparison to 66% of men.
- Christians score higher than Atheists in grateful feeling. When asked to rank gratitude in terms of its importance, 75% of Christians ranked it as 'high priority' in comparison to 65% of Atheists. Interestingly though, there is no difference between these two groups in terms of gratituderelated behaviours.

Summary of Recommendations:

- would like to see gratitude promoted, particularly in educational and workplace contexts. We recommend this be incorporated where possible into public policy, organisational and corporate initiatives, for instance, well-being policie and educational interventions.
- In educational contexts, gratitude must be explored in a discriminating manner, which allows children to discern when gratitude is appropriate and fitting.
- 3. We recommend the use of our Multi-Component Gratitude Measure (MCGM in future explorations of the concept of gratitude.

Park and Peterson, 2006

³ Grant and Gino, 2010; Algoe, Haidt, and Gable, 2008

⁴ Froh et al., 2008; Froh, Kashdan, Ozimkowski, and Miller, 2009; Froh, Yurkewicz, and Kashdan, 2009

1 Purpose of the Report

The subject of gratitude has gained traction in recent years in academic and popular (eg, media) circles. However, limited attention has been devoted to understanding what laypeople understand by the concept of gratitude; the meaning of which tends to have been assumed in the literature. Furthermore, while intrapersonal and interpersonal benefits of gratitude have been extolled in this growing body of research, there has been little assessment of the value laypeople place on gratitude themselves, or whether and how they think it might be fostered.

Since September 2012, our Attitude for Gratitude research project has been engaged in examining precisely how gratitude is conceptualised by the British public, what British people are grateful for, the value they place on gratitude, what kinds of people tend to be grateful, and whether and how they think gratitude might be promoted in British society. The project has incorporated a variety of methods to examine these questions, conceptually and empirically, canvassing the opinions of over 10,000 people in the UK. A key issue for our research has been to represent the views of British people across a range of ages, ethnicities and backgrounds that are representative of Britain today. We are strongly committed to the view that researchers should engage with laypeople to avoid superimposing a meaning and value on gratitude that does not reflect the views of the people the research purports to study. To this end, and to throw light on what British laypeople understand by the concept of gratitude, we carried out a series of empirical

studies that complement the definitions of philosophers and psychologists with more everyday definitions of laypeople⁵. To examine the perceived value of gratitude we surveyed British people directly, making no prior assumptions about where gratitude might be evaluated in relation to other values and virtues. Finally, we sought to elicit suggestions from the British public themselves about how gratitude might be fostered in British society.

Much recent research on gratitude has originated in the USA and therefore a further aim of the project was to assess the degree to which the understanding and evaluation of gratitude may differ between the USA and the UK. We sought to target the British public with these questions:

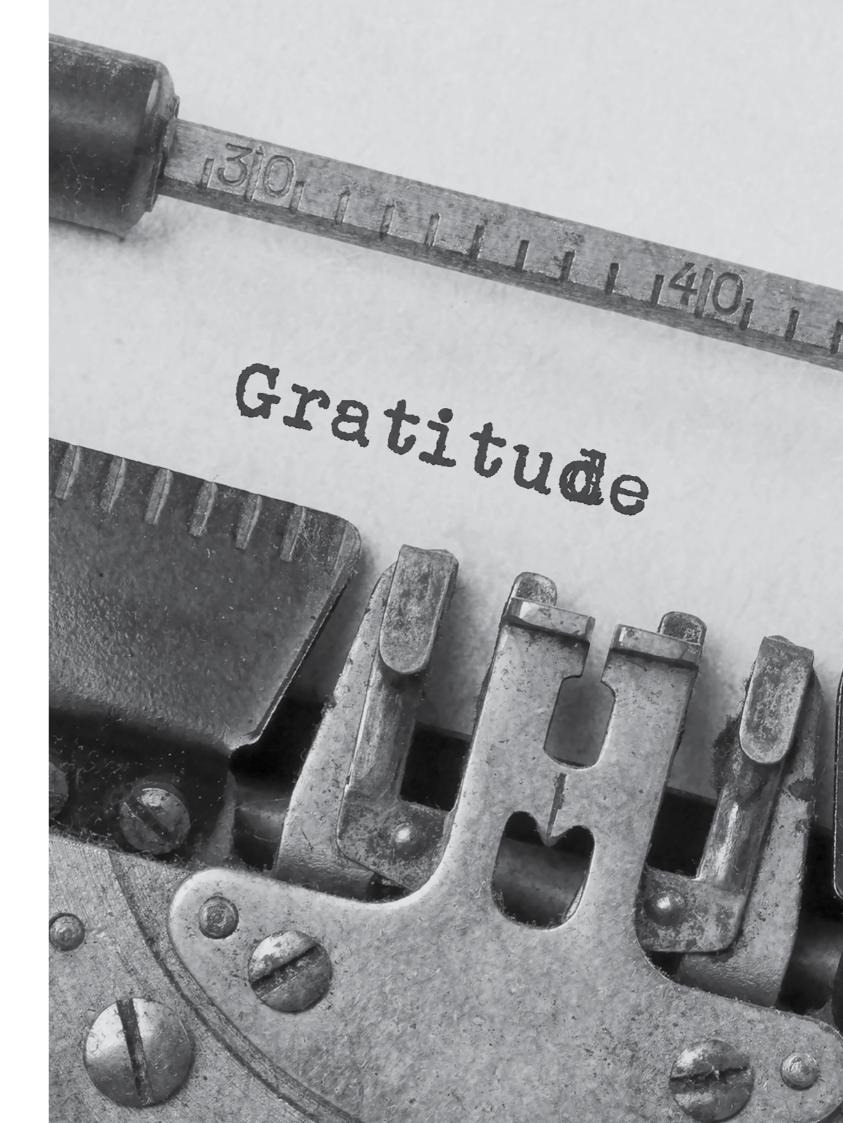
- What is gratitude? And when and why is gratitude experienced?
- What value do British people place on gratitude?
- What are British people grateful for (and/or to whom are they grateful)?
- What kinds of people tend to be grateful?
- Do the British public believe that gratitude can be promoted across a range of contexts and, if so, how might this be achieved?

This report provides an account of the many and varied methods we devised to address these questions. Our research makes a significant contribution to both philosophical and psychological examinations of gratitude, as well as practical and educational perspectives on this virtue. We invite readers to discover how our unique combination of methodological approaches elucidates the key research questions.

'WE SHOULD ALWAYS BE THANKFUL IN LIFE, BECAUSE NOT EVERYONE GETS OUR OPPORTUNITIES.'

Anonymous Research Participant

The term 'layperson' is used to refer to persons without professional or specialised knowledge in the subject of gratitude. As such, laypersons' understandings of gratitude can be compared and contrasted with a growing number of 'expert' views on gratitude in the fields of philosophy and (positive) psychology. The English word 'lay' derives from the Greek (laikos) which translates as 'of the people'. Our report canvassed the views of over 10,000 people across a range of cohorts of laypeople, including children in primary schools, adolescents in secondary schools, students and staff from universities and members of the general (lay) public in Britain. It is extremely unlikely that any of the people who took part in our research would have considered themselves to have had specialised knowledge in the subject of gratitude and we are confident that our research represents a major contribution towards elucidating gratitude from a lay (ie, non-expert) perspective.



2 Background

2.1 GRATITUDE IN PSYCHOLOGY

A groundswell of interest in gratitude has been generated by the rise of positive psychology, a recent branch of psychology emphasising human strengths, well-being and positive emotions. Gratitude has been variously characterised within this literature as a relatively fleeting positive emotion, an enduring character strength, an adaptive coping mechanism, and a virtue that mitigates against materialism and envy.

Gratitude has been advocated as a major means by which subjective well-being (SWB) can be increased. Research has demonstrated that higher levels of gratitude are associated with increased SWB (Emmons and McCullough, 2003; Froh, Sefick and Emmons, 2008; Watkins, 2004), satisfaction with life (Fagley, 2012; Froh, Yurkewicz and Kashdan, 2009), improved mental health (Froh *et al.*, 2011) and increased positive and decreased negative affect (Emmons and McCullough, 2003).

A number of interventions to promote gratitude in both clinical and educational contexts have been developed. Many incorporate gratitudejournaling exercises whereby participants note down daily things for which they are grateful, or which 'went well'. Gratitude has been shown to help people with coping and resilience (Emmons and McCullough, 2003; Wood, Froh and Geraghty, 2010) and even to improve sleep (Wood et al., 2009). Relatedly, a thriving self-help literature, capitalising on the age-old wisdom of 'counting one's blessings,' has mushroomed. Academic interest in gratitude has percolated down to a popular audience by way of the media, where it has become increasingly more prevalent.

In Australia and the USA, gratitude interventions are finding their way into school curricula, largely under the aegis of 'positive education' (see Seligman et al., 2009; Waters, 2012). These interventions have been shown to have a positive impact on SWB, life satisfaction, satisfaction with school experience, and even academic attainment (Froh et al., 2008; Froh et al., 2009; Froh, Yurkewicz and Kashdan, 2009).

However, researchers within the Jubilee Centre have raised concerns that such interventions may fail to give young people the opportunity to reflect on when and where gratitude is appropriate, thus promoting an indiscriminate and uncritical 'attitude for gratitude' (Morgan, Gulliford and Carr, 2015, in press).

In addition to the benefits to the individual of cultivating a grateful disposition, gratitude has been shown to strengthen social bonds and promote pro-social behaviour (Grant and Gino, 2010; Algoe, Haidt and Gable, 2008). Bartlett and De Steno (2006) found that gratitude fosters 'upstream reciprocity'. This means that grateful people tend to wish to return benefits, not just to benefactors, but to others more generally. Gratitude may thus be seen as a way of building social bonds, fostering a connection with, and desire to serve, the community (see also Rogerson, 2015).

2.2 GRATITUDE IN PHILOSOPHY

Attention to gratitude has also been generated as a result of the resurgence of interest in virtue ethics within philosophy. Berger (1975) instigated a number of key philosophical writings, many attempting a conceptual analysis of gratitude, including Simmons (1979), McConnell (1993) and Roberts (2004). Some papers, which we have reviewed critically (Gulliford, Morgan and Kristjánsson, 2013) discuss particular conceptual issues involved in gratitude, such as whether gratitude is necessarily 'supererogatory'6 (Card, 1988; Wellman, 1999; Roberts, 2004), whether gratitude must always be targeted towards a benefactor (McAleer, 2012), and whether gratitude involves an intentionally rendered benefit (Fitzgerald, 1998).

Lively philosophical debate concerning the conceptual contours of gratitude continues, as recent papers by Carr (2013), Nisters (2012) and Roberts (2012) attest. However, there is little dialogue between philosophers and psychologists working in this field, and our review brought to light far more divergent uses of the term, both within and between

the two disciplines than we had anticipated (see Gulliford et al., 2013). Psychologists and philosophers studying gratitude rarely seem to engage in conversation with each other, working instead with different concepts or sub-concepts of gratitude in their respective disciplines, and both are equally prone to a reliance on 'top-down' definitions.

Philosophers have historically been divided in their opinions about the value of gratitude. On the one hand, the first-century Roman philosopher and politician, Cicero, claimed 'Gratitude is not only the greatest of the virtues, but the parent of all of the others.' On the other, Aristotle did not regard gratitude as a virtue exhibited by the 'great minded' because being the receiver of a benefit placed the individual in an inferior position to the giver (Aristotle, 1985, 1124b10 - 15); yet attempts have been made to reinstate gratitude as an Aristotelian virtue (Kristjánsson, 2013). As noted, the value of gratitude within psychology has tended to inhere in its benefits to mental and physical health and its role in strengthening social bonds. There is to date, however, little sense of what value people place on gratitude in Britain and how this relates to other important values

2.3 OVERALL EVALUATIVE GOALS

With a few notable exceptions (eg, Lambert, Graham and Fincham, 2009; Morgan, Gulliford and Kristjánsson, 2014), the meaning of gratitude tends to have been assumed in both the philosophical and psychological literatures on the topic, and the question of what laypeople understand by gratitude has been largely uncharted territory.

While psychological research has highlighted the health benefits of gratitude and underscored its role in strengthening social bonds, there is insufficient knowledge of the value people place on it, and how this relates to the value they place on other virtues like courage, honesty or kindness. Moreover, if gratitude is esteemed by laypeople, it may not be for the same reasons as it is advocated in positive psychology. Rather

than exhorting people to cultivate an 'attitude of gratitude', to benefit their mental or physical health, we felt it instructive to ask people first whether they think gratitude should be promoted, and if so, in what contexts and, perhaps most importantly, how?

In our view, the fundamental problem of existing research on gratitude is that it takes too much for granted; what gratitude is, its status as 'positive', its meaning across cultures and its perceived psycho-moral and educational value. Academia and the media both influence society, but we cannot be sure that the view of gratitude presented in these domains really connects with laypeople. There is a risk of imposing a meaning and value on gratitude that does not reflect laypeople's views, which has implications

for measures of gratitude and psychological interventions to promote it, as we have observed (Morgan et al., 2014). In this connection, we are particularly concerned that educational interventions to cultivate gratitude should probe young people's understanding of gratitude, enabling them to reflect on when gratitude is actually appropriate (Morgan et al., 2015, in press).

As previously indicated, we have created a number of innovative methods in order to address our five major research questions. In the course of answering these questions, we have had cause to reflect on and examine a number of more general issues which make both theoretical and practical contributions to knowledge. Firstly, a major goal of this research has been academic: namely, to advance both

social scientific and philosophical discussions of gratitude and seek new ways in which psychology and philosophy can interact constructively in this area. Secondly, as a result of closely examining the conditions under which gratitude is experienced, we have not only been able to elucidate specific questions, such as whether we are grateful only for intended benefits, but we have also tried to lay the ground for a more adequate pedagogy of gratitude, which would cultivate in young people a critical literacy around gratitude. Thirdly, by asking the British public about the value they place on gratitude and, relatedly, whether and how they think it might be promoted, our work has harnessed the views of the people whom we hope will ultimately benefit from our research.



⁶ This term refers to the notion that gratitude must involve going above and beyond the call of duty

3 Methodology and Findings

The Attitude for Gratitude project has employed a number of specially designed and innovative methods to explore gratitude in Britain. For ease of reading, this section will be split into five subsections following the research questions listed previously.

3.1. RESEARCH QUESTION 1: WHAT IS GRATITUDE?

3.1.1 Method 1 - Examining the features and characteristics associated with the concept of gratitude: A prototype analysis

The primary goal of the prototype analysis was to begin examining how laypeople in Britain construe gratitude. Prototype analysis allows for a simple examination of the features and characteristics associated with a given concept, in this case gratitude. Features generated by this method should begin to elucidate how gratitude is understood by laypeople. The prototype analysis comprised three distinct studies:

Study 1 asked participants to write down all of the features and characteristics that they believe typically exemplify gratitude along with a score of positive/negative valence which ranged from 1 = very negative to 5 = very positive.The features arising from this study were collated into a list of 63 key gratitude features and presented to participants in Study 2.

In Study 2, a second group of participants rated the centrality of these 63 features on a Likert scale from 1 = not at all central to 8 = extremely central. The centrality ratings were subsequently combined with the frequency ratings from Study 1 to create a combined rank of the gratitude features. These combined ranks were then used to create the materials for Study 3.

In Study 3, participants were presented with a series of fictional characters. Each of these

characters demonstrated three features of gratitude. Participants saw 16 character descriptions in total: four descriptions contained gratitude features that were central to the concept (for example, Person A feels appreciative, expresses thanks and feels respected); four descriptions contained peripheral gratitude features (Person E feels valued, has received a gift, and is excited); four contained marginal features (Person I feels motivated, is optimistic, and feels blessed); and four contained remote features (eg, Person L feels secure, is sensitive, and feels enlightened). After reading the character descriptions, participants answered a series of questions - the key question being 'How GRATEFUL is this person?' The idea here is that fictitious characters demonstrating central features should be deemed to be 'more grateful' than those exhibiting peripheral/remote features. We added another interesting question here; 'How VIRTUOUS is this person?' This allowed us to begin examining the link between gratitude and virtue; will more grateful characters also be deemed more virtuous? (For more details on the method and results of this prototype analysis, see Morgan et al., 2014.)

Participants: Two hundred and fifty five students from the University of Birmingham took part: 108 in Study 1; 97 in Study 2; 50 in Study 3. Participants were aged 18-40 years; 87% were female (for a full breakdown of the demographics across all of our methods see Appendix 2).

Analysis: The complete list of all features and characteristics associated with gratitude in Study 1 were coded into larger categories based on their linguistic and semantic similarities. This procedure was completed by two independent coders. The degree of overlap (or agreement) between coders' decisions was very good (Cohen's Kappa = .87). Participants' centrality ratings in Study 2 were examined for internal consistency (very high,

Cronbach α = .92) and compared (using

Findings: Study 1 resulted in 63 key gratitude features with a mean valence of 4.29 (Standard Deviation (from now on SD) = 0.70)⁷. Interestingly, however, a number of features that were freely identified as characteristic of gratitude were also rated as negative in valence, Examples include 'obligation'. 'indebtedness', 'guilt', 'embarrassed', and 'awkward'. The number of negative features named in our UK sample is higher than that previously found in Lambert et al.'s (2009) comparable US study.

Comparisons of centrality scores from Study 2 and frequency scores from Study 1 revealed a significant positive correlation (r = .43, p < .001)8, demonstrating that features that were frequently named in Study 1 were also deemed central to the concept in Study 2. An examination of centrality scores (in Study 2) and positive/negative valence scores (from Study 1) revealed that more central gratitude features tended to be rated as more positive in valence (r = .59, p < .001). However, this correlation between centrality and positive valence is weaker than that demonstrated in Lambert et al.'s (2009) study (r = .84, p < .001) which also supports the notion that gratitude may not be viewed as positively in Britain as it is in the USA.

Study 3 aimed to show that fictitious characters demonstrating more central features of gratitude would be deemed more grateful than those demonstrating more peripheral. marginal or remote features. An ANOVA

participants' responses to the key questions 'How GRATEFUL is this person?' and 'How VIRTUOUS is this person?' were assessed using correlations, Analysis of Variance (ANOVA) and paired-sample t-tests.

3.1.2 Method 2 - Vignette Questionnaire

of responses to 'How GRATEFUL is this

person?' revealed a significant difference

The results indicate that characters

demonstrating more central gratitude

 $p < .001)^9$.

et al., 2014).

across the four conditions (F(3, 147) = 37.3,

features were considered to be more grateful

central features). This is an important condition

to meet in a prototype analysis, and suggests

that gratitude does indeed have a prototypical

compare responses to 'How VIRTUOUS is this

person?' and 'How GRATEFUL is this person?'

structure. Another goal of this study was to

A large, positive and significant correlation

p < .001) indicates a link between gratitude

were also considered virtuous (see Morgan

Limitations: Prototype analysis is a useful

methodology in beginning to examine gratitude;

however, it only offers initial evidence of how

gratitude is conceptualised. This method does

not distinguish between features identified as

part of a given concept and features typically

associated with a concept. A more in-depth

is needed to draw any strong conclusions

(see Methods 2 and 3 below).

about laypeople's understanding of gratitude

examination of how gratitude is conceptualised

and virtue; characters perceived to be grateful

between these two questions (r = .61,

(in comparison to those demonstrating less

The 'vignette questionnaire' examines various conceptual controversies briefly reviewed in Section 2 (eg, the intention of the benefactor and the value of the benefit: see Appendix 1 and Gulliford et al., 2013). The questionnaire presents different scenarios (or vignettes) that are systematically manipulated to examine these conceptual controversies.

The vignette questionnaire was designed for use with adults and adolescents. We created four different scenarios that explore gratitude. Two are 'high gratitude scenarios' - in this case being rescued from a dangerous situation - and two are 'low gratitude scenarios', where gratitude should still be present but at less intense levels (ie, receiving a nomination for an award or being a beneficiary in a will). Only two scenarios were used at a time to ensure that the questionnaire was manageable. Therefore, to test all scenarios and control for order effects, the type and order of the scenarios was counterbalanced across participants.

Each scenario followed a similar format: we began with a baseline question before systematically manipulating the scenario to examine different conceptual controversies (see Figure 1 and Appendix 1). For each conceptual controversy we examined, we asked three types of question: whether the participants would be grateful if that scenario were to arise; how grateful they would be; and whether they should be grateful. Order of the 'should' and 'would' questions was also counterbalanced. The adults' version of this questionnaire was presented online via SurveyGizmo and the adolescents' version was presented in hard copy.

Figure 1: Baseline Questions from a High **Gratitude Scenario**

- 1 = Strongly agree
- 3 = Neither agree nor disagree
- 4 = Disagree
- 5 = Strongly disagree

- 1 = Strongly agree
- 2 = Agree
- 3 = Neither agree nor disagree
- 4 = Disagree
- 5 = Strongly disagree

Participants: Of the adults who accessed the questionnaire; 510 yielded usable data. Of these respondents, 74% were female; ages ranged from 18-65 years (mean age 28 years); 80% of respondents were White British. Students from a Secondary School in Cheshire completed a hard copy of the vignette questionnaire; of the 271 respondents 54% were female; 95% White British; and ages ranged from 11-17 years (mean age 14 years).

Analysis: Data from the two high gratitude scenarios (rescues from a lake and fire), and two low gratitude scenarios (nomination for an award at work and being a beneficiary in a will) were combined. Frequencies, means and standard deviations for all ARE. SHOULD and DEGREE questions were calculated. Repeated measures Analyses of Variance (rANOVAs) were used to examine differential responding from the baseline in the amalgamated data in high and low gratitude scenarios. Mixed-design ANOVAs were used to compare adult and adolescent responses.

Findings: The vignette questionnaire enabled us to systematically manipulate factors influencing whether gratitude is deemed appropriate in a variety of situations, and the amount of gratitude respondents reported they would feel in each circumstance (as compared to the baseline). In the following descriptions ARE scores refer to answers to 'how grateful would you be?' (if this scenario were to arise); SHOULD scores refer to 'how grateful should you be?'; and DEGREE scores refer to the amount of gratitude that would be experienced.

The mean scores from the low gratitude scenarios showed variations from the baselines, for example, malicious intentions decreased ARE and DEGREE scores indicating a reduction in gratitude experience (we return to this issue later). In the high gratitude scenarios, however, the mean ARE score of gratitude at baseline was 4.89 (SD = 0.44) and the mean DEGREE of gratitude of 94.71% (SD = 8.62), the highest reported across all conditions (see Graph 1). Therefore, when exploring the issues of cost and supererogation we observed no increase in gratitude (as might have been hypothesised), see Online-Appendix A. Perhaps in a life and death situation, so long as a successful rescue is achieved, no greater gratitude would be experienced, despite increasing risk or lack of training. Relatedly, there is strong evidence that laypeople deem gratitude as fitting even when people are 'just' doing their job; only 1.4% of the sample disagreed or strongly disagreed with the proposition that they would be grateful to the lifeguard or firefighter because it is their job to help.

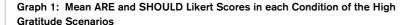
In contrast, the low gratitude scenarios showed differential levels of gratitude, relative to the baselines (see Graph 2). Across all three measures (ARE, SHOULD and DEGREE),

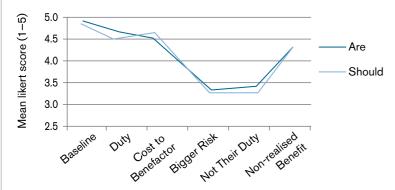
a Pearson's correlation) with frequency and valence scores from Study 1. In the final study,

⁸⁹⁶ features were generated in total (an average of 7.7 per participant). The coding procedure resulted in 201 gratitude features. Of these, 138 were named only once or twice and were discarded from the study, leaving 63 key features.

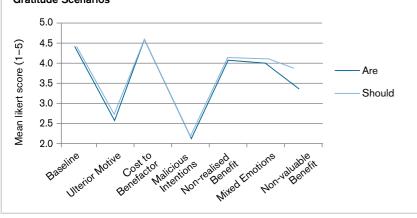
 $^{^{8}\}quad\text{According to Cohen (1988: 79-81) small correlations range from $r=.10$ to .29; medium $r=.30$ to .49 and large from $r=.50-1.0$. The probability or 'p value' and large from $r=.50-1.0$.}$ is an index of significance; it signals the probability of this finding arising by chance. A p value below .05 indicates that there is less than 5% probability of this happening by chance; we therefore take this result as statistically significant.

⁹ Paired-samples t-tests showed that gratitude ratings were significantly higher in the central compared to the peripheral condition (t (49) = 2.67, p < .05); ratings were significantly higher in the peripheral condition than the marginal condition (t (49) = 4.64, p < .001); and significantly higher in the marginal condition to the remote condition (t (49) = 2.16, p < .05).





Graph 2: Mean ARE and SHOULD Likert Scores in each Condition of the Low Gratitude Scenarios



the mean reported gratitude increased significantly where benefactors expended greater effort, and decreased significantly where ulterior and malicious motives were involved (see Online-Appendix B). Similarly, the presence of mixed emotions (ie, feeling grateful but also guilty or indebted); the bestowal of a non-valuable benefit (ie, an unwanted gift); and an intended benefit that did not materialise also showed significant reported decrements in gratitude across all three measures (ARE, SHOULD and DEGREE).

The vignettes also addressed conceptual controversies surrounding the issue of whether gratitude necessarily involves benefactors' benign intentions. The empirical data showed that malicious and ulterior motives significantly undermine reported gratitude (Baseline DEGREE = 73.25%, SD =18.33; Ulterior DEGREE = 37.53%, SD = 24.0; Malicious DEGREE = 27.12%, SD =23.98). They do not always disqualify it however; 22.8% of respondents would feel grateful regardless of whether a benefactor had an ulterior motive, and 12.3% would be grateful for a benefit with the malicious motive of either embarrassing them or harming their relationship with relatives.

This research offers a unique insight into how well philosophers' conceptual understanding of gratitude maps onto lay conceptions. The vignette approach elucidated conceptual controversies empirically. Our findings show that in *lower* gratitude situations cost expended to benefit *increases* reported gratitude. Our research also found that gratitude does not necessarily involve a supererogation condition, nor is it always disqualified in the case of a benefactor having malicious or ulterior motives in conferring a benefit.

Limitations: One potential limitation of this research lies with the fact that it utilises a self-report measure and, as such, may be subject to the influences of social desirability, self-deceptions and self-presentation effects. A similar problem arises when asking respondents to imagine themselves in the scenarios described; participants may not be able to imagine themselves feeling this way (eg, they may be unable to imagine not wanting to be nominated for an award). These factors could have influenced participants' responses, regardless of being asked to respond as honestly as possible.

3.1.3 Method 3 - Gratitude Stories

For children (aged 8 – 11 years) gratitude stories were used instead of a questionnaire. As far as possible, we tried to replicate the same conceptual controversies in four gratitude stories as in the vignette questionnaire. For instance, the lake rescue scenario in the vignette questionnaire maps closely onto 'The Blue Oasis' (see Online-Appendix C). 'The Class Councillor' and 'St Oscar's Oscars' follow similar themes to the two low gratitude scenarios in the questionnaire. 'Shooting Hoops' offers several scenarios that manipulate issues of duty.

At several junctures in the stories, participants answered questions in story workbooks about how they thought the characters in the story would feel. The questions included both open-ended and closed forms; some questions necessitated a Yes/No response, others followed a five-point Likert scale gauging degree of gratitude. Within a one-hour lesson, teachers read through one of the stories with students, pausing at set junctures to answer the questions.

Participants: 270 primary school students, aged 8–11 years, completed one of the workbooks. The six schools involved were recruited from: West Midlands (N = 90); Derbyshire (N = 33); and Scotland (N = 147).

Analysis: Frequencies were calculated for Likert scale responses and Y/N options. Open-ended questions were coded thematically to gather qualitative data elucidating children's answers.

Findings: In terms of *duty*, 99%¹⁰ (N = 86) of respondents thought a character in the 'Blue Oasis' would be grateful to the lifeguard for rescuing her, even though it is her job. Similarly, in 'Shooting Hoops', all respondents reported that they deemed gratitude appropriate in the case of a person 'doing their duty' in retrieving a ball they had sent over the fence during a game. Of this sample 93% (N = 40) indicated that they thought the owner of the ball would be 'quite' or 'really' grateful.

In terms of *risk/cost*, children read in the 'Blue Oasis' that a man had attempted (but failed) a rescue that was eventually achieved by the lifeguard. Of respondents, 65% thought they would be more grateful to the man who *tried* to save them over the lifeguard who did save them. Thus it seemed that respondents calibrated gratitude according to risk/cost. This finding was underscored in 'Shooting

Hoops', where all respondents agreed that they would be grateful to a child taking the risk of getting stung by nettles in retrieving a wayward ball. Here, a greater percentage of respondents reported that the character would be 'really grateful' in comparison to when the ball was retrieved from a sense of duty (80% as opposed to 58%). These findings show that respondents take account of going the extra mile, according particular weight to the element of risk/cost involved as well as duty. Indeed, in qualitative responses asking why they would be more grateful to the man than the lifeguard, 27% of respondents spontaneously used the term 'risk' in their explanation, while 23% said they had identified the man because 'it was not his job to help.'

Of respondents, 29% indicated that they thought a character who had been nominated for an award with an ulterior motive (namely, a nomination with the aim of subsequently copying the nominee's spelling test) would still be grateful for it. Comprehension of the ulterior motive was checked with qualitative questions which showed that 70% of respondents understood an ulterior motive was present. In cases where the ulterior motive was recognised as such, only 7% of respondents indicated that they thought the boy in the story would be grateful. Similarly, malicious intentions were explored in a story where a shy boy (Jason) was nominated to be class councillor as a joke by his bullying nominators. Of respondents 86% (N = 81) indicated that Jason would not have been grateful to receive a nomination calculated to embarrass him. Only 8% of respondents believed that Jason would have been either 'really grateful' or 'quite grateful' to have received the nomination.

Mixed emotions were explicitly addressed in 'St Oscar's Oscars' where a boy (Ethan) feels obliged to nominate a classmate for an award because the classmate (Jordan) has nominated him. Ethan already has another nominee in mind (Dominic). While 60% of respondents said 'Yes' in response to the question 'Do you think Ethan is grateful for the nomination he received from Jordan?', 37% answered 'No' and 3% amended the workbook to give a 'Yes and No' response. Qualitative data showed that 40% of respondents mentioned confusion and 13% awkwardness. While 63% believed the boy should nominate Dominic, whom he originally had in mind, 21% suggested he now nominate Jordan.

Whilst the stories were written with the primary goal of tapping children's *understanding*

of factors influencing gratitude, we also suggest they may be used as tools for teaching the 'grammar of gratitude' (Morgan, et al., 2015, in press). The results suggest not all children aged 8–11 years understand how ulterior motives or mixed feelings impact on whether gratitude is warranted. In the first case, almost a third of respondents did not register the ulterior motive, while in the latter case, approximately a fifth of the sample thought feelings of indebtedness obligated the child to nominate a different person than they had originally had in mind.

Limitations: Whilst care was taken to ensure that the stories mapped onto the same conceptual controversies as the vignette questionnaire, it was not possible to reproduce direct comparisons of all items. We were, however, still able to make informed comparisons about the factors which influence gratitude across generations. Secondly, although we supplied facilitator notes for conducting the lesson, administration may have differed across classes and schools. Whilst students' answers were varied, we cannot guarantee workbooks were completed entirely independently.

Comparison of laypeople's conceptualisation of gratitude across generations: As described, almost all adult, adolescent and child respondents indicated that gratitude is *not* subject to a supererogation condition (see Table 1).

Noteworthy differences emerged across generations in terms of how risk was appraised. Of the children aged 8–11 years 65% indicated that they would be more grateful to a man who *tried* to save them over a lifeguard who *did* save them. In the comparable vignette manipulation, participants were asked whether they would (and should) be more grateful to a passer-by than a firefighter or lifeguard 'as there is bigger risk involved'. Intriguingly, a far greater proportion of adult respondents than adolescent respondents disagreed that they would be more grateful to the person who helped at greater risk;

34.6% and 11.2% respectively. Moreover, 66.4% of the adolescents agreed that they would be more grateful to the have-a-go hero for taking greater risk, whereas only 45.7% of adults chose this response. Mixed-design ANOVAs, comparing adult and adolescent responses across this data revealed that these differences were significant (p < .01, see Online-Appendix D). The findings suggest that there may be differences between adults and young people in their assessment of whether risk taken is deemed virtuous or foolhardy. The data indicate that adults may take a less positive view of untrained heroes than children and adolescents, perhaps because people become more ambivalent with age about the value of taking such risks.

A mixed-design ANOVA conducted on the ARE data in the low gratitude scenarios revealed that adults were significantly more likely than adolescents to acknowledge that mixed emotions (indebtedness or guilt) co-occur with gratitude (p < .01). Adults were also significantly less grateful to receive a benefit that was not of any real value to them (eg, a nomination for an unwanted award) than adolescents (p < .01). Does this latter finding suggest that young people are more likely than adults to endorse the adage 'it's the thought that counts'?

These findings begin to illuminate possible generational differences in understanding gratitude. While children and adults agree that gratitude is appropriate where people are 'simply' doing their duty, other elements demonstrate differences; for example, children and adolescents appear to esteem benefactor *risk* in a rescue much more highly than adults.

3.2 RESEARCH QUESTION 2: WHAT IS THE PERCEIVED VALUE OF GRATITUDE?

In order to examine how valuable gratitude is perceived to be, we developed a 'Valuable Values Questionnaire' (VVQ) for use with adults and adolescents, and a 'Valuable Values Activity' (VVA) for children aged 8–11 years.

Table 1: Percentages of Agreement across Age Groups in Feeling Grateful to a Professional Rescuer Who is Simply Doing Their Duty

Condition	% Adults Agree/ Strongly Agree (N = 510)	% Adolescents Agree/Strongly Agree (N = 254)	% Children (8–11yrs) Grateful to Lifeguard Y/N (N = 86)
Duty Are	98.2	95.0	Question not asked
Duty Should	95.8	89.3	98.8 YES

Due to the smaller numbers of participants in the gratitude stories, percentages were rounded up to the nearest whole number.

3.2.1 Method 4 - Valuable Values Questionnaire

The VVQ asks respondents about a series of different values (taken from Peterson and Seligman's (2004) 24 Character Strengths¹¹). The questionnaire consists of four steps. The first step involves sorting the 24 values into discrete categories, ranging from Extremely Low Priority to Extremely High Priority, depending on how important each individual value is deemed to be. The second step involves deciding how much attention is typically paid to these values. The third step involves ranking a refined set of seven values from most to least important; these seven values are courage, fairness, gratitude, honesty, humility, kindness and self-control. The final step involves deciding how often each of these seven values guides behaviour12.

Alongside these four stages of the questionnaire, we asked participants questions that (1) measured social desirability (ie, responding with the aim of pleasing the investigator/presenting themselves in a good light) (Rammstedt and John, 2007); and (2) assessed personality using a refined scale of the Big Five Model (Stöber, 2001; the five domains of personality are Agreeableness: Conscientiousness; Extraversion; Neuroticism; and Openness). We also asked an open-ended question: Do you think gratitude is an important value? Why/Why not?

Participants: Of the 2194 adults who accessed the online VVQ; 1880 yielded usable responses. Of these respondents, 56% were female and 89% were White-British. Ages ranged from 19-88 years (mean age, 43 years) and 36% identified themselves as atheist, 45% as Christian. Of those who identified with a religion 31% practised their religion. Of the 456 adolescents aged 11-18 years who completed

the VVQ in hard copy (mean age, 13 years), 50% were female; 36% atheist and 33% Christian. Of those who identified with a religion 9% practised their religion.

Analysis: To examine where gratitude was placed in relation to the other 23 values in terms of priority and attention, and where it fell in relation to the other six values in the rank and behaviour questions, we examined the means and frequencies across all values tested. Multivariate analysis of variance (or MANOVA) tests were carried out on the adolescent and adult data sets to separately explore any differences across groups (eg, across gender, age, etc.). The gratitude-priority scores; gratitude-attention scores; gratitude-rank; and gratitude-behaviour scores were included as dependent variables, and gender, age, religion, and practise religion (yes/no) were included as fixed factors. Bivariate correlations examined relationships between the four aforementioned dependent variables and participants' social desirability (SD) scores and scores on the Big Five domains of personality. There were various small, positive and significant correlations between participants' scores on priority, attention and behaviour stages of the VVQ and their SD and Big Five scores; therefore SD scores and scores on the Big Five were treated as covariates in the MANOVA tests.

Limitations: After piloting this questionnaire with adults and receiving their feedback, three sections of the questionnaire were subsequently changed to improve clarity and accessibility. These changes concern Section 1 of the questionnaire (priority), Section 2 (attention), and Section 4 (behaviours). Therefore, whilst

of this questionnaire. Therefore, in the following section we present findings to the four stages of the VVQ for adults and adolescents separately.

Findings:

Adult questionnaire: The first section of the questionnaire asked participants to rate the level of priority that they currently give to 24 values (see Table 2). Responses ranged from 1 = low priority to 5 = high priority. The mean priority rating for gratitude was 3.99 (SD = 0.94, N = 1880), making gratitude the eighth most highly prioritised value (see Table 3).

Participants then rated how much attention they typically pay each of the 24 values (1 = under attention; 2 = the right amount of attention; 3 = over attention). The mean attention rating was 1.92 (SD = 0.63, N = 1876). When ordering the 24 values from most attention given to least attention given, gratitude appears 11th (see Online-Appendix E).

Subsequently, participants ranked the subset of seven values (1 = most important to 7 = least important). The mean rank for gratitude was 4.80 (SD = 1.59, N = 1880) and overall gratitude was ranked fourth of the seven values. The rank of importance by mean is as follows: honesty, kindness, fairness, gratitude, courage, self-control and humility.

Participants were further asked to rate how often each of the seven values typically guides his/her behaviour. Each value was assessed using three statements from Peterson and Seligman's VIA (2004). For example, to assess how much gratitude guides the respondents' behaviour they were presented with: (1) 'Counting my blessings'; (2) 'Acknowledging people are good to me'; and (3) 'Expressing my thanks to those who care about me'.



^{11 24} value definitions were provided, limiting ambiguity and ensuring understanding (Park, Peterson and Seligman, 2008).

Participants rated how often each of these beliefs or tendencies typically guides their behaviour from 1 = seldom guides behaviour to 5 = frequently guides behaviour. The responses to all three statements were added together to form a total score for each of the seven values, ranging from 3 to 1513. The mean gratitude behaviour rating is 11.02 (SD = 2.44) making gratitude the fourth most likely value to guide behaviour.

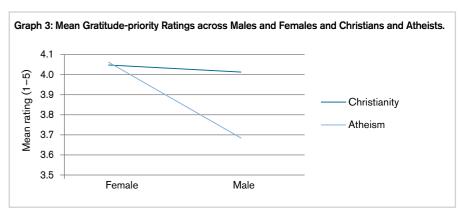
Importantly, there were significant correlations¹⁴ between all four stages of the questionnaire, indicating a degree of consistency in response patterns (see Online-Appendix G). That is, respondents who professed that they prioritise gratitude highly also gave gratitude a high level of attention (r = .25, p < .001), ranked its importance highly ($r = -.33^{15}$, p < .001) and indicated that gratitude often guides their behaviour (r = .34, p < .001). Importantly, however, the relationship between these stages was not as strong as we predicted; whilst there was a significant correlation between stages. the strength of this correlation was relatively small (ie, the r score was between 0.1 and 0.4, suggesting only a small to medium relationship between the four stages). This suggests that attitudes of importance do not necessarily map onto grateful behaviours. We return to this issue in Section 3.4.

When comparing responses to our four questionnaire stages across different groups of participants, we observe several main effects of, and interactions between, our fixed factors, which consist of gender (male; female), age group (19-30 years; 31-40; 41-50; 51-60; 61-70; >70 years) religion (Christianity; atheism) and practise religion (yes; no)16.

Group comparisons for priority of gratitude:

There was a significant difference between males' and females' responses regarding priority, with females allocating gratitude a higher priority rating than males (Female Mean (or M) = 4.06, SE = 0.06; Male M = 3.86, SE = 0.04, respectively; F(1, 1476)= 8.78, p < .01). The difference between ratings by Christians and atheists was also significant due to higher priority ratings from Christians (M = 4.04, SE = 0.04;

and M = 3.88, SE = 0.06, respectively; F (1, 1476) = 5.42, p < .05). However, when comparing individuals who regularly practise their religion with those that identify with a religion yet do not practise, we see no significant difference in priority ratings (M = 4.12, SE = 0.04; M = 4.03, SE = 0.09 respectively; F (1, 1028) = 0.825, p = 0.364). The analysis also revealed a significant interaction between gender and religion due to a larger difference between Christianity and atheism ratings in males (F (5, 1476) = 5.94, p < .05) – see Graph 3.



Group comparisons for attention paid to gratitude:

When examining the degree of attention paid to gratitude across the various participant groups we observed no significant differences.

Group comparisons for ranked importance of gratitude:

When examining the mean rank allocated to gratitude across participant groups there were significant differences across age groups (F (5, 1680) = 6.20, p < .001). A planned comparison of the different age groups demonstrated significantly higher ranking in 18-30 year olds than for 51-60 year olds and 61-70 year olds (M = 4.54, SE = 0.82; M = 5.04, SE = 0.10; and M = 5.11, SE = 0.11 respectively).

When taking the whole order of values from 1-7, females most often rank gratitude as fourth out of the seven values, whilst males most often rank it last (see Table 2).

Table 2: The Mean Order of the Seven Values Ranked by Participants Shown Overall; across genders; across Christians and atheists; and across individuals who do and do not practise their religion

		Gender		Reli	gion	Practise Religion		
Group Rank:	All groups (N = 1880)	Females (N = 1024)	Males (N = 856)	Christians (N = 853)	Atheists (N = 673)	Yes (N = 575)	No (N = 496)	
1	Honesty	Kindness	Honesty	Honesty	Honesty	Honesty	Honesty	
2	Kindness	Honesty	Fairness	Kindness	Fairness	Kindness	Fairness	
3	Fairness	Fairness	Kindness	Fairness	Kindness	Fairness	Kindness	
4	Gratitude	Gratitude	Self-control	Gratitude	Courage	Gratitude	Courage	
5	Courage	Courage	Courage	Self-control	Gratitude	Self-control	Gratitude	
6	Self-control	Self-control	Humility	Courage	Self-control	Humility	Self-control	
7	Humility	Humility	Gratitude	Humility	Humility	Courage	Humility	

¹² Inspiration for this question comes from the Life Values Inventory (Brown and Crace, 1996).

Behaviour scores below the lowest possible value of 3/above the biggest possible value of 15 were excluded from analysis.

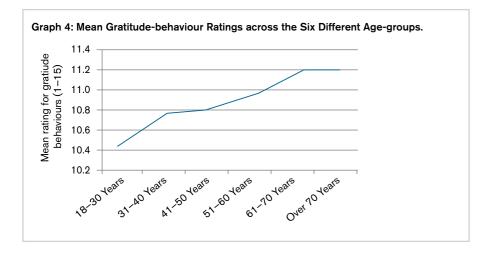
¹⁴ There is debate whether Likert responses should be treated as interval or ordinal data. Interval data allows for parametric testing, whilst ordinal data normally requires non-parametric tests. Our data here requires a MANOVA for which there is no non-parametric alternative. Given this, this questionnaire has been analysed using parametric tests. Importantly, a non-parametric Spearman's Rho correlation yielded almost identical results (see Online-Appendix H).

¹⁵ For the rank of gratitude a lower value rather than a higher value indicates higher importance therefore there is a negative relationship between rank and the other

¹⁶ Christianity and atheism made up 81.2% of our adult sample and 68.7% of the adolescent data. Therefore, we restricted analysis of religion in both data sets to Christianity and atheism.

Group comparisons for gratitude behaviours:

Finally, when examining how gratitude guides behaviour we observed that female ratings are significantly higher than male ratings, suggesting that females believe that gratitude guides their behaviour more frequently than males do (M = 11.44, SE = 0.14; M = 10.38, SE = 0.09 respectively; F (1, 1476) = 39.39, p < .001). We also found a significant difference in behaviour ratings across the six age groups (F (5, 1476) = 2.93, p < .05) – see Graph 4; a planned comparison of the data revealed that this difference is due to lower behaviour ratings for 18–30 year olds in comparison to 61–70 year olds (M = 10.51, SE = 0.12; M = 11.21, SE = 0.16 respectively). Further to this, we see a significant difference between responses from Christians and atheists, with Christians indicating that gratitude guides their behaviour more frequently than atheists (M = 11.33, SE = 0.09; M = 10.49, SE = 0.14 respectively; F (1, 1476) = 25.46, p < .001).



Adolescent questionnaire:

When rating the level of priority that they currently give to the 24 values (1 = extremely low priority to 7 = extremely high priority), adolescents' mean priority rating for gratitude was 4.91 (SD = 1.48, N = 448), making gratitude the seventh most highly prioritised value (see Table 3).

The mean attention rating for gratitude (from 0 = Too little attention to 150 = Too much attention, marked on a 150mm line) was 89.51 (SD = 32.15, N = 449). Gratitude was rated sixth highest of the 24 values (see Online-Appendix E).

When asked to rank the seven values, the mean gratitude rank was 4.5 (SD = 1.71, $N = 358^{17}$) and overall gratitude was typically ranked sixth (see Table 4).

When asked to rate how often each of the seven values typically guides his/her behaviour, which was assessed using 3 statements
(1 = seldom guides behaviour), the mean

gratitude-behaviour score¹⁸ was 13.56 (SD = 3.8, N = 395). Gratitude was fifth most likely to guide respondents' behaviour with kindness the most likely value to guide behaviour and humility the least likely (see Online-Appendix F).

There were significant correlations between all four stages of the questionnaire, which indicated a degree of consistency in response patterns. All but one of these correlations were small to medium in strength, with the exception of priority and attention which correlated strongly (r = .509, p < .001).

Group comparisons:

No differences across gender, school, religion or practise religion were observed in any of the four questions. In contrast with the adult data, the overall mean rank of the seven virtues was identical across males and females, Christians and atheists, and individuals who practise their religion and those who do not. The overall order of honesty, fairness, kindness, courage, self-control, gratitude and humility is the same across all group subsets.

Table 3: Mean Priority Ratings for the 24 Values, Shown across Adolescents and Adults in Descending Order

	Adolescent Data (Age 11-	-18 years; N = 448))	Adult Data (Age 19-88 years; N = 1880)						
Priority Order	Value/ Character Strength	Mean priority rating (1-7)	SD	Priority Order	Value/ Character Strength	Mean priority rating (1-5)	SD			
Highest priority 1	Kindness	5.48	1.38	Highest priority 1	Honesty	4.60	0.75			
2	Humour	5.36	1.50	2	Fairness	4.50	0.78			
3	Love	5.35	1.64	3	Kindness	4.43	0.80			
4	Fairness	5.24	1.46	4	Love	4.24	0.96			
5	Honesty	5.23	1.44	5	Humour	4.14	0.91			
6	Hope	4.91	1.54	6	Perspective	4.07	0.86			
7	Gratitude	4.91	1.48	7	Love of Learning	4.01	0.96			
8	Zest	4.88	1.68	8	Gratitude	3.99	0.94			
9	Social Intelligence	4.86	1.44	9	Judgement	3.98	0.95			
10	Creativity	4.76	1.50	10	Social Intelligence	3.87	0.98			
11	Citizenship	4.72	1.42	11	Persistence	3.86	0.94			
12	Self-Control	4.69	1.63	12	Self-Control	3.85	0.94			
13	Forgiveness	4.68	1.62	13	Curiosity	3.83	0.98			
14	Courage	4.61	1.50	14	Humility	3.77	0.96			
15	Leadership	4.56	1.57	15	Hope	3.76	1.03			
16	Perspective	4.51	1.44	16	Forgiveness	3.74	1.00			
17	Persistence	4.45	1.42	17	Courage	3.68	0.93			
18	Curiosity	4.39	1.55	18	Creativity	3.49	1.07			
19	Humility	4.36	1.56	19	Leadership	3.38	1.06			
20	Love of Learning	4.34	1.75	20	Zest	3.37	1.04			
21	Judgement	4.24	1.55	21	Citizenship	3.37	1.13			
22	Appreciation of Beauty	4.14	1.56	22	Prudence	3.30	1.01			
23	Prudence	4.08	1.51	23	Appreciation of Beauty	3.25	1.14			
Lowest priority 24	Spirituality	3.51	1.75	Lowest priority 24	Spirituality	2.55	1.37			

3.2.2 Method 5 - Valuable Values Activity

The WA examined the relative importance of gratitude in children aged 8–11 years. Teachers presented a PowerPoint facilitating a discussion about seven values (gratitude; courage; kindness; fairness; honesty; self-control; and humility). The PowerPoint included definitions of the values, questions to probe their importance; and opportunities to discuss the values in pairs, groups and as a class. Alongside this PowerPoint, teachers were given seven short stories embodying each of the seven values. The materials were designed so that teachers could split the material across multiple lessons to fit with other teaching commitments; all teachers completed this activity within two days. Students completed response booklets, which

asked them to define the seven values and rank the values from most to least important.

Participants: Of the 248 primary school students, aged 8–11 (mean age 10 years), who participated in the WA, 36% were in Year 4, 34% Year 5 and 30% Year 6. Of the sample, 48% were female; 36% were Asian British Pakistani; 19% White British; 58% Islamic. Of those who identified with a religion, 72% practised their religion.

Analysis: We examined both the mean rank for gratitude and the overall mean rank of all seven values, exploring differences across groups including gender differences, year group differences, and practise religion differences.

Findings: Of the students, 67% devised their own definitions of the seven values demonstrating a good understanding of the concepts. On average, gratitude was placed fifth in the rank of seven values (see Table 4). There were no differences in the rank of gratitude across gender, year group or practise religion, however a larger sample may have increased the reliability of these comparisons.

Limitations: To ensure teachers felt comfortable and free in the delivery of these resources, we allowed for flexibility in timing and delivery. Whilst we believe these conditions were necessary to produce a desirable and useful resource, the administration of these materials differed across classrooms and schools.

¹⁷ Cases where sum of ranks did not equal 28 (signifying that instructions were not adhered to) were excluded from analysis.

Behaviour scores below the lowest possible value of 3/above the biggest possible value of 21 were excluded from analysis.

Table 4: The Mean Rank of the Seven Values across the Three Age-groups (children; adolescents; and adults).

Mean Rank	Primary School Students (aged 8-11 years, N = 248)			Adolescents ed 11–18 year N = 358)	rs,	Adults (aged 19–88 years, N = 1880)			
	Value	Mean Rank	SD	Value	Mean Rank	SD	Value	Mean Rank	SD
1	Kindness	2.75	1.59	Honesty	3.04	1.77	Honesty	2.41	1.52
2	Honesty	3.07	2.00	Fairness	3.18	1.78	Kindness	2.87	1.71
3	Self-control	3.93	1.77	Kindness	3.31	1.61	Fairness	2.88	1.58
4	Fairness	3.98	1.67	Courage	3.89	1.98	Gratitude	4.80	1.59
5	Gratitude	4.00	2.05	Self-control	4.47	1.96	Courage	4.86	1.81
6	Courage	4.56	2.06	Gratitude	4.50	1.71	Self-control	5.03	1.68
7	Humility	5.36	1.62	Humility	5.61	1.81	Humility	5.14	1.69

Comparisons of the perceived value of gratitude across generations:

One component of the Valuable Values techniques (questionnaire and activity) is repeated across all three age groups; namely, the ranking of gratitude alongside courage, fairness, honesty, humility, kindness and self-control. This allowed for a comparison of the position of these seven virtues across the three groups (aged 8–88 years). As Table 4 demonstrates, there appears to be a difference in the importance afforded gratitude (in relation to other values) across ages. That is, adults rank gratitude higher than both adolescents and primary school students. Adolescents ranked gratitude lowest of all three age-groups.

Whilst the scales in the VVQ were altered for the adolescent version, the same 24 values appear in each of the versions, allowing for some comparison across adults and adolescents.

Examination of priority, attention and behaviour ratings of gratitude revealed a similar pattern for adolescents and adults (see Table 3). Interestingly, there were far more group differences when examining the adult data (eg, gender differences, practise religion yes/no differences); there appears to be more conformity across different participant groups in the adolescent data.

Data from the Jubilee Centre's *Character Education in UK Schools* research project demonstrated that secondary school students rated gratitude as their top character strength of the 24 tested in the VIA-Youth (96 items) (see Arthur *et al.*, 2015, in press). This does not map onto the results here; when asked importance/ priority of gratitude, attention and behaviour gratitude did not emerge in first place (however, the number of students sampled was significantly smaller here). This is particularly striking

in responses to the behaviour section of our questionnaire, where the three gratitude statements were taken from the original VIA (Peterson and Seligman, 2004). This could suggest that the context in which these questions are presented and the way that they are framed may have an impact upon responses.

To analyse the qualitative question of the VVQ,

we sampled 20% of adult19 (N=439) and 20% of adolescent responses (N=92) to 'Do you think gratitude is an important value? Why/Why not?; 65% of adolescents and 82% of adults explicitly indicated that they considered gratitude an important value, while 2% of adolescents and 4% of adults did not deem gratitude important²⁰. Reasons why gratitude was considered important were coded (see Online-Appendix K). The most common reason given in response, across both groups, was that gratitude is important because it signals appreciation of others/not taking others for granted (21% of adolescents; 36% of adults). The second most common response for both groups was that gratitude is important because it helps people to be aware of the benefits they enjoy/not take benefits for granted (15% of adolescents; 16% of adults).

3.3 RESEARCH QUESTION 3: WHAT ARE PEOPLE GRATEFUL FOR?

3.3.1 Method 6 - Thank You Letters and Films

To explore what people in the UK are grateful for, children (and a small number of adults) were invited to reflect on their gratitude and composed thank you letters or thank you films.

Participants: We collected 596 thank you letters at three public engagement events. Two hundred and twenty-three films (101 from primary schools;

81 secondary) were collected as part of the Thank You Film Awards (TYFA) where 5–16 year olds created films documenting their gratitude (see Harrison, Hayes and Higgins, 2015). Unfortunately, only limited demographic information could be collected. For the letters, 9% were completed by 3–7 years olds; 86% by 8–11 year olds; 4% 12–17 year olds; and 1% 18–60 year olds.

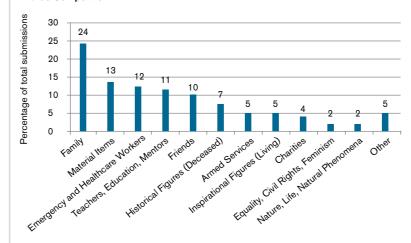
Analysis: Using content analysis we separated the films and letters into distinct categories/ themes. The films were further analysed to explore the reasons behind displays of gratitude.

Findings - TYFA: The main subject

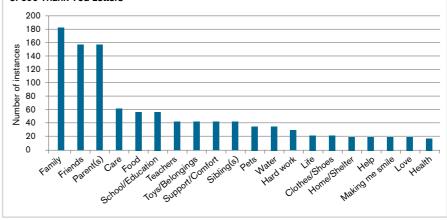
classifications that were identified can be seen in Graph 5. In accordance with our own data on how gratitude is conceptualised (see Sections 3.1.2 and 3.1.3), supererogatory behaviour is perceived to be an important factor but not a requirement for experiencing gratitude. Many films thanked individuals who were simply doing their job (teachers, nurses, soldiers, police officers and fire-fighters), yet actions of these individuals were often portrayed as being above the expected level of duty.

Another interesting finding concerns benefits. Whilst primary school students tended to reflect on benefits which were self-orientated, secondary school students were more likely to be grateful for benefits that went beyond their own personal gain. It could be argued that the older students have greater awareness of the social benefits of gratitude and display a more pro-social understanding of the concept than their younger counterparts (see Harrison, Hayes and Higgins, 2015).

Graph 5: The Subjects of Gratitude mentioned by 5 –16 Year Olds in the Thank You Film Awards Competition



Graph 6: The Top 20 Most Frequently Named Subjects of Gratitude from the Sample of 596 Thank You Letters



Thank You Letters:

The question of 'what are people grateful for?' was also gauged using Thank You Letters. These letters were largely filled in by young people (86% aged 8-11 years) and were completely open; respondents could use this opportunity to say thank you to anyone or for anything. A coding system teased apart the various different themes and subjects of gratitude (see Graph 6). Unfortunately, it was not possible to separate 'grateful to' and 'grateful for' into distinct categories as both terms were used interchangeably. Eighty-one distinct categories were coded with the highest number of instances for family, friends, and parents. Other popular themes included care and support as well as school, education and teachers (see Online-Appendix L).

Limitations: A limitation of these techniques is that they offer only a snapshot of gratitude; their content will be heavily influenced by students' immediate environment and recent events in their lives. Whilst these are unarguably

interesting records of state gratitude, they do not allow for a comprehensive examination of what people are grateful for.

3.4 RESEARCH QUESTION 4: WHAT KINDS OF PEOPLE TEND TO BE GRATEFUL?

3.4.1 Method 7 – The Multi-Component Gratitude Measure (MCGM)

There are currently two measures of gratitude and one measure of appreciation established in the literature: the GQ6 (McCullough, Emmons and Tsang, 2002); the GRAT (Watkins et al., 2003) and the Appreciation Scale (Adler and Fagley, 2005). These have been widely adopted to examine both states of gratitude and grateful dispositions as well as correlates of gratitude such as SWB (Emmons and McCullough, 2003). We see a major problem with these current measures, however, which we highlight briefly here. The most well-established measure of gratitude is the GQ6; as it consists of only six items, it is quick to administer and easy to analyse.

The problem with this measure, however, is that all six items tap only one dimension or component of gratitude; namely, grateful feeling. Similarly, the GRAT has a limited scope; whilst tapping into more dimensions than the GQ6 (with items focusing on grateful feeling, evaluations of abundance — or lack thereof — and supportive dispositions), there are components of gratitude that remain unexamined. Neither of these measures, nor the Appreciation Scale, offer a measure of conceptual understanding of gratitude, or simultaneously tap into cognitions, emotions, attitudes and behaviours pertaining to gratitude. Thus, in our view, none of these scales offer a comprehensive measure of gratitude.

In contrast, our aim has been to develop a *Multi-Component* measure of gratitude that explores the various facets that make up this interesting and complex construct. To this end, we have created a measure that consists of four distinct components designed to measure four different dimensions of gratitude – the Multi-Component Gratitude Measure (MCGM, Morgan, Gulliford and Kristjánsson):

- (A) The Conceptual Component: this component of the measure examines an individual's conceptual understanding of gratitude and gauges whether the person has a 'broad' or 'narrow' view of the meaning and scope of gratitude. To examine conceptual understanding, we employed a scenario from the vignette questionnaire (a nomination for an award). The person's view on the scope of gratitude may, for example, be limited to when benefactors act benevolently, or may be broader, encompassing situations where there is even an ulterior motive. The ARE (5-point Likert scale) and DEGREE (0-100 slider) questions were taken from the vignette questionnaire.
- (B) The Emotion Component: items assess individuals' degree of grateful feeling, for example, 'I feel appreciative of the support of many people in my life's journey'; 'There are so many people that I feel grateful for'. Six items assess grateful feeling. All items from components B D are answered using a 7-point Likert scale (1 = Strongly disagree to 7 = Strongly agree).
- (C) The Attitude Component: this component examines attitudes of gratitude and evaluations of its importance. Items include, 'I don't think it is necessary to show your gratitude to others' and 'I make it a priority to thank others'. This stage comprises 10 items.

^{19 50%} of adult sample represented the first 10% of questionnaire responses while the remainder (a further 10%) were randomly selected. All 20% of the adolescent sample were randomly selected.

^{87%} of adults and 70% of adolescents indicated whether gratitude is important or not (Yes/No); 85% of adults and 61% of adolescents gave a reason why (not).

(D) The Behaviour Component: items measure the amount of gratitude-related behaviours that respondents engage in. For instance, 'I notice the people who are kind to me' and 'I remind myself of the benefits I have received'. This stage contains 13 items.

We have tested the MCGM as an alternative to the GQ6, GRAT and Appreciation scales. The aim was to demonstrate validity and reliability and to implement this measure in examining what kinds of people tend to be grateful.

Participants:

Pilot of the MCGM

Five hundred and thirty-two participants accessed the online survey; complete usable responses totalled 477. 68% of respondents were female; ages ranged from 18-88 years (mean age 38 years); 85% of respondents were White British; 42% Christian; 37% atheist. Of those who identified with a religion, 37% practised their religion.

Confirmatory and validity tests of the MCGM Of the 1817 participants who accessed the

second online survey, 1599 responses could be analysed. Of these respondents 52% were female; ages ranged from 18-83 years (mean age 51 years). For employment, 28% of respondents were in intermediate managerial positions; 22% were in supervisory, clerical or junior managerial positions or identified themselves as administrative or professional; 22% were pensioners. Of the sample, 93% were White-British; 56% Christian; 23% atheist. Of those who identified with a religion, 21% practised their religion and 23% of the sample was single; 67% married; 58% had dependants, 41% did not.

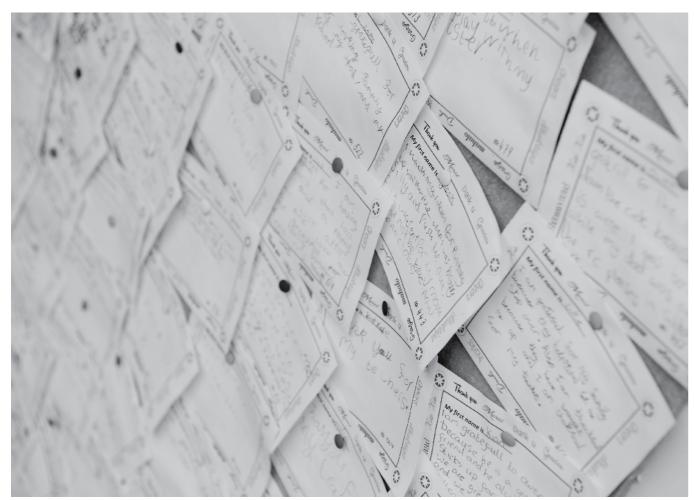
Analysis: The analysis of the MCGM included exploratory factor analysis; correlations; hierarchical multiple regressions; and MANOVAs.

Pilot of the MCGM

The first step in testing the MCGM involved piloting the full list of items to pinpoint those that worked well. After piloting these items with 477 participants, we performed a principles components analysis (or PCA) to explore what

aspects of gratitude our measure is tapping21. The six factors that emerged from this analysis were: (1) feelings of gratitude; (2) attitudes to appropriateness (of gratitude); (3) behavioural shortcomings; (4) rituals/noticing benefits; (5) expressions of gratitude; (6) attitudes to gratitude (see Table 5 for example items).

Given that the GQ6 is a notably short measure of gratitude, we wanted to ensure that the MCGM (while covering diverse components of gratitude) contained no redundant items. Therefore, we highlighted any items that were strikingly similar to one another; where this occurred the item(s) with the lowest reliability were removed²². We were left with 29 items (six emotion items; 10 attitude items; and 13 behaviour items), and an additional 14 items from the vignette questionnaire to assess conceptual understanding. The reliability of each subscale of the MCGM (ie, each of the six factors) was assessed using Cronbach's α (see Table 5). The overall reliability of the MCGM (ie, all six factors combined, excluding the conceptual stage) is 0.89 (an acceptable value of scale reliability).



Oblimin rotation ran with eigenvalues over 1 and suppression of coefficients smaller than 0.50.

Table 5: The Reliability of the MCGM; correlations with existing gratitude/appreciation scales and example items ((E) refers to an emotion item; (A) attitude item; and (B) behaviour item; ** = p < .01)

Subscale/Factor Name	Reliability of Subscale (Cronbachs α)	No. of Items	Correlation with GQ6	Correlation with GRAT	Correlation with Appreciation Scale	Example Item
Feelings of Gratitude	0.87	6	0.709**	0.612**	0.514**	There are so many people that I feel grateful towards (E)
Attitudes of Appropriateness	0.85	6	0.382**	0.369**	0.223**	Gratitude should be reserved for when someone intends to benefit you (A)
Behavioural Shortcomings	0.82	4	0.182**	0.170**	0.109**	I overlook how much I have to be grateful for (B)
Rituals/Noticing Benefits	0.92	5	0.529**	0.510**	0.769**	I stop to recognize all the good things I have in my life (B)
Expressions of Gratitude	0.79	4	0.416**	0.353**	0.497**	I make it a priority to thank others (B)
Attitude of Gratitude	0.74	4	0.415**	0.404**	0.289**	I don't think it is necessary to show your gratitude to others (A)
Overall for components B-D of the MCGM	0.89	29	0.702**	0.645**	0.653**	

Validity test of the MCGM:

Following the pilot of the MCGM, we had three main aims: (1) to test the refined six factor version of MCGM with new participants; (2) to examine the incremental validity of our measure (that is, whether it could demonstrate any effects above and beyond the ability of the GQ6, GRAT and Appreciation Scale combined); and (3) examine what kinds of people tend to be grateful.

(1) Testing the refined six factor version of the MCGM

After testing our refined MCGM on an additional 1599 participants, we confirmed the same six factor structure observed in the pilot. A re-examination of the measure's reliability

demonstrated Cronbach's α values of over 0.70 for all subscales and 0.89 for the six subscales combined. The reliability of the conceptual DEGREE items collectively is 0.79; for the conceptual ARE items, 0.554.

All components of the MCGM correlated positively and significantly with the GQ6; the GRAT; the Appreciation scale; and with three measures of well-being - Subjective Happiness (SH) scale (Lyubomirsky and Lepper, 1999); the Satisfaction with Life (SWL) scale (Diener et al., 1985); and the positive affect component of the PANAS scale (Watson, Clark and Tellegen, 1988), see Online-Appendix M. Importantly, there was an exceptionally high correlation between the emotion stage

of the MCGM and the GQ6, which as previously suggested taps only feelings of gratitude (r = .709, p < .001).

(2) Incremental validity of the MCGM

To test the incremental validity of our measure, we conducted a hierarchical multiple regression on three outcome variables that measure well-being: SWL, SH, and the positive affect component of the PANAS. When examining each of the outcome variables, the regression consisted of three steps. First, we entered the Big Five domains of personality, which previous research has demonstrated accounts for a large amount of variance in such measures of well-being (McCullough et al., 2002; Wood, Joseph and Maltby, 2008). The second step involved entering the three existing measures of gratitude/appreciation into the regression (ie, the GQ6, the GRAT, and the Appreciation Scale). The final step involved entering the four components of our MCGM. This process allowed us to examine whether the MCGM can account for (variance in) the three outcome measures above and beyond what the GQ6, GRAT and Appreciation scale (combined) are capable of measuring; that is, can our own measure of gratitude add anything new that is not already covered by existing scales?

Predicting Satisfaction with Life (SWL); Subjective Happiness (SH); and Positive Affect in the PANAS: When entering a composite score for Conceptual ARE items from the MCGM, Conceptual DEGREE items, the Emotion component, the Attitude component, and the Behaviour component, the MCGM accounted for: an additional 2.2% of the variance in SWL above the Big Five and existing gratitude/appreciation measures (p < .001); an additional 1.6% of variance in SH above the Big Five and existing measures (p < .001); and an additional 1.3% of variance in the PANAS above the Big Five and existing measures (p < .001, see Online-Appendix N).

In explanation, the MCGM predicts variance in all three outcome measures examined here that cannot be explained by the three existing measures of gratitude/appreciation combined. Simply put, our measure is offering something new, rather than merely replicating the effects of the GQ6, GRAT or Appreciation Scale.

(3) What kinds of people tend to be grateful? A MANOVA was used to examine whether

there are any differences between participant groups across the various dependent variables measured here. The participant groups

²² We looked to the 'Cronbach's alpha if item deleted' value for each item; the items that increased Cronbach's alpha (the most) were removed from the MCGM.

examined were gender (male; female). age-group (18-30 years; 31-40; 41-50; 51-60; 61-70; and > 70 years), religion (Christians; atheists²³), the practice of religion (individuals who do practise their religion regularly and those that do not), relationship status (single; married), participants who have dependants and those that do not, and employment type (the three main groups were comprised of intermediate managerial positions; (supervisory or clerical and) junior managerial, administrative or professional positions; and pensioners). The dependent variables included all four components of the MCGM; the three existing gratitude/ appreciation scales; and the three well-being variables (SH, SWL, PANAS)24.

Gender: Females scored significantly higher in self-reported ratings of gratitude. That is, females rated themselves more highly on the emotion (p < .05), attitude (p < .001) and behaviour components (p < .001) of the MCGM, and on the GQ6 (p < .01), GRAT (p < .01) and Appreciation scales (p < .01). (See Online-Appendix O for means, standard errors and confidence intervals for all group comparisons in this MANOVA).

Age: When examining differences across age groups, we see that over 70 year olds scored significantly higher on the Appreciation Scale compared to all other age groups (18–30 years, p < .05; 31–40 years, p < .001; 41–50 years, p < .001; 51–60 years, p < .001, and 61–70 years, < .05). However, there were no age-related differences in any other dependent variable tested.

Employment Type: In terms of employment type, pensioners scored significantly higher than individuals currently working at the level of intermediate managers (p < .01) and at the level of junior managerial/ administrative/ professional (p < .001) on the GRAT scale. Relatedly, pensioners rated themselves significantly higher than the other two groups in terms of satisfaction with life (p < .05, p < .001 respectively) and subjective happiness (p < .001 for both comparisons).

Christianity/atheism: Compared to selfprofessed atheists, individuals who identify themselves as Christian report significantly higher ratings of gratitude/appreciation on the emotion stage of the MCGM (p < .001); the GQ6 (p < .01); the GRAT scale (p < .05) and the Appreciation Scale (p < .01). Interestingly, there was no significant difference between these two groups in terms of attitudes and behaviours relating to gratitude (as measured by the attitude and behaviour stages of the MCGM). Christians, however, also reported higher levels of satisfaction with life and subjective happiness than their atheist counterparts.

Single/married and dependants Yes/No:

There were no differences between these participant groups across any of the dependent variables.

Practice of religion: When examining individuals who identified with a religion, we were also interested to see if there would be any differences between those who practise their religion and those that do not. Our findings indicated that those who practise their religion report higher levels of gratitude in the emotion and behaviour components of the MCGM (p < .01 and p < .05 respectively); and all three existing gratitude/appreciation measures (GQ6: p < .01; GRAT: p < .05; Appreciation Scale: p < .05). This group of individuals also score higher than their non-practising counterparts in terms of satisfaction with life and positive affect (p < .05 and p < .01 respectively).

Limitations: Unlike the GQ6, GRAT and Appreciation scale, our measure gives an overall profile of individuals' gratitude; this is a strength in terms of the breadth and comprehensiveness of the measure, but could be viewed as a limitation as each participant becomes associated with four different scores (for each component of the measure) rather than one overall gratitude score. Whilst it would be possible to collate scores in components B - D (of emotion, attitude and behaviour), the conceptual understanding of gratitude must be retained as a separate entity due to the different response options. However, since understandings, feelings, attitudes and behaviours do not necessarily map onto one another (see for example, Section 3.2). a measurement of each distinct factor should in fact allow for better exploration of the concept and its relationship with other correlates, such as well-being.

3.5 RESEARCH QUESTION 5: HOW MIGHT GRATITUDE BE PROMOTED?

3.5.1 Method 8 – Promoting Gratitude Questionnaire

There are four sections to this questionnaire. The first section examines the contexts in which gratitude is deemed most important. Participants are presented with a variety of different contexts/people and a list of seven values (gratitude, courage, fairness, honesty, humility, kindness and self-control). For each question, participants must choose the three values that are most important. Each question asks 'in my opinion it is most important for a [] to have' where the missing elements are 'partner'; 'child'; 'parent'; 'friend'; 'workplace'; 'community'; or 'society'.

The following sections posed a variety of questions which were answered using a 7-point Likert scale (1 = *Strongly disagree* to 7 = *Strongly agree*). The questions posed were regarding:

- (A) Whether and where gratitude should be promoted (eg, 'I believe that more effort should be spent on promoting gratitude'; 'Schools are not the right places to promote gratitude'; 'I believe that gratitude should be promoted at home' (or 'at school', 'in the workplace', 'in public policy');
- (B) How gratitude should be promoted (eg, 'I believe that a good way to promote gratitude is through educational interventions' (or 'through the media'; 'through policy and government');
- (C)Where there is a perceived *lack of* gratitude (eg, 'There is a lack of gratitude in schools' (or 'in my home'; 'in my workplace'; 'in my community').

Participants: Of the 554 participants who accessed this online survey, 549 provided complete and usable responses. Of these respondents, 54% were female. Ages of respondents ranged from 18–83 years (mean age 49 years) and 93% of respondents were White-British; 56% Christian and 22% atheist. Of those who identified with a religion 23% practised their religion. For employment, 28% of respondents were in intermediate managerial positions; 27% were in supervisory, clerical

or junior supervisory positions or identified themselves as administrative or professional; 21% were pensioners. Of the sample 35% were single; 53% married; 53% had dependants and 47% did not.

Analysis: Frequencies across items and stages were calculated. We also conducted correlations between responses to items/ stages and participants' scores on the GQ6²⁵. Group comparisons were explored using between-group ANOVAs.

Findings: This questionnaire examined whether Britons believe gratitude should be promoted and, if so, how? Importantly, 84.9% of respondents agreed (to some degree) that gratitude is worth promoting, and similarly, 77.9% of respondents agreed (to some degree) that more effort should be spent on promoting gratitude²⁶. When responses to these two questions were examined, no differences across participant groups emerged (ie, gender for example). However, these answers correlate with participants' gratitude score measured by the GQ6 (GQ6 and 'worth promoting' r = .377, p < .01; GQ6 and 'more effort spent promoting', r = .298, p < .01).

Gratitude only appeared in the top three most important values (alongside honesty, fairness etc.) for the workplace context. Relatedly, when asked where gratitude should be promoted, 80% of respondents believed gratitude should be promoted in the workplace (see Table 6). Given that almost 50% of respondents believe that there is currently a lack of gratitude in their workplace, focusing on workplace strategies to enhance gratitude appears to be an important future goal. Indeed, an examination of both our MCGM and the GQ6 alongside job satisfaction and job-related affective well-being demonstrates positive correlations between gratitude and happiness or satisfaction at work27.

The contexts for promoting gratitude that most respondents agreed with were at home and in schools; 88% and 87% overall agreement respectively, suggesting that respondents do not believe that promotion of gratitude is solely down to family influence or the home environment. Similarly, when offered a variety of methods for promoting gratitude, educational

interventions were advocated by 74% of respondents. We were also interested in canvasing novel ideas from participants as to how gratitude might be effectively promoted. The most commonly suggested method (other than those identified in Table 6) was the idea of learning through example. This indicates that there may be scope for promoting gratitude through the presentation of case studies for instance. Indeed, this could be incorporated into an educational intervention, or used alongside learning resources, such as our gratitude stories and VVA. It should be reemphasised, however, that we do not advocate the teaching of gratitude without

careful consideration of whether gratitude is due: it would be unhelpful and potentially dangerous to ask students to feel indiscriminately grateful as emotional virtues can turn into vices not only through underreactions, but also over-reactions (see Morgan et al., 2015, in press).

Participants were asked a series of questions about where they think there is a current lack of gratitude. Unsurprisingly, we observed a 'gratitude gap' where individuals tend not to view themselves or their homes as lacking in gratitude but deem others and society to be so (see Table 7).

Table 6: The Pattern of Responses across Likert Scale Questions on the Promotion of Gratitude

	Strongly Disagree (%)	Disagree (%)	Somewhat Disagree (%)	Somewhat Agree (%)	Agree (%)	Strongly Agree (%)	Total Agree (%)
Gratitude shou	uld be prom	noted in:					
the Home	0	0.9	1.8	25.5	37	25	88
School	0	0.9	2.2	25	37.7	24.2	87
the Workplace	0.2	1.1	4	27.4	35.4	17.3	80
Public Policy	0.7	2.9	6.6	28.8	29.7	10.9	69
Communities	0	1.3	2.7	36.5	24.4	6.7	68
Society	0.2	1.1	2.4	29.6	39	16.6	85
A good way of	promoting	gratitude is	s through:				
Educational Interventions	0.2	2	4.2	36.1	26.4	11.1	74
the Media	0.9	2.9	7.3	35.7	22.8	6.9	65
Community Programmes	0.2	2.2	6.9	36.1	24.4	6.7	67
Policy and Government	3.3	7.5	16.2	28.1	13.7	4.2	46
Family Influence	0	0.7	0.9	21.1	38.4	31.3	91

Table 7: Participants' Responses to where they Currently Believe there is a Lack of Gratitude

	Strongly Agree (%)	Agree (%)	Somewhat Agree (%)	Total Agree (%)					
I think there is a lack of gratitude in:									
Schools	6.5	21.1	33.9	61.5					
My Home	2.3	4	13.4	19.7					
My Workplace	7.6	13	23.7	44.3					
My Community	4	16.4	37.2	57.6					
Society	11.9	27.1	40.4	79.4					
Myself	1.3	2.5	15.3	19.1					
Others	6.3	19.3	41.5	67.1					

²⁵ This questionnaire was completed prior to validating our MCGM and the GQ6 was used for reasons of brevity.

^{23 51.6%} of our sample are Christians; 23.4% Atheists; combined they account for 75% of our sample. Thus these two groups were compared to examine the effect of religion.

The three well-being variables were included as outcome variables in the incremental validity test and as dependent variables in the MANOVA; this is because we view gratitude as enhancing well-being and well-being gratitude, see Watkins (2004: 185). The MCGM components; existing gratitude measures; and well-being variables were also included in separate MANOVAs as a control. There were no differences between the various MANOVA results.

²⁶ When asked whether gratitude is worth promoting, 16.4% agreed strongly; 38.4% agreed; and 30% agreed somewhat; in terms of more effort being spent on promoting gratitude, 12.1% agreed strongly; 31.9% agreed; 33.9% agreed somewhat.

²⁷ Correlation between GQ6 and (1) Job-Satisfication Scale, or JSS (Macdonald and MacIntyre, 1997): r = .34, p < .01; and (2) Job-related Affective Well-being Scale, or JAWS (Van Katwyk *et al.*, 2000): r = .35; p < .01. Correlation between JSS and Emotion component of MCGM: r = .28, p < .01; JSS*Attitude component: r = .15, p < .01; Behaviour component: r = .26, p < .01. Correlation between JAWS and Emotion component of MCGM: r = .25, p < .01; JSS*Attitude component: r = .19, p < .01; Behaviour component: r = .25, p < .01.

However, almost a fifth of respondents reported a lack of gratitude in either themselves or their homes, which is a relatively high figure given the obvious social desirability element at play here. This is supported by a small but significant negative correlation between respondents' GQ6 score and their responses to questions on a lack of gratitude in themselves (r = -.266; p < .001) and a lack of gratitude in their home (r = -.277, p < .001).

Perhaps most striking of the responses is the fact that 16.3% of respondents agreed (to some extent) that a lack of gratitude in society is 'not their problem' (0.4% strongly agree; 5.6% agree; 10.3% agree somewhat) indicating that almost one fifth of individuals did not view themselves as having a role in society's overall level of, or expression of, gratitude or, at the very least, perceived their own gratitude experience as distinct from that of society as a whole.

Limitations:

There is likely to be a strong social desirability effect present in this questionnaire; even though almost 20% of questions were negatively worded, the overall premise of the questionnaire is likely to be apparent to participants and their responses may well have been skewed accordingly.

3.6 ETHICAL CONSIDERATIONS

All studies received full ethical approval from the University of Birmingham's Ethics Committee. We carefully adhered to the ethical guidelines set out by the University, ensuring that participants were fully informed about the purpose of the research and had the opportunity to withdraw at any point. Where respondents were under the age of 18 we sought informed consent from parents/ caregivers. All participants were debriefed on the aims of the research and offered contact details of the researchers involved.

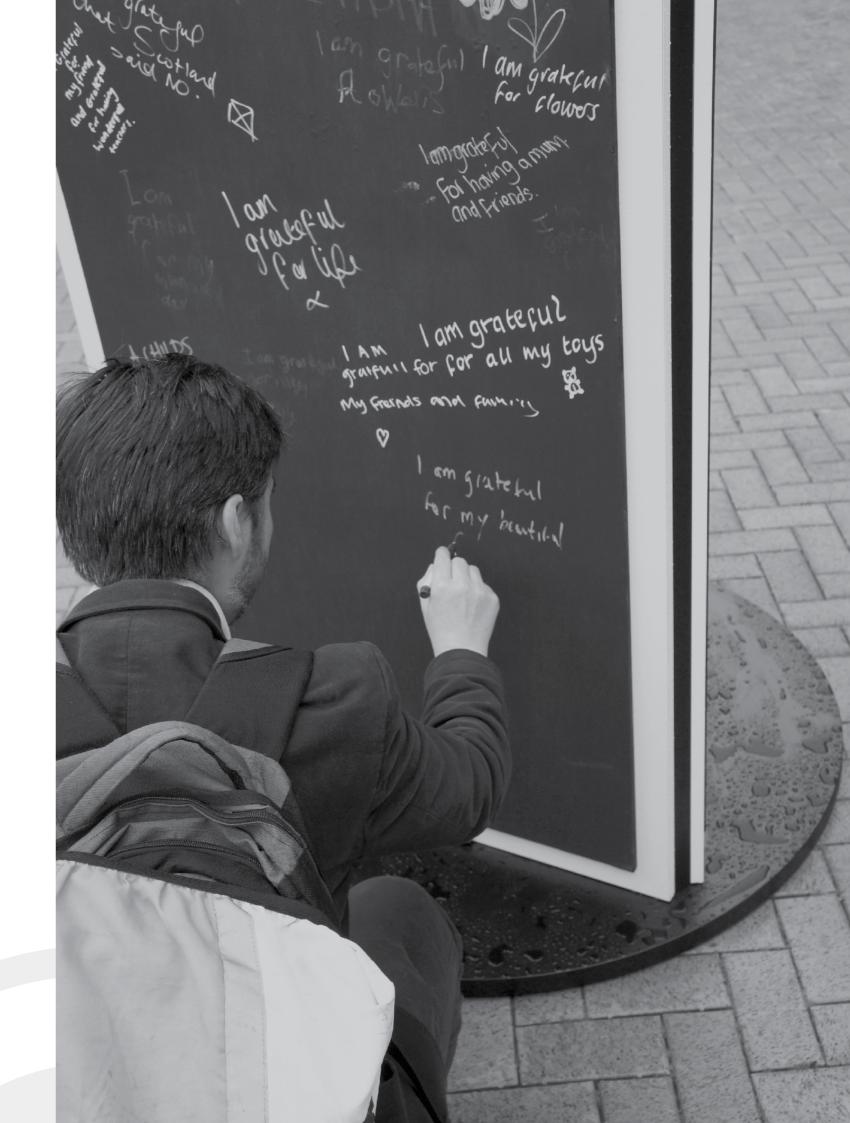
3.7 OVERALL FINDINGS

- The prototype analysis of gratitude demonstrated that participants in our British sample associated gratitude with more negative features in comparison to a US sample; examples that were unique to British respondents include guilt, awkwardness and embarrassment. Participants deemed character descriptions of more grateful individuals to also be more virtuous, confirming a link between gratitude and virtue.
- The vignette questionnaire confirmed various modifiers of gratitude that have been suggested in the literature; for example, greater effort in bestowing a benefit increases gratitude experience whilst the presence of non-benevolent intentions, such as ulterior motives and malicious intentions, decreases gratitude experience. Significantly, however, non-benevolent intentions do not always disqualify gratitude. When comparing adult and adolescent responses to our vignette questionnaire, we see some similarities but also striking discrepancies; for example, adolescents were more likely to be grateful for a benefit that was not of value to them and adults were more likely to acknowledge that mixed emotions (positive and negative) co-occur in experiences of gratitude.
- Primary school students aged 8-11 years were able to successfully navigate through several conceptual controversies surrounding gratitude by participating in our gratitude stories. They were able to recognise the presence of non-benevolent intentions and the negative emotions that might accompany gratitude (examples include confusion and awkwardness). This suggests that our four gratitude stories could be effective tools for exploring the nuances of gratitude experience and aiding children to decipher important conceptual and intensity variables.
- When comparing gratitude to other important values, such as honesty, fairness, kindness, courage, humility and self-control, gratitude is typically placed around the middle in terms of importance. The importance afforded to gratitude, however, appears to alter slightly with age, with adults deeming gratitude more important than adolescents or children (aged 8-11 years).

- The main subjects of gratitude (as found in our Thank You Films and Letters) appear to be family, friends and parents, other major themes include care/support and schools, education and teachers (the frequency of the latter could have been influenced by contextual effects of completing these films/letter at school).
- Younger students (aged 8-11 years) are more likely to be grateful for benefits that are self-oriented, whereas older students (aged 11-17 years) pick out benefits that have an impact beyond the self and are pro-social in nature.
- The Centre has developed and tested a Multi-Component Gratitude Measure (MCGM) which captures the complex nature of gratitude. This is the first measure to incorporate a conceptual component alongside three other dimensions of gratitude (emotional, attitudinal and behavioural).
- The MCGM appears to add something new in comparison to the existing gratitude/ appreciation scales available. We suggest that the most commonly implemented gratitude measure, the GQ6, is measuring only the emotional aspect of gratitude, as indicated by a strong correlation between the GQ6 and the emotion component of the MCGM.
- The findings show that females report higher levels of gratitude than males. Over 70 year olds appear to experience a higher degree of appreciation than younger individuals. Self-reported Christians score higher than atheists in grateful feeling; however, there is no difference between these two groups in terms of attitudes towards gratitude or gratitude-related behaviours.
- The further promotion of gratitude in society is largely supported by respondents in our sample. Over 80% of respondents in our promoting gratitude questionnaire believe that gratitude is worth promoting; 78% of respondents believe more effort should be spent promoting gratitude.
- Two important contexts for the promotion of gratitude appear to be the workplace and schools; currently almost 50% of respondents believe there is a lack of gratitude in their workplace and 74% supported the use of educational interventions to promote gratitude.

'DOES GRATITUDE CAUSE HAPPINESS, OR DOES HAPPINESS CAUSE GRATITUDE? I PROPOSE THAT THE ANSWER TO BOTH **QUESTIONS IS YES.**'

Philip Watkins



4 Discussion and Interpretation of Findings

The current report offers a much-needed contribution to empirically informed, interdisciplinary work in the field of gratitude research. Our approach has brought philosophy and psychology into genuine dialogue with one another, allowing meaningful cross-fertilisation to take place. Furthermore, we brought lay understandings of gratitude under the spotlight to enable the views of 'experts' to be compared with those of people. For the most part, this latter domain has previously been either ignored or taken for granted.

To revert to the five research questions listed in Section 1, three studies shed light on the first question on British conceptual understandings of gratitude: the prototype analysis; the vignette questionnaire; and the gratitude stories.

The prototype analysis (Morgan et al., 2014) showed that participants in our UK sample associated gratitude with more negative features than an earlier study conducted in the USA had revealed (Lambert et al., 2009). British respondents uniquely associated gratitude with awkwardness, embarrassment and guilt. This finding offers an important challenge to the predominant view within psychology that gratitude is an unalloyed 'positively valenced' emotion or trait. Secondly, our findings call into question the view that gratitude assumes the same shape crossculturally, even in cultures that share the same language. Thirdly, in neither the USA nor the UK studies was gratitude associated with 'awe' or 'wonder' - characteristics which have featured in scales operationalising purported aspects of gratitude (see Adler and Fagley, 2005; Emmons and Shelton, 2002). Measures that include items about the supposed features of gratitude may 'construct' gratitude in a way that is at odds with the experience of laypeople. The findings from our prototype analysis serve to enrich empirical measures of gratitude by allowing imagined features that do not resonate with people to be abandoned.

In addition to shedding light on the question of what the British public understand by the concept of gratitude, the vignette questionnaire and gratitude stories also addressed the question: 'Under what conditions

is gratitude experienced?' Along with confirming modifiers of gratitude, such as effort in bestowing a benefit and the role of ulterior and malicious motives in appraisals of gratitude, the questionnaire and stories showed, perhaps surprisingly to some, that non-benevolent intentions do not automatically rule out gratitude.

Furthermore, our analysis of the vignettes and

stories suggested that, while there were similarities across generations regarding many of the conditions under which gratitude was experienced, differences were observed in the way adults, adolescents and children appraised whether gratitude was fitting. In a rescue scenario adolescents and children gave a significantly greater endorsement of gratitude than adults to a passer-by who helped at greater risk to themselves than a trained professional. suggesting that people may become more ambivalent with increasing age about risk in appraisals of gratitude. In this connection, the vignettes and stories also provided definitive evidence that gratitude is not subject to a supererogation condition; over 98% of each age group indicated that they would be grateful to a professional rescuer even though it is her job. The stories and vignettes supplement the findings of the prototype analysis in showing that gratitude is *not* perceived to be entirely positive, with the perception of gratitude's mixed valence also seeming to demonstrate developmental differences.

Taken together, the vignettes and stories provide empirical evidence from a large sample of laypeople, demonstrating factors which both increase and decrease reported gratitude. Whilst it must be acknowledged that the scenarios are fictitious, and as such are limited insofar as they report what factors people believe would influence their appraisals of gratitude in given situations, they nonetheless go much further than mere armchair speculation and, as such, provide a means of challenging and illuminating philosophers' abstract theories about the necessary and sufficient conditions of gratitude with concrete empirical data.

We are aware that it may seem a category mistake to some philosophers to present empirical data on laypeople's understandings in order to illuminate conceptual points, for example about the proper application of virtue concepts, such as gratitude. We do believe, however (and in line with the prevailing methodological naturalism in contemporary virtue ethics), that moral theorising is ultimately answerable to empirical evidence, and thus justifies the use of empirical data on lay conceptual understandings. We are not claiming that laypeople's views offer the final word, but that they do offer the first word.

Our Thank You Films and Thank You Letters served to illuminate the question: 'What are British people grateful for (and/or to whom are they grateful)?' Content analysis of the films and letters revealed that is not easy to dissociate to whom people are grateful from what they are grateful for. The main theme emerging in 24% of submissions in the TYFA was 'family', and it will be appreciated that it is impossible to tease out whether this was 'grateful to' or 'grateful for'. The same consideration applies to family, friends and parent/s which constituted the top three themes in the letters. Interestingly, of the top ten most frequently named themes in the letters, only two concerned material benefits (food and toys/belongings), suggesting that

non-material benefits predominated in this

To illuminate our research question about

largely child sample.

the value British people place on gratitude, we developed the Valuable Values Questionnaire and Valuable Values Activity. While Cicero's now famous contention that gratitude is the greatest (and parent) of all virtues finds little support here, gratitude clearly has a place among values. In comparison with courage, fairness, honesty, humility, kindness and self-control, gratitude tended to be ranked at position four or six of seven respectively, with its importance increasing with age. This may be a result of increased varieties of gratitude experienced by adults or a greater appreciation for the contexts where gratitude is important (for example, the workplace). Similarly, the importance of gratitude may increase in line with the number of instances of being a benefactor rather than beneficiary (which in turn may increase with age).

In recent years psychological research has highlighted the benefits of gratitude to mental and physical health, locating its value instrumentally. Gratitude has been seen by some researchers as an important value to develop in school. For instance, Froh et al., (2011) linked gratitude with educational attainment. Froh and Bono (2014) have recently likened gratitude to a 'wonder drug' that 'would get kids to behave better, improve their grades, feel happier, and avoid risky behaviors'. The point to be emphasised in this context is that Froh and Bono (like Cicero) seem to esteem gratitude as a 'master virtue'. However, our British sample does not concur with that estimation. Calls for gratitude to be valued as a 'wonder drug' seem, at least in the British context, to be somewhat overstated.

Our VVO and VVA illuminated the scant existing knowledge of the value people place on gratitude, relative to other values. We believe academics and educators should locate their advocacy of gratitude against these findings, lest they exaggerate the role of gratitude in character building in a way that both jars with the experience of laypeople, and which neglects the development of other values deemed essential to good character. The VVQ shed light on the reasons laypeople gave as to why gratitude was considered an important value. There was no suggestion, in any responses, that gratitude would generally get people to behave better, improve grades or avoid risky behaviours, although a number of respondents identified its role in fostering happiness and positivity.

To examine what kinds of people tend to be grateful, we developed the Multi-Component Gratitude Measure (MCGM) and compared responses to this questionnaire across a number of demographic variables. The development of the MCGM offers a vitally important addition to existing measures in the field, and is perhaps, from an academic perspective, the most significant contribution of this research project. The MCGM incorporates a means of examining respondents' conceptual understanding of gratitude, whilst also tapping grateful emotion, attitude towards gratitude and

behaviours associated with gratitude. The MCGM is the first gratitude questionnaire to offer a comprehensive profile of gratitude, incorporating conceptual, affective, attitudinal and behavioural dimensions.

Structurally, the MCGM has been shown to be internally reliable (Cronbach's $\alpha = 0.89$) and to show convergent validity by correlating significantly with all existing gratitude measures. Moreover, the MCGM demonstrated incremental validity by predicting variance in three outcomes measures (life satisfaction, subjective happiness and positive affect) that could not be explained by the GQ6, GRAT and Appreciation Scales currently in use.

These existing gratitude measures mainly assess the emotional dimension of gratitude: the strong correlation between the emotion component of the MCGM and GQ6 being indicative of that point. The MCGM goes beyond grateful affect to examine other dimensions of gratitude and allows for more nuanced understanding along behavioural, cognitive, attitudinal and emotional lines. For instance, the MCGM enabled us to discover that in comparison with atheists, Christians report significantly higher ratings of grateful feeling on the MCGM (p < .001), but that there is no significant difference between atheists and Christians regarding attitudes and behaviours relating to gratitude (measured by components C and D of the MCGM). It would not have been possible to make this observation without the measure we have developed at the Jubilee Centre.

Despite the fact that Britons seem to view gratitude as a virtue of moderate importance (relative to honesty, kindness and fairness), we have collected data showing that British people would like to see gratitude promoted in society. Two contexts emerged as particularly fertile for this endeavour; the workplace and schools. There is growing evidence that promoting gratitude in the workplace is beneficial for individual and group morale (see Waters, 2012). While workplace rights and responsibilities are important, there is much to be gained from promoting gratitude for colleagues' help, even when they are 'just

doing their job'. In line with our findings, we also propose that gratitude be promoted in schools, but we are mindful of the fact that this needs to be undertaken carefully and critically, alongside reflection on the other virtues and values that make a person of good character (see Recommendations below).

In summary, our research to date has stimulated reflection on gratitude in a variety of domains and across interdisciplinary borders. We are confident that our contribution to this field will make a considerable impact. Within our research we have collected data from over 10,000 members of the British public across a range of demographic variables and geographical locations to represent the views of laypeople across Britain (see Appendix 2 for full breakdown across all methods). We have been guided by the principle that the matter of circumscribing and evaluating gratitude should not be left to experts, by they philosophers or psychologists. In answering our research questions, we have developed a range of methods of understanding what gratitude is, evaluating its importance in twenty-first century Britain and measuring it as accurately and as comprehensively as possible.

> 'GRATITUDE IS 'THE MORAL MEMORY OF MANKIND'.'

Georg Simmel

5 Recommendations Gratitude Britain and Beyond...

It is one of the guiding principles of the Jubilee Centre that the findings of our research be used to inform practice. To this end, we make four recommendations consequent on our research.

First, our findings show that the British public would like to see gratitude promoted in the workplace and in schools. In an educational context, this needs to be undertaken in a discriminating manner, which allows children to discern when gratitude is appropriate and fitting. In primary schools, our gratitude stories have not only shed light on the way in which children aged 8-11 years understand gratitude, but they can also be used as tools for teaching children about what we have called elsewhere 'the grammar of gratitude' (Morgan et al., 2015, in press), enabling children to find their way through the complexities that surround this concept, such as how feelings of indebtedness and ulterior motives impact on gratitude experience. The vignette questionnaire can be used to spark similar discussion in secondary schools and possibly with adults.

Second, we suggest that our findings regarding gratitude in the workplace be shared with organisational psychologists who are

in a position to help bring about the changes British people would like to see in their places of work. The ultimate aim would be to stimulate changes in the corporate landscape and instigate initiatives to enhance workplace well-being (with gratitude featuring as a key theme).

Thirdly, we recommend the use of our multi-component gratitude measure (MCGM). This is the first measure to incorporate a conceptual component alongside three other dimensions of gratitude (emotional, attitudinal and behavioural). The measure has been shown to be psychometrically robust and offers a more nuanced way of tapping different aspects of gratitude than is offered by any other measure currently in use.

Finally, our findings from the prototype analysis indicate that the conceptual contours of gratitude may take slightly different forms cross-culturally and, with this in mind, we are in the process of replicating our research (using the prototype, vignette and story methods) in collaboration with the Graduate School of Education, University of Melbourne, Australia. We encourage other academics to pursue cross-cultural research on gratitude to further map its cross-cultural contours.

'TO HAVE THE VIRTUE OF GRATITUDE IS TO BE DISPOSED, AS ARISTOTLE MIGHT HAVE SAID, NOT JUST TO BE GRATEFUL, BUT TO BE GRATEFUL IN THE RIGHT WAY, TO THE RIGHT PEOPLE, FOR THE RIGHT THINGS.'

Robert C. Roberts

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'I THINK HAVING GRATITUDE IS IMPORTANT BECAUSE EVERYONE SHOULD BE GRATEFUL FOR EVERYTHING GOOD THAT HAPPENS IN THEIR LIFE AND BE THANKFUL FOR THE PEOPLE IN IT WHO MADE EVERYTHING GOOD HAPPEN.'

Anonymous Research Participant

Appendices

Appendix 1:

Table of Manipulations in Vignette Questionnaire.

Examples are shown for a rescue from a lake (high gratitude condition) and a nomination for an award (low gratitude scenario)

High gratitude scenarios (Rescue from lake/fire)	Low gratitude scenarios (Nomination for award/beneficiary of will)
Baseline You get into difficulties swimming in a lake. You cannot make it back to the shore and you are in real danger. A person on the shore sees you struggling and dives in and rescues you. ■ You are grateful to this person for their help (1 = Strongly agree − 5 = Strongly disagree) ■ Please indicate the degree of gratitude you feel: (Not at all grateful − Most grateful you could feel) ■ You should be grateful to this person for their help (1 = Strongly agree − 5 = Strongly disagree)	Baseline A colleague nominates you for an award at work. If you win, you will receive recognition of your hard work and a voucher.
Cost (or Risk) to benefactor You get into difficulties swimming in a lake A person on the shore sees you struggling and dives and rescues you. You know that she is risking her own life by doing so as she is not a very good swimmer. You are/should be more grateful to this person than the lifeguard as there is a bigger risk involved.	Ulterior Motive A colleague nominates you for an award at work. If you win, you will receive recognition of your hard work and a voucher. The colleague has nominated you because she wants you to repay the favour by helping her with her own workload. Cost to benefactor A colleague nominates you for an award The colleague had to spend a long time filling
You are/should be more grateful to this person than the lifeguard as it was not her job to help you.	in the nomination form outside of work.
Duty You get into difficulties swimming in a lake A lifeguard is on duty and jumps in and saves you.	Non-realised benefit A colleague nominates you for an award at work In the end you do not win the award.
Non-realised benefit You get into difficulties swimming in a lake. A person on the shore sees you struggling and dives in to rescue you. However, she struggles herself and has to give up. In the end a lifeguard rescues both of you.	Malicious intent A colleague nominates you for an award at work You do not get on with this colleague and you know that she only nominated you because she knew it would embarrass you. Value of benefit A colleague nominates you for an award You do not want to win this award and would rather
	that you had not been nominated. Mixed emotions A colleague nominates you for an award at work You feel thankful that your colleague nominated you but you

also feel uncomfortable now that you are indebted to her.

Questionnaire/Method

MCGM Numbe		MCM Valid Numbe		Promo Gratit Numbe	ude	Workp Questio Numbe	nnaire	Total	% of Sample	Estimates of UK population (%)	
53		181	7	56		156		9775			
Social N		PureP		PurePi		Busine					
My.bham v		(crowd-s				Charities; P					
1		webs									
477 Of usabl	89.7%	1599 Of usabl	88.0%	549 Of usabl	97.2%	1362 Of usable	87%	8647	88.5%	usable data:	
OI USADI	68%	Oi usabi	52%	Oi usabi	54%	OI USADI	51.4%		63.4%	50.81	
18-88yrs	00 /0	18-83yrs	0270	18-83yrs	0470	18-73yrs	01.470	3-88yrs	00.470	00.01	
38		51		49		40		33	24	39.9	
NA		NA		NA		NA		1143	13.2%	5.9%	
NA		NA		NA		NA		890	10.3%	11.6%	
219	45.9%	67	4.2%	98	17.9%	347	25.5%	1805	20.9%	~15%	
72	15.1%	331	20.7%	97	17.7%	421	30.9%	1337	15.5%	13%	
56 70	11.7% 14.7%	370 371	23.1%	97	17.7% 18.4%	323 218	23.7% 16%	1207 1058	14% 12.2%	14.3% 12.5%	
46	9.6%	365	22.8%	101	19.1%	53	3.9%	822	9.5%	11%	
14	2.9%	95	5.9%	51	9.3%	1	0%	248	2.9%	11.9%	
•	2.0 /0	00	0.070	01	0.070		0 70	210		ple asked this question: 3510	
NaO		104	6.5%	27	4.9%	81	5.9%	212	6.1%		
NaO		459	28.7%	156	28.4%	466	34.2%	1081	31%		
NaO		347	21.7%	147	26.8%	551	40.5%	1045	30%		
NaO		61	3.8%	15	2.7%	91	6.7%	167	4.8%		
NaO		32	2%	15	2.7%	51	3.7%	98	2.8%	No comparable estimates	
NaO NaO		31	1.9%	8	1.5%	38	2.8%	77	2.2%		
NaO NaO		18 353	1.1% 22.1%	5 117	0.9%	13 NA	1%	36 470	1% 13.5%		
NaO		36	2.3%	10	1.8%	NA NA		46	1.3%		
NaO		144	9%	41	7.5%	71	5.2%	256	7.3%		
1440		144	370	71	7.0 /0	71	0.2 /0	200		usable data:	
407	85.3%	1490	93.2%	511	93.1%	1208	88.7%	6577	76.1%		
5	1%	26	1.6%	8	1.5%	67	4.9%	139	1.6%	White: 87.1%	
13	2.7%	32	2%	5	0.9%	25	1.8%	139	1.6%		
3	0.6%	1	0.1%	1	0.2%	1	0.1%	41	0.5%	Black British	
1	0.2%	1	0.1%	1	0.2%	2	0.1%	24	0.3%	(African/Caribbean): 3%	
						1	0.1%	5	0.1%		
13	2.7%	15	0.9%	9	1.6%	12	0.9%	141	1.6%	2.3%	
5	1%	4	0.3%	3	0.5%	1 2	0.1%	144	1.7%	1.9%	
4	0% 0.8%	9	0.1%	4	0.7%	14	0.1%	26 63	0.3% 0.7%	0.7% 0.7%	
2	0.4%	2	0.0%	4	0.790	4	0.3%	22	0.3%	1.4%	
4	0.8%	1	0.1%			1	0.1%	36	0.4%	1.170	
				2	0.4%	0	0%	11	0.1%	M4: 1/M4 II: 1 II II II II O	
4	0.8%	3	0.2%			2	0.1%	35	0.4%	Mixed/Multiple ethnicity: 20	
6	1.3%	2	0.1%			6	0.4%	53	0.6%		
2	0.4%	1	0.1%			3	0.2%	22	0.3%	0.9%	
										usable data*	
NaO	00.00/	160	10%	50	9.1%	138	10%	348	9.2%	OF 10/	
176 3	36.9% 0.6%	374 5	23.4% 0.3%	121	22% 0.4%	383 4	28.1% 0.3%	2167 33	25.1% 0.4%	25.1% 0.4%	
201	42.1%	897	56.1%	306	55.7%	655	48.1%	3579	41.4%	59.3%	
6	1.3%	8	0.5%	5	0.9%	9	0.7%	61	0.7%	1.5%	
9	1.9%	9	0.6%	5	0.9%	6	0.4%	225	2.6%	4.8%	
14	2.9%	6	0.4%	3	0.5%	5	0.4%	70	0.8%	0.5%	
3	0.6%	2	0.1%	1	0.2%	2	0.1%	55	0.6%	0.8%	
NaO		25	1.6%	5	0.9%	15	1.1%	46	1.2%		
22	4.6%	328	20.5%	16	2.9%	40	2.9%	564	7.8%	0.4%	
										pple asked this question: 839	
163	34.2%	336	21%	124	22.6%	267	19.6%	1939	23.1%	No comparable estimates	
111	23.3%	646	40.4%	225	41%	499	59.3%	2841	33.8%	· ·	
NaO		122	7.6%	56	10.2%	220	16.2%	398	10tal number of peo	pple asked this question: 351	
NaO		27	1.7%	18	3.3%	34	2.5%	79	2.3%		
NaO		108	6.8%	53	9.7%	170	12.5%	331	9.4%	68.5%	
NaO		109	6.8%	64	11.7%	165	12.1%	338	9.6%		
NaO		1064	66.5%	290	52.8%	695	51%	2049	58.4%	29.8%	
NaO		11	0.7%	3	0.5%	9	0.7%	23	0.7%	No comparable estimates	
NaO		22	1.4%	9	1.6%	12	1%	31	0.9%	No comparable estimates	
NaO		83	5.2%	32	5.8%	35	2.6%	115	3.3%	1.5%	
NaO		50	3.1%	22	4%	15	1.1%	72	2.1%	1.070	
						2	0.1%		0%		
NaO		930	58.2%	289	52.6%	684	49.3%	1219	34.7%	No comparable estimates	
NaO		662	41.4%	256	46.6%	671	50.2%	918	26.2%	·	
NaO NaO				0.00				2.065	1.7%	1.7%	
NaO		2.1		2.03		0.6		2.000			
NaO NaO NaO	83 40%	2.1	70 70%		60.90%		/1 G0/s		Of	usable data:	
NaO NaO NaO 398	83.4%	2.1 1274	79.7%	383	69.8%	567	41.6%	6559	Of 92.4%	usable data: 84%	
NaO NaO NaO	83.4% 1.3% 2.5%	2.1	79.7% 6% 3.3%		69.8% 4.7% 3.1%		41.6% 25.9% 20%		Of	usable data:	

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Research Team

JAMES ARTHUR

Principal Investigator

Professor James Arthur, Director of the Jubilee Centre for Character and Virtues, is the Head of the School of Education and Professor of Education. He has written extensively on the relationship between theory and practice in education, particularly the links between communitarianism, social virtues, citizenship, religion and education. A leading expert in the field of character and values, James is also Editor of the *British Journal of Educational Studies* and Director of CitizED, an organisation in higher education promoting citizenship.

KRISTJÁN KRISTJÁNSSON Principal Investigator

Professor Kristján Kristjánsson is a Deputy Director in the Jubilee Centre for Character and Virtues and Professor of Character Education and Virtue Ethics. He is also an editorial board member of the *Journal of Moral Education*. Kristján leads and oversees all the research activities in the Centre and has written widely on moral education, with his main area of interest being research in character and virtues at the intersection between moral philosophy, moral psychology and moral education.

LIZ GUILLIFORD

Dr Liz Gulliford is a Research Fellow in the Jubilee Centre for Character and Virtues. Liz has an interdisciplinary background. She gained a Theology degree from Trinity College, Oxford and has a BSc in Psychology. Liz studied for her doctoral thesis, an interdisciplinary evaluation of positive psychological approaches to strengths and virtues, at Queens' College, Cambridge. She is particularly interested in the topics of hope, optimism, courage, forgiveness and gratitude.

BLAIRE MORGAN

Dr Blaire Morgan is a Research Fellow in the Jubilee Centre for Character and Virtues. Blaire's background is in Psychology and her PhD, the Coordination of Speaking and Listening in Dialogue, was awarded by the University of Birmingham. She has developed a keen interest in exploring attitudes to virtue and developing new research methodologies.

'I THINK IT IS IMPORTANT TO SHOW GRATITUDE TO OTHERS AND ACKNOWLEDGE THEIR HELP AND KINDNESS ALTHOUGH IN A BUSY WORLD THIS IS OFTEN OVER LOOKED.'

Anonymous Research Participant

Acknowledgements

The report authors would like to thank the many people and organisations that have made the Attitude for Gratitude project possible. In particular, we would like to thank the following schools:

- Alsager Secondary School, Stoke-On-Trent
- Bursted Wood Primary School, Greater London
- Firs Primary School, Birmingham
- Kings Rise Academy, Birmingham
- Markinch Primary School, Fife
- Ochiltree Primary School, East Ayrshire
- Oratory R.C Primary School, BirminghamRoyal Society of Arts (RSA)
- Royal Society of Arts (RSA Academy, Tipton
- St Lukes CE Primary School, Birmingham
- St Muns Primary School, Dunoon
- Stockport Secondary School, Stockport
- Turves Green Primary School, Birmingham
- Yarnfield Primary School, Birmingham

In addition, we wish to thank the many people whose valuable contribution and willing participation made the project a success.

We would particularly like to thank:

Danielle Wartnaby Jenny Higgins Ashley Cook

Karen Jordan Ian Davidson

Tian Qiu John Ryan

David Carr

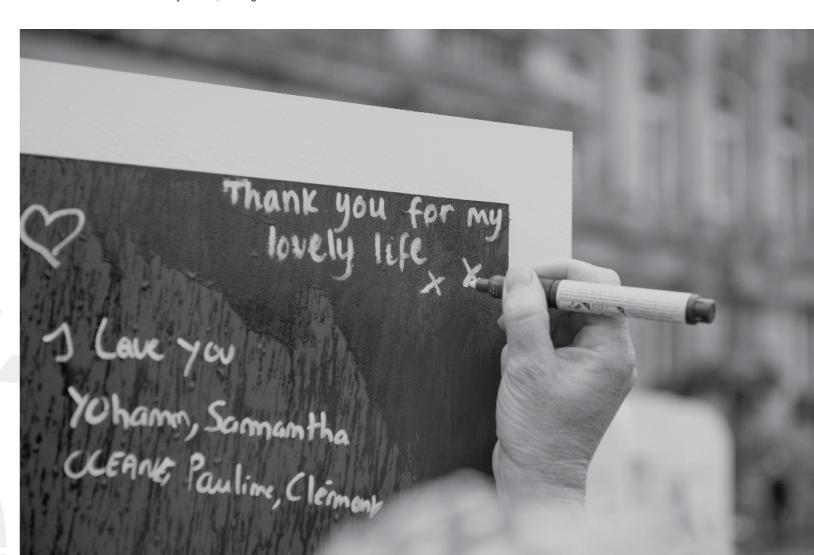
Robert C. Roberts

Victoria Hogan Fiona Vittery

David Booth

'GRATITUDE IS IMPORTANT BECAUSE IT ENCOURAGES SOCIAL COHESION/WORKING TOGETHER.'

Anonymous Research Participant



$\frac{\text{JOHN TEMPLETON}}{\text{FOUNDATION}}$

This project was made possible through the support of a grant from the John Templeton Foundation.



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ISBN: 978-0-7044-2850-8