Shaping Morality: Psychological Predictors of Morality as Cooperation

Sarah Turner

A thesis submitted in partial fulfilment of the requirements of the University of East London for the degree of Professional Doctorate in Clinical Psychology

May 2024

Wordcount: 23539

TABLE OF CONTENTS

ABSTRACT 7
ACKNOWLEDGEMENTS 8
1.INTRODUCTION 9
1.2. Overview 9
1.3. Morality 9
1.3.1.Traditional Approaches 9
1.3.2. Psychological Approaches 10
1.3.3. Evolutionary Approaches 10
1.3.3.1. Moral Foundations Theory. 10
1.3.3.2. Recent developments. 11
1.3.4. Evidence for Evolutionary Perspectives 11
1.3.5. Morality as Cooperation 11
1.3.6. Content of Morality: Moral Domains 12
1.3.7. Further Evidence and Critiques 15
1.3.7.2. Theory and rationale. 15
1.3.7.3. Applications of the MAC. 17
1.4. Shame 17
1.4.1. The Social Emotions 17
1.4.2. Shame Within a Social and Evolutionary Context 18
1.4.3. The Development of Shame 19
1.4.3.1. Shame memories. 20
1.4.4. Shame and Behaviour, Judgement and Mental Health 20
1.4.4.1. Shame and morality. 20
1.4.4.2. Shame and compassion. 22
1.4.4.3. Shame in Clinical Psychology. 22
1.4.4.4. Shame coping. 23
1.4.5. Cross-Cultural Variations 23
1.5. Attachment 24
1.5.1. Attachment and Morality 25
1.6. Compassion 25
1.7 Attachment, Shame, Compassion and Morality 26
1.7.1 Attachment: Links with Compassion and Morality 26
1.7.2. Shame: Links with Attachment 27
1.8. Literature Review 28
1.8.1. Search Strategy, Criteria, and Screening 28
1.8.2. Data Summary and Analysis 29
1.8.3. Summary of Review 32

1.9. Rationale and Aims 33
1.9.1. Implications 34
1.10. Research Questions 34
2. METHODOLOGY 35
2.1. Overview 35
2.2. Epistemology 35
2.3. Ethical Approval and Considerations 36
2.3.1. Informed Consent. 36
2.3.2. Confidentiality 36
2.3.3. Possible Distress 37
2.3.4. Debrief 37
2.3.5. Reflexivity 37
2.4. Design 38
2.5. Participants 38
2.5.1. Recruitment 39
2.5.2. Inclusion Criteria 39
2.6. Materials 39
2.6.1. Moral Values 40
2.6.2. Shame Experiences 40
2.6.2.1. Current measure. 40
2.6.3. External and Internal Shame 41
2.6.3.1. Measurement. 41
2.6.3.2. Current measure. 41
2.6.4. Attachment 42
2.6.4.2. Current measure. 42
2.6.5. Compassion 43
2.6.5.1. Measurement. Many of the available measures explore different 43
2.6.5.2. Current measure. 43
2.7. Participant Demographics 43
2.8. Procedures 44
2.8.1. Order of Measures 44
2.9. Analytic Strategy 45
2.9.1. Sample Size and Power Calculation 45
2.10. Study Sample Characteristics 45
3. RESULTS 48
3.1. Overview 48
3.2. Exploratory Data Analysis 48
3.3. Correlational Analysis 50
3.4. Multiple Regression (GLM) 50

3.4.1. Past Shame 51
3.4.1.1. Age 53
3.4.1.2. External shame. 53
3.4.1.3. Coping strategies. 53
3.4.2. Compassion 53
3.4.4. Present Shame 54
3.4.4.1 Demographic Variables. 54
3.4.5. Assumptions Check; Normality of Residuals 55
3.5. Moderation 56
4. DISCUSSION 59
4.1. Summary of Results 59
4.2. Integration with Previous Research 59
4.2.1. Compassion 59
4.2.2. Past Shame 60
4.2.2.1. Shame memories. 60
4.2.2.2 Shame coping strategies. 61
4.3. Present Shame-proneness 62
4.4. Further Explorations of Shame and MAC 64
4.4.1. External Shame-proneness, Attachment, and MAC Domains. 64
4.4.2. External Shame-proneness, Compassion, and MAC Domains 65
4.5. Clinical Implications and Utility 66
4.5.1. Clinical Implications 66
4.5.2. Wider Implications 68
4.6. Study Strengths 68
4.6.1. Data Collection and Study Design 68
4.6.1.2. Online research 69
4.6.1.3. Researcher position. 69
4.6.2. Measurement 69
4.6.2.1. Measuring morality. 69
4.6.2.2. Measuring shame. 70
4.7. Study Limitations 70
4.7.1. The Sample 70
4.7.1.1. Gender. 70
4.7.1.2. Ethnicity and culture. 71
4.7.2. Validity of Design 71
4.7.2.1. MAC-Q. 72
4.7.2.2. Shame 72
4.8. Implications and Recommendations for Future Research 73
4.8.1. Building on Present Questions 73

4.8.2. Other Considerations 74
4.7.2.1. Religion. 74
4.7.2.2. Neurodiversity. 74
4.9. Conclusion 75
5. REFERENCES 76
6. APPENDICES 111
Appendix A. Literature Review Search Strategy. 111
Appendix B. Ethics Application dated May 2023. 113
Appendix C. Ethical approval letter. 131
Appendix D. Data management plan. 138
Appendix E. Participant information sheet. 148
Appendix F. Participant consent form. 153
Appendix G. Risk assessment form. 154
Appendix H. Participant debrief sheet. 157
Appendix I. Study Advert. 160
Appendix J. Morality as Cooperation Questionnaire. 162
Appendix K. Shame Experiences Interview (sections used highlighted grey). 165
Appendix L. Other as Shamer Scale II. 177
Appendix M. Social Comparison Scale. 178
Appendix N. Attachment Style Questionnaire. 180
Appendix O. Compassion Engagements and Actions Scale. 182
Appendix P. Table 7. Correlation matrix. 190
Appendix Q. Table 8. General Linear Model output for compassion variables and MAC domains. 191
Appendix R. Table 9. General Linear Model output with age. 192
Appendix S. Table 10. General Linear Model output with ethnicity. 193
Appendix T. Table 11. General Linear Model output with gender. 194
Appendix U. Table 12. General Linear Model output with mental health diagnosis. 195
Appendix V. Scatterplots for current external shame-proneness and MAC domains. 196

LIST OF TABLES

Table 1. Study Sample Characteristics.

Table 2. Descriptive statistics for variables.

Table 3. General Linear Model output for past shame variables and MAC domains.

Table 4. General Linear Model output for shame-proneness and MAC domains.

Table 5. Moderation effects of Attachment and Compassion on the relationship between external shame-proneness and MAC domains.

Table 6. Scoping review output

Table 7. Correlation matrix.

Table 8. General Linear Model output for compassion variables and MAC domains.

Table 9. General Linear Model output with age.

Table 10. General Linear Model output with ethnicity.

Table 11. General Linear Model output with gender.

Table 12. General Linear Model output with mental health diagnosis.

LIST OF FIGURES

Figure 1. Scoping flow chart. ?

ABSTRACT

Morality has intrigued generations of scholars. An exciting new theory, 'Morality as Cooperation' (MAC) has recently been developed, based on evolutionary understandings that morality is about cooperating with the social group. This theory offers seven morally relevant domains of cooperation that guide an individual's moral worldview: reciprocity, group loyalty, allocation of resources to kin, division, possession, deference and possession, that benefit both the individual and the group. Little is known about how these are shaped by other factors, particularly morally relevant emotions, such as shame. A scoping review confirmed further understanding was required, particularly of its subcategories. The present research aimed to explore how both past shame and shame-proneness relate to MAC domains, as well as the parameters of this relationship and other potential influences, such as attachment and compassion. An online survey was created using validated measures of shame-proneness, past shame, attachment, compassion, and the MAC-Q. The final sample included 231 participants. General linear models were used to analyse the data and the unique contributions of the variables to the MAC domains. Analyses suggested that both past shame (related to a shame memory) shame coping, and external shame-proneness are associated with various moral domains. Moderations were undertaken to examine whether compassion and attachment affect the relationship between shame-proneness and morality domains. No significant moderations were found. Conclusions stated that emotions can shape our morality, though factors implicated in these relationships remain unclear. This research supported the differential investigation of both past and present shame-proneness, and internal and external shame. Further research is encouraged to develop understanding, both generally and in specific populations. Understanding human's morality has implications for individuals, on a therapeutic level, and wider society, casting light on how we consider morality.

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Matthew Jones-Chesters, for his continued support and guidance, always fostering hopefulness when it is running low. Also, my co-researcher Megan for her brilliant mind.

I would also like to thank my fellow course-mate, Sam, who has been alongside me on this challenging journey, and always been at the other end of the phone for thesis-related support. I could not have done it without her.

To my family and friends, I appreciate you and your support so much, both inside and outside of my professional life. Particularly my friend Holly: you keep me going.

Finally, to the participants, who gave their time and effort and made this research possible.

1. INTRODUCTION

1.2. Overview

This section will provide the theoretical background and justification for the present study. It will introduce the key concepts within this area, review the existing literature in this area, and lead to the formulation of the research questions.

1.3. Morality

Morality is an expansive term that encompasses the way human behaviour fits with personal or social values (Cambridge Dictionary, 2023). Generations of scholarship have attempted to conceptualise and understand morality, and this spans interdisciplinary research. Many scholars have posited explanations for understanding what it comprises, how it develops and what influences this process. This will be examined below.

1.3.1.Traditional Approaches

Within the context of the industrial revolution, foundational thinking in moral philosophy was proposed by Kant (1785). He introduced a universal moral law, grounded in rationality, whereby individuals treat others as individuals rather than means to an end, underlining the inherent value in each person. He believed that individuals are morally autonomous and can, guided by reason, legislate moral principles themselves. Mill (2001) was also influential in this area, guided by utilitarian principles, believing that moral actions are evaluated based on their tendency to promote the most happiness for the most individuals. He argued that moral pleasures have greater value than physical pleasures, and that individual rights should only be restricted when needed to prevent harm to others. Thus, he sought to uphold individual freedom within the pursuit of societal well-being.

Across the 19th century, morality was intertwined with religious values. Within Western society, societal norms were largely determined by Judeo-Christian ideas, and moral conduct was evaluated based on whether individuals adhered to these principles (Weber, 2002). Moving into the 20th century, against the backdrop of world wars, Camus formulated ideas on morality grounded in humanism (Camus, 1951). He advocated for moral integrity and rejecting unjust authority, highlighting respect for individual freedom and dignity.

Later, the ‘Big Three’ ethics that govern moral behaviour were later formulated: autonomy, community and divinity (Shweder, Much, Mahapatra & Park, 1997). The community aspect, particularly relevant to this thesis, incorporates a sense of duty, shared social norms, and

loyalty to support the community. However, after reviewing bodies of literature across the 20th century, scholars have highlighted how there has been no sustained field of enquiry, or sound understanding concluded, in comparison to developments made within other areas such as health or the economy (Laidlaw, 2002).

1.3.2. Psychological Approaches

Morality began to be explored within the psychology domain. In the early 20th century behaviourism dominated psychological literature (Watson, 1913), and morality was largely sidelined. However, as cognitive approaches grew, psychologists then began to explore morality within this perspective. Piaget (1932) proposed ideas about how moral reasoning develops in children through progressive stages, and Kohlberg (1981) extended these ideas to develop an influential theory on moral development, emphasising the role of cognitive processes in ethical decision-making. However this model was largely male-centric, and feminist perspectives argued the importance of empathy, caring and relationships within morality, in opposition to Kohlberg’s justice-based framework (Gilligan, 1982).

1.3.3. Evolutionary Approaches

In recent years, theories on morality began to take an evolutionary approach. The Social Intuitionist Model (Haidt, 2001) viewed moral judgements as intuitive, instinctive responses to stimuli. Recently, efforts have been made to further understand morality as a cooperative tool within an evolutionary approach, focussing equally on moral judgement/cognition, and moral action. This is supported by young children in early childhood, who, despite being pre-linguistic, begin to help, share and cooperate (Tomasello & Vaish, 2023).

1.3.3.1. Moral Foundations Theory. SIT was built upon to create Moral Foundations Theory, one that dominated how morality was understood in recent years (Haidt & Joseph, 2004), taking a cooperative perspective on morality. MFT formulated 5 moral domains that have evolved as adaptive responses to problems in human evolution (care/harm, fairness/justice, sanctity/degradation, loyalty/betrayal, authority/subversion). However, it has been argued that this theory is an inadequate account of morality, with conceptual limitations and ambiguity (Suhler & Churchland 2011), and its moral domains are too limited (Graham et al, 2013). For example, evidence suggests that its domains do not account for moral profiles in a sample of libertarians (Iyer et al, 2012). Some researchers tested the theory's proposition that conservatism is linked to its moral domains, by comparing 11 Americans from white and black backgrounds, and found this relationship significantly differed between races. The authors wondered whether this may be due to higher religiosity and liberalism in black

samples, and concluded that MFT did not apply well to non-white ethnic and cultural identities (Davis et al, 2016). Moreover, MFT does not infer domains from any established theory of cooperation (Haidt & Joseph, 2011).

1.3.3.2. Recent developments. Scholars argue for the cooperative nature of morality: agreeing that it functions to promote and maintain social-cooperative relationships (Rai & Fiske, 2011, Greene, 2015). How societies manage social dilemmas has been coined one of the key questions facing science, as scholars question why humans are so extraordinarily cooperative (Pennisi, 2005). Key recent theorists within this realm propose that morality is a set of skills that regulates social behaviour, governing how we cooperate with the social group (Vaish & Tomasello, 2013, 2023). Other authors agree that morality is interactionally constructed: it emerges through social behaviour and feedback based on concerns about others welfare, justice, rights and fairness and whether these are deemed right or wrong (Dahl, Martinez, Baxley & Waltzer, 2022). Overall, many theorists now agree on ideas that morality is based upon cooperation with the social environment, and is an answer to persistent social problems (Vaish & Tomasello, 2023; Greene, 2015; Rai & Fiske, 2011).

1.3.4. Evidence for Evolutionary Perspectives

Evolutionary research has shown that chimpanzees display cooperation within large groups; they exhibit collective intentions in tasks such as going on patrol or hunting (Boehm, 2018). Humans likewise depend on each-other to forage and were thus interested in the wellbeing of their partners. Sympathising, helping, and collaborating serve both the individual and the other person (Tomasello, 2016). Humans also compete with other groups and use skills to cooperate (Tomasello & Vaish, 2023). Cooperation enabled increased productivity and greater chance of finding food, though reciprocal division of labour (Nichols, 2016). In-group cultural practices and values began to be established (Boehm, 2001). Human evolution also saw cultural innovations to promote survival, such as fire and cooking, meaning individuals with the ability to communicate or persuade, provided advantage (Gintis, 2018).

Historically, attempting to understand morality across cultures has been limited by the use of different measures in different countries, meaning comparison or conclusion is not possible (Curry, Mullins & Whitehouse, 2019). Indeed, opinions of the universality of morality are mixed, some arguing that it is ubiquitous across the globe (e.g. Brown, 1991) whilst others believe this impossible, as it is not innate and is instead a by-product of the sociocultural environment (Prinz, 2007).

1.3.5. Morality as Cooperation

The Morality as Cooperation (MAC) theory was borne out of these ideas, as a broader, more

systematic framework of morality, drawing on the mathematical analysis of cooperation and the evolutionary concept of non-zero sum games (Curry, Jones-Chesters & Van Lissa, 2019). This describes the way in which humans have evolved to behave in cooperative ways to benefit both parties: a 'win-win' (Curry, 2016). This supports and builds upon cooperative understandings of morality as regulating the self in order to allow cooperative societies (Haidt, 2012). In comparison to previous theories, MAC contains more aspects of cooperation (morality) and thus widens explanations.

More specifically, the MAC argues that morality has developed as a solution, be that biological or cultural, to recurrent cooperative problems within the social world (Curry, 2016). As organisms replicate themselves at the expense of competitors, they are operating within zero sum games: one wins and the other loses (Maynard Smith, 1982). However, replicators can also work in collaboration with others (Dawkins, 1998) where there are two winners, or non-zero-sum games. As humans have existed in social groups for 5 million years (Shultz, Opie, & Atkinson, 2011) genes for strategies to achieve cooperation have been favoured by natural selection (Szathmáry & Maynard Smith 1995). Humans have thus developed biological and psychological adaptations for cooperation. Through selection and cultural transmission, these adaptations have been revised (Pinker, 2010) via a process of devising solutions, or 'tools' to boost cooperation (Hammerstein, 2003). Such intuitions and instincts provide motivation for moral behaviour, and underpin the MAC framework (Curry et al, 2019a).

The MAC understanding has thus been compared to a society as a game: people play by the rules of the game, and the environment (e.g. political landscape) can change or affirm these rules. The rules are socially constructed, and therefore require a moral sense: people are satisfied to work within them, or ashamed or offended when they or others break them. They may reward or punish others accordingly (Gintis, 2018).

1.3.6. Content of Morality: Moral Domains

Seven domains of the MAC have been formulated based on prior research (Curry et al, 2019a). They are argued to be genetically distinct, and domain-specific psychological mechanisms (Zakharin, Bates, Curry & Lewis, 2023). Firstly, 'Allocation of Resources to Kin' (i.e. family) describes altruism towards family members, such as caring for them, obligation towards them, and avoiding harm. This is underpinned by understanding that natural selection favours genes that benefit genetic relatives, if the benefit to the recipient gene outweighs the cost of helping (Dawkins, 1979). Thus, organisms are adapted to detect and deliver benefits, or avoid harm, to relatives. Humans live in groups of genetic relatives, so

allocation of resources to kin has been present (Chapais, 2014). Tight kinship has long been considered to promote cooperation (Alesina & Giuliano, 2013) and sustain the species by facilitating protection, food sourcing, and childcare (Pennisi, 2005). Strategies adopted that realise a mutual benefit to the individual, and their kin, may therefore be regarded as morally good. A wide body of literature supports that caring for children (Gilligan, 1993), avoiding inbreeding (Lieberman, Tooby & Cosmides, 2003), and aiding family members (Fukuyama, 1996) are recognised as significant aspects of morality. Culturally, humans have adopted practices such as naming conventions: names are used as cues of kinship, indicating familial relations (Oates & Wilson, 2002). These authors evidence that people are more likely to show altruism to people with the same name.

Group loyalty, or coordination to a mutual advantage, is also recognised as an important domain. Game theory posits that 'coordination problems' arise when individuals are unsure how to behave in order to benefit both parties (Lewis, 2008). Species, including humans, adopt various strategies to solve these, e.g. leadership, traditions, signalling, 'theory of mind', and badges of membership (Alvard, 2001; Boos, Kolber, Kappeler & Ellwart, 2011; Curry & Jones Chesters, 2012; McElreath et al, 2003). Coordination to mutual advantage is also apparent by cultural conventions such as use of maps, clocks and communication technology (Curry, 2016). Indeed, these solutions realise mutual benefit and are therefore regarded as morally good. Research supports that favouring your group (Gert, 2013), collaborating together (Royce, 2005b), and adopting local protocols (Gibbard, 1990a), are significant parts of morality.

Another key domain is reciprocity. Game theory suggests that social dilemmas occur when individuals welcome the fruits of cooperation without paying the cost, 'free-riders' (Olstrom & Walker, 2003). 'Reciprocal altruism' offers a solution to this problem (Trivers, 1971) whereby altruism between individuals is conditional on reciprocity. This has been evidenced in various species (Carter, 2014), including humans (Jaeggi & Gurven, 2013). As this solution realises mutual benefits, the MAC predicts that it is regarded as morally good. This is supported by research that finds reciprocity is widely recognised as a significant part of morality (Neusner & Chilton, 2009) expand, including its subcomponents: gratitude (Emmons & McCollough 2004), trust (Baier, 1995), guilt (Gibbard, 1990b), forgiveness (Godfray, 1992), apology (Ohtsubo & Watanabe, 2009) and patience (Curry, Price & Price, 2008). Culturally, humans have adopted practices based on reciprocity such as use of receipts, written contracts and train tickets (Pinker, 1997).

According to MAC, there are three ways to resolve contests over resources e.g. food, mates, territory (Huntingford & Turner, 1987): displaying heroism (hawks) and deference (doves), division, and possession. Game theory illustrates that such conflicts can be settled through demonstrating ‘fighting ability’, where the weaker party defers to the stronger (Gintis, Smith & Bowles, 2001; Maynard, Smith & Price, 1973). Status-related behaviours are also apparent in humans (Mazur, 2005) and culturally developed hierarchies (Rubin, 2000).This occurs widely within nature (Hardy & Briffa, 2013) and can create hierarchies whereby resources are shared according to ‘rank’ (Preuschoft & van Shaik, 2000). Humans have adapted to use facial expressions and tone of voice to cue dominance and deference (Sell et al, 2008). Consequently, the MAC posits that displays of dominance and submission are a key moral domain, as they realise mutual benefit. Indeed, ‘heroic’ values of bravery, skill, and wit, as well as ‘monkish’ values of deference, obedience, humility and respect are considered important aspects of morality (Curry, 2007). Culturally, humans have created ways to display status such as dress codes and medals (Curry, 2016).

Division, or fairness, is a key MAC domain. In game theory, a ‘bargaining problem’ occurs when resources are divisible (Nash, 1950). One solution is to divide based on individual power (Skyrms, 1996), which, for equally powerful individuals, produces equal portions (Maynard Smith, 1982). Humans may accept the current distribution in expectation that, over time, it will equalise. This facilitates cooperation in humans, as they have the cognitive ability to assess distributions and imagine future opportunities to even out. This has developed into a ‘sense of fairness’ in today's society (Brosnan & de Waal, 2014). Tools such as ‘taking turns’, or ‘meeting in the middle’ evolved to resolve disputes (Brams & Taylor, 1996). ‘Equal shares’ is a particularly cross-cultural rule used in distribution issues (Henrich et al, 2005). Within the MAC, division provides mutual benefit by avoiding a costly fight, and is thus considered morally good. Indeed, compromise (Pennock & Chapman, 1979) and fairness (Rawls, 1958) are recognised as important elements of morality.

Finally, possession, or property rights, is another key aspect of MAC. Recognising prior possession is common within species (Sherratt & Mesterton-Gibbons, 2015) and is part of conflict resolution within game theory (Gintis, 2007). Vignette studies illustrate how humans defer to prior possession . This is also evident in experimental games (Kahneman & Tversky, 1979), international relationships (Johnson & Toft, 2014) and the law (Rose, 1985). Ownership, such as of private property, is evident universally across cultures (Herskovits, 1952). Again, deferring to prior possession realises a mutual benefit by avoiding a costly fight, and thus is considered morally good within the MAC. Indeed, prohibiting theft and the

right to own property are regarded as important parts of morality (Becker, 1977, Locke, 2000). Culturally, 'first possession' underpins most property law (Rose, 1985).

The MAC-Q is split into two subscales measuring these domains (Curry, Jones & Lissa, 2019). The first measure the moral relevance of domains, where examples of cooperative behaviour are provided, and questions are used to determine whether they are deemed morally relevant. Specifically, its asks for consideration of how one decides whether something is right or wrong, and to what extent the items about cooperative domains are relevant to this. The second subscale measures morality judgement, which uses more contextualised items that trigger intuitions used when making a moral judgement.

1.3.7. Further Evidence and Critiques

1.3.7.1.Cross-cultural. Historical analysis supports evidence of these cooperative moral values across a variety of cultures, across continents, using data from 60 ethnographic data from 60 societies (Curry, Mullins & Whitehouse, 2019). This was also recently extended to 196 societies, where evidence was found that most MAC domains exist across most cultures (Alfano, Cheong & Curry, 2024). Meta-analytical data supports that cooperation occurs to a similar degree across cultures, and variance is not significant (Spadaro et al, 2022). The MAC domains may therefore be considered universal moral rules.

MAC domains have specifically been supported across cultures. In the World Values Survey, conducted across 65 societies, 'helping kin' was recognised as morally good (Inglehart & Baker, 2000). Moreover, research from large samples across countries indicate that 'helping your group' is recognised as morally good (Scwartz, 1992; Graham et al, 2011). Positive and negative reciprocity has been evidenced in student samples (Eisenberger, Lynch, Aselage & Rohdieck, 2004), and across 54 countries (Park et al, 2006, Peterson & Seligman, 2004). Additionally, research in the UK and Turkey find hawkish traits (such as bravery) morally relevant (Cross et al, 2014). Others highlight the relevance of responses to authority within morality (Graham et al, 2011) including 'respecting superiors' (Schwartz, 1992). Student samples suggest that 'dividing disputed resources' is considered morally good (Davey, Bobocel, Son Hing, & Zanna, 1999) whilst the World Values Survey illustrates the relevance of 'respecting property' (Weeden & Jurzban, 2013). Thus, whilst they may vary in priority, there is evidence for the cross-cultural relevance of the MAC domains across a wide range of societies.

1.3.7.2. Theory and rationale. Support for the MAC comes from Gintis, Van Shaik and Boehm (2015), who agree with MAC ideas, that society has rules, and these are governed by environmental conditions, which change in order to survive. Gintis (2019, as cited in Curry

et al, 2019b) also supports principles that people gain satisfaction by cooperating and are ashamed when they don't.

However, the theory was criticised by Bloom (2019) (as cited in Curry et al, 2019b), who argued that MAC does not explain the role of emotions and reasoning in morality. They question how the collection of instincts develops: what is innate, learned, or personal choice. They argue that to support MAC, it is not only important to portray that we moralise cooperative behaviour, but also that we do *not* moralise other behaviour. For example, they highlight that cooperation does not necessarily account for why physical harm is considered immoral across cultures, or prohibition on sexual behaviour such as infidelity, homosexuality, or bestiality. However, Curry et al (2019b) responds that MAC attempts to explain the function of morality, enabling predictions to be derived. They argue that MAC domains are morally relevant, supported by empirical evidence, and that the moral valence of physical harm will depend on the context: e.g. cooperative harm (punishment/self-defence) will be considered more moral. Curry et al (2019) also apply this to sexual behaviour: the more cooperative, the more morally good. They offer an example that long-term relationships such as marriage often involve an exchange of sexual exclusivity for resources (Baumeister and Vohs 2004), and thus adultery is considered morally bad, or that bestiality might highlight low-mating value.

An opposing perspective to the MAC, offered by Smith and Kurzban (2019) (as cited in Curry et al, 2019b) argued that acts are not only considered morally bad when it is at the expense of cooperation, as moral cognition does not always involve considered consequences. This argument is supported by authors who share examples that people often do not condemn behaviours that do violate norms, but arguably lead to better outcomes for the group (DeScioli & Kurzban, 2009) for example the trolley problem: whereby people judge the sacrificing of one individual to save five others as unacceptable (Mikhail 2007). This is in contrast to the burying beetle, who kill their offspring to save others (Mock, 2004), a system designed by natural selection that does not favour cooperation. Research also shows that people are more willing to kill one sibling to save five others, than the same for strangers, though both acts are judged equally immoral (Kurzban, DeScioli & Fein, 2012), which may suggest that morality and kin-related cooperation are in opposition. Another example highlights the prohibition of selling organs, despite being mutually beneficial (Barnieh, Gill, Klarenbach, & Manns, 2013). However, Curry et al (2019b) highlight how moral behaviour will inevitably have some negative side effects, particularly in the case of evolutionarily novel issues such as organ transplant, which reflects the limitations and by-products of

cooperative strategies. Generally, MAC theorists affirm that the theory may not account for all aspects of moral phenomena (Curry et al, 2019b).

Finally, Smith and Kurzban (2019, as cited in Curry et al, 2019b) have also posed critique for the theory, arguing that morality can be used to serve self-interest, highlighting evidence that in an experimental game, people favoured fairness rules that benefitted themselves (DeScioli et al, 2014). However Curry et al (2019b) highlight that this fits MAC ideas that morals are genetically self-serving, and that mutual benefits are crucial aspects of morality.

1.3.7.3. Applications of the MAC. Morality, including MAC, has also been applied to politics. Curry (2021) draws on the parallels between cooperative morality, and how politics is considered a coalitional conflict. Politics concerns which types of cooperation to encourage, what schemes and goods to pursue, and how benefits generated by cooperation should be disseminated or shared (Petersen, Sznycer, Sell, Cosmides, & Tooby, 2013). Thus both can be seen as reflecting preferences for cooperation. More specifically, those who endorse particular moral values may support relevant policies that promote these values (Weeden & Kurzban, 2015). For example, a person who aligns with the MAC family domain, may endorse policies that promote families. Thus, the MAC has important potential to further understand real-world behaviour.

1.4. Shame

Shame is a significant concept influential on human behaviour, particularly within a social context. This section will explore conceptualisations of shame, how it develops, and its influence on social behaviour.

1.4.1. The Social Emotions

The term ‘shame’ emerges from an Indo-European word, ‘skam’, meaning to conceal, implying fear of exposure (Kluge, 1891). Shame is considered a ‘moral emotion’ due to its self-conscious nature, emerging when an individual feels they have violated moral standards, and triggered by self-reflection or self-evaluation (Tangney, Stuewig & Mashek, 2007a). Kaufman (1989) defines it as the feeling of inferiority, a powerful emotion, with potentially destructive consequences. It has been conceptualised as a negative evaluation of the core self as a whole, rather than a response specific event (i.e. guilt) (Lewis, 1971). Guilt involves concern with wrongful behaviour, whereas shame focusses on a wrongful person (Tangney, 1998). Guilt is generally viewed as an adaptive emotion that encourages more

moral behaviour (Tangney, Stuewig & Mashek, 2007b). There is much debate attempting to differentiate guilt and shame, both moral emotions, (Tangney et al, 2007b) but considering its relevance to clinical psychology and interpersonal behaviour, this paper will focus on shame.

Shame as a negative evaluation of the self has been supported empirically (Tangney & Dearing, 2002): studies suggest that internal attributions for failure are positively associated with shame (Tracy & Robins, 2006). It is related to experiencing the self as worthless, undesirable and inferior (Gilbert, 1998) and understood as a negative perspective on how we exist in others minds (Gilbert & McGuire, 1998). Shame is therefore largely influential upon self-identity (Gilbert, 1998).

Shame can be seen as an overarching concept, and can be broken down into differing dimensions. It can be implicit or explicit, meaning it can be a conscious process, or outside of our awareness (Tangney et al, 2007a) and is a response to the threat of, or actual, social rejection (Gilbert, 2002). There are also two recognised forms of shame: internal shame involves negative evaluation of the self (Gilbert, 2003) whereas external shame is the perception of negative evaluation from others (Gilbert, 2002). Research increasingly suggests that external and internal shame should be distinguished both conceptually and empirically (Kim, Thibodeau & Jorgensen, 2011). Moreover, shame can be both a trait or state. State shame refers to reactive and momentary feelings, whereas shame-proneness refers to the disposition to experience that emotion, considered a 'trait' (Tangney, 1996). Theorists argue that some individuals develop a high capacity to experience shame, as feeling unwanted can become an aspect of their identity, meaning most experiences become viewed as potentially shame productive (Pattison, 2010).

1.4.2. Shame Within a Social and Evolutionary Context

Shame can be understood within an evolutionary approach: a process that becomes specialised over time to achieve certain goals, in the context of survival (Buss, 1995). Such approaches assert that there is an innate need in all humans for care and connection, including the need to facilitate positive regard in the minds of others, which motivate individuals to seek connectedness and acceptance (Gilbert, 2017). Theorists argue that whilst it may vary both culturally and personally, shame is also a universal experience, as it is about a threat to social bonds (Scheff & Mateo, 2016), and thus relevant to all. Key aspects of evolution involve our need for attachment (Bowlby, 1969), group living (Baumeister & Leary, 1995) and sexual selection (Darwin, 1871). Without these things, humans would not continue to survive.

Shame evolved in hominins and non-hominins, allowing them to navigate social hierarchies: those with the capacity for shame created future generations due to social rank (Gilbert & McGuire, 1998), as social signals regulated psychobiological states and behaviour, to achieve bio-social goals. As humans became cooperative, the shame system became involved in the maintenance of prestige, a proxy for possession of, and access to resources (Nichols, 2016).

To understand this further, it is important to note that social attractiveness is key to developing useful relationships within social groups, which can be facilitated by cooperating with group values, to maintain acceptability (Gilbert, 2007). Experiences of being devalued or deemed unattractive can threaten social bonds (Gilbert, 1995). If an individual does not conform, acting outside of group values, and does not display shame, they risk social exclusion (Gilbert, 2007). Shame has thus evolved to monitor our attractiveness in others minds, and can act as a warning signal that others perceive us negatively (Gilbert, 2003) where we interpret that we should hide, or get rid of, certain parts of ourselves that are not in line with group norms or expectations (Gilbert, 2007). Cooperating with groups increases access to resources and predictability of others actions, facilitating group coordination (Fessler, 2004). Therefore, it may be adaptive if an individual changes their behaviour to recalibrate social rank (Nichols, 2016). Through feelings about the self and our social acceptability, shame may therefore influence anticipatory, or actual, moral behaviour (Gilbert, 1998). It is argued that anticipatory behaviour is evaluated based on past experiences, and responses to similar events (Tangney et al, 2007a). Shame thus acts as a barometer, providing immediate feedback on our acceptability in the social and moral world (Tangney et al, 2007a). Overall, state shame is therefore considered a social threat system, linked to the need to appear desirable, and competitive behaviour (Gilbert, 2003), evolving to motivate conformity and cooperation with the group (Fessler, 2004). Notably, this research refers to state shame in the moment, not an individual's propensity to experience shame.

1.4.3. The Development of Shame

Shame emerges within our early experiences with others and is well-established by middle childhood (Tangney & Dearing, 2002). It develops later than primary emotions (e.g. anger) as it requires cognitive abilities, including the theory of mind and self-awareness (Gilbert, 2003). Research also suggests that adolescence is a critical period in the development of shame, particularly external shame, considering adolescents' increased awareness and consideration of how they exist in other's minds (Heaven, Ciarrochi & Leeson, 2009). Greater interaction with peers, as opposed to the family, provides crucial information about social acceptance, and whether their characteristics fit with this (Irons & Gilbert, 2005).

Theorists propose that shame can be understood in an evolutionary biopsychosocial framework, whereby biological factors or predispositions interact with psychological and social factors to inform experiences of shame (Gilbert, 2007).

1.4.3.1. Shame memories. Memories of shame experiences can be considered threat memories (a threat to the social self) and can infiltrate self-identity (Andrews & Hunter, 1997), perhaps acting in our minds as emotional hot spots (Kaufman, 1989). Shame experiences might include bullying, parental criticism, abuse, or failing at something, and can become conditioned emotional memories (Matos, Pinto-Gouveia, Costa, 2011). Such memories influence emotional processing and brain maturation (Schore, 1998), particularly the development of the orbital frontal cortex (Schore, 1994) and neurophysiological systems (Dickerson & Kemeny, 2004b).

A large body of literature therefore posits that shame memories can operate as traumatic memories, which impact shame in adulthood and moderate the relationship between shame and depression (Matos & Pinto-Gouveia, 2010). They can thus be considered self-defining. For example, being treated as undesirable may lead to the view one *is* undesirable (Gilbert, 2003). Traumatic memories can be characterised by flashbacks, intrusion, hyperarousal and dissociation (Ehlers & Clark, 2000) and studies support that shame memories operate similarly (Matos & Pinto-Gouveia, 2010). Research suggests that such memories are used as reference points for current experiences and generating expectations (Pinto-Gouveia & Matos, 2011). This is in line with the Centrality of Event Theory, proposing that negative emotional memories shape identity, life story, inferences and meaning (Bernsten & Rubin, 2006). For example, stressful events may influence expectations for the future, thus creating worries, or avoidance of similar events. In this way, shame memories may shape judgement of how one should behave.

1.4.4. Shame and Behaviour, Judgement and Mental Health

Whilst a large portion of literature has highlighted the possible adaptive function of shame, acting as a warning signal, as discussed above, research suggests that the impact of shame on experiences, perspectives and behaviour is mixed. It highlights how the impact of shame may not always be adaptive, i.e. leading to cohesion with the group, and may be dependent on other factors.

1.4.4.1. Shame and morality. Considering shame shapes perceptions and behaviour around social norms (Schaumberg & Skowronek, 2022), it has been considered a ‘moral algorithm’ that brains use to adapt the self to the environment (Grecucci, Neresini & Job, 2021). It provides motivation to do ‘good’ things and avoid doing ‘bad’ things (Kroll & Egan, 2004),

and propels our moral conscience (Scheff, 2011). It has been argued that state shame has stopped humans behaving in deviant or inhumane ways, reminding them of a threat to their relations to ours and bringing their sense of belonging into view (Pattison, 2010). For example, research suggests that fat shaming is underscored by moral ideas around ‘unhealthy’ behaviour (Spratt & Jemma, 2023).

Empathy is considered the ‘good’ moral capacity (Feshbach, 1975) and evidence suggests it facilitates altruism and helping behaviour (Eisenberg & Miller, 1987), positive, close interpersonal relationships, and inhibits aggression (Miller & Eisenberg, 1988). Despite ideas that shame motivates moral behaviour (Kroll & Egan, 2004), both shame-proneness (Tangney & Dearing, 2002), and state shame (Marschall, 1996) have been related to lower empathy towards others. Shame-proneness has also been positively related to focusing on personal distress (Tangney & Dearing, 2002). Scholars posit that shame involves turning inwards, meaning there is less capacity to consider the other person (Tangney, Stuewig & Mashek, 2007), and more focus on one's own feelings (Tangney, 1991), which may explain lower empathy, despite possibly motivating group cooperation (Fessler, 2004). Interestingly, within a group setting, field studies suggest that state shame is related to lower compensatory behaviour towards the group (Burmeister, Fasbender, & Gerpott, 2019), whilst shame-proneness has been linked to lower collaboration conflict style, but higher conflict-avoidance (Lopez et al, 1997). The impact of shame-proneness specifically on morality may therefore be nuanced.

Shame may also motivate defensive behaviour, considering it is a painful emotion (Tangney & Price, 2001). Research largely explores trait shame in relation to criminality. Generally, shame-prone individuals are more likely to experience intense anger and express this using aggression to the self and others (Tangney, Stuewig & Mashek, 2007) e.g. towards their partners (Tangney, 1995b). Shame-proneness has been related to higher anger, arousal, suspiciousness, resentment, irritability, and aggression towards others (Tangney, Wagner, Fletcher & Gramzow, 1992). It is also related to psychological abuse within adult relationships, with anger mediating this relationship (Harper, Austin & Arias, 2005), and has been linked to intentions towards criminal behaviour (Tibbetts, 1997) and recidivism (Hosser, Windzio & Greve, 2007). Sheff (1987) posits that the association between shame and aggression or criminality is due to feeling powerless, which may result in a ‘shame-fury’ episode, where the person erupts in anger to gain control in their life. In this way, the hostility is redirected outside of the self, serving a defensive function (Tangney, 2001). However, some research fails to find a link between shame-proneness and criminal behaviour (Stuewig & McClosky, 2005). This may be due to inadequate measurement of concepts or

lack of statistical power, or because the relationship between shame and morality is more complex and multifactorial.

Overall, whilst there is much evidence and theoretical bases stating that state shame can motivate cooperative and moral behaviour, results are mixed about differing types of shame and various aspects of morality. It may be that state and trait shame operate differently.

1.4.4.2. Shame and compassion. Shame may also influence compassion, a morally relevant concept. Scholars suggest that negative experiences in childhood, such as abuse, which induce shame, may lead to high compassion towards others, but difficult receiving compassion or showing it to the self (Van de Kolk, 2014). Moreover, research highlights how the impact of shame memories on depression and anxiety symptoms is mediated by the fear of compassion for the self and from others (Matos, Duarte, & Pinto-Gouveia, 2017). However, differing results emerge for trait shame: shame-prone individuals can struggle to direct compassion to themselves and others, as it is perceived as aversive or threatening (Gilbert, McEwan, Matos, & Rivis, 2011; Rockliff et al, 2011). Notably, Compassion Focused Therapy was developed for those with high levels of shame (Gilbert, 2014). through large bodies of literature highlighting the links between these two concepts. There are thus well-established links between shame and compassion, though results are mixed on the impact of differing subtypes. If shame influences compassion, a morally relevant concept, it may be that it is also implicated in our moral values.

1.4.4.3. Shame in Clinical Psychology. Shame is a common experience for those suffering with varying mental health difficulties, and thus considered a trans-diagnostic phenomenon within mental health (Gilbert, 2009). Evidence suggests that shame within childhood can shape our experiences in adulthood (Matos & Pinto-Gouveia, 2010) including mental health. Research shows that certain shame experiences differ in different mental health difficulties, for example higher existential shame in those with a diagnosis of Borderline Personality Disorder, and higher cognitive and bodily shame in those with a diagnosis of Social Anxiety Disorder (Sheel et al, 2014). Shame is also particularly relevant to those experiencing PTSD (Øktedalen et al, 2014) and Eating Disorders (Rørtveit, Åström, & Severinsson, 2010). Not only are significant levels of shame present in those who suffer with their mental health, but stigma towards this population is still rife across many cultures (Stier & Hinshaw, 2007). Shame as an emotional proxy of internalised stigma can lower likelihood of seeking help for difficulties (Rüsch et al, 2014).

Within therapeutic spaces, research suggests that shame states, and coping styles of physical and psychological withdrawal, are predictive of a less effective therapeutic

relationship (Black, Curran & Dyer, 2013). This research evidences how coping styles of withdrawal and attacking the self also predict impaired functioning in intimate relationships. The authors thus highlight how shame may be a barrier to effective relationships both in and out of therapy. DeLong & Khan (2014) offer empirical support that the relationship between shame and non-disclosure of distress extends beyond a therapist (a stranger, with a supportive stance), to various settings. In therapy, Kaufman (1989) suggests that both the therapist and client engage in a dance to avoid being shamed or exposing inadequacies. Moreover, given shame memories may create strong emotional reactions, and can be used as a reference for meaning and generating expectations (Pinto-Gouveia & Matos, 2011), certain topics may be avoided in the therapy space. Research suggests that therapeutic populations tend to avoid disclosing feelings of shame for fear of it bringing about further shame (Macdonald & Morley, 2001), and that individuals who have withheld information from therapists experience higher levels of shame-proneness (Hook & Andrews, 2005). Shame is thus a key consideration within clinical psychology and the therapeutic environment.

1.4.4.4. Shame coping. The impact of shame on psychological outcomes can depend on an individual's ways of coping (Elison, Pulos & Lennon, 2006; Harper, 2011). Authors suggest that humans are inclined to respond to shame by moving toward, against, or away from it (Brown, 2010). For example, the relationship between shame-proneness and psychological symptoms is mediated by self-concealment (purposeful hiding of personal information) (Pineles, Street & Koenen, 2006). Shame coping strategies can be categorised based on type: social, emotional, psychological, and defensive/behavioural (Matos & Pinto-Gouveia, 2006). Coping by attacking others involves turning anger outward (Elison, Pulos & Lennon, 2006; Harper, 2011; Nathanson, 1992). The impact of shame on behaviour is thus nuanced and variable, and may depend on how it is individually managed. It is not clear whether shame coping influences a person's moral values.

1.4.5. Cross-Cultural Variations

Some argue that though shame is fundamentally relevant to human beings, the meaning and impact of shame varies cross-culturally (Gilbert, 2003). In individualistic, Western cultures, such as America, shame may be focused on inward self-evaluation (Cook, 1996), based on perspectives that the self is a bounded, independent construct (Markus & Kitayama, 1991). In more collective cultures, the self is seen as relational and interdependent (Delong & Khan, 2014), and community is the priority over the individual. For example, in Eastern countries like India and China, shame is considered a collective phenomenon, meaning an individual's behaviour risks shaming the whole community (Yakeley, 2018). This maintains social order for fear of ostracism from the social group, as shame is viewed as a prosocial device to

promote group cohesion (Yakeley, 2018). For example, in China, shame is viewed as an important and necessary moral agent (Wilson, 1981). In collectivist cultures, shame may be viewed as an 'honour code' (Yakeley, 2018). Research finds that in the US, Asian-Americans experienced shame more frequently than European-Americans (Ratanasiripong, 1997).

Moreover, responses to shame may vary cross-culturally. High levels of shame avoidance (e.g. Sedighimornani, Rimes, & Verplanken, 2021) are based upon Western values of feeling good. In Western cultures, shame is unlikely to be disclosed, as hiding is an intrinsic aspect of shame, or shame *about* their shame reaction (Macdonald, 1998). Alternatively, in collectivist cultures, feeling bad, or experiencing shame about oneself, is considered motivational and associated with self-improvement (Wong & Tsai, 2007). Consequently, shame may be viewed with more positive regard in such cultures. It is thus important to note that research about shame may best be interpreted within its sociocultural context.

1.5. Attachment

Relationships are integral to our survival, coupled with physical and emotional well-being (Bowlby, 1969). In evolutionary terms, attachment and caregiving has increased chances for survival and reproduction (Carter, 1998) through behavioural and neurophysiological systems evolved to care for offspring (Bowlby, 1969). Thus, the quality and availability of social and emotional bonds are crucial. Attachment theory (Bowlby, 1969) explains how infants seek proximity to a caregiver to gain care, nurture and protection. The security of this relationship is based on interactions, particularly the soothing of distress, and will thus influence socioemotional development. Research shows that early interactions with attachment figures influence brain maturation, expression of genes, emotion regulation, cognitive skills, and autonomic, neuroendocrine and immune function (Cozolino, 2006; Mikulincer & Shaver, 2004, 2007; Taylor et al, 2004, 2006; Schore, 1994). The ability to regulate emotions is internalised through experiences with the caregiver (Bowlby, 1969), for example by allowing individuals to explore their emotions and develop adaptive regulation strategies (Mikulincer & Shaver, 2007), or experiences of soothing distress (Bowlby, 1969). This impacts the development of neural circuits related to stress responses (Schore, 2001). Attachment thus influences later socioemotional functioning (Schore, 2005). It also facilitates individuals' ideas about themselves (e.g. as worthy of love) and others (e.g. as caring or threatening), known as 'internal working models' (Bowlby, 1969), which determine how individuals will relate to others in the future. This forms the basis for how individuals perceive experiences and predict others behaviour (Baldwin, 1992, 1997).

Earlier theorists categorised relational patterns into 'attachment styles', including secure, anxious and avoidant (Ainsworth et al, 1978). However, more recent scholars posit that attachment is more effectively conceptualised as two continuous dimensions: attachment avoidance and anxiety (Brennan, Clark & Shaver, 1998). Attachment anxiety may occur following difficult attachment experiences or adversities, which can last into adulthood (Mikulincer & Shaver, 2007) and may involve fear of rejection, need for reassurance, or being highly dependent on others (Karantzas, Feeney & Wilkinson, 2010). Attachment avoidance may include avoiding intimacy or distrusting others (Karantzas et al, 2010).

1.5.1. Attachment and Morality

Attachment theorists suggest that individuals learn prosocial behaviour through our experiences and observations of caregivers (Gross, Stern, Brett & Cassidy, 2017), for example comforting or sharing, key to cooperative relationships. A securely attached individual might know what it means to consider and care for others, through modelling, and thus learn to exhibit this behaviour toward others (George & Solomon, 2008). Moreover, considering securely attached individuals have more positive internal working models about relations with others, it may be easier to perceive others as deserving care and support, and to have confidence in their ability to do this. Alternatively, less securely attached individuals may have more focus on their own unmet attachment needs, and find it hard to attend to others (Milkulincer & Shaver, 2012). Modern neuroscience has provided evidence of how ancient neurological systems of social attachment and aversion influence our moral behaviours choices in social settings, such as altruism or empathic concern (Moll & Schulkin, 2009). Thus, research suggests that evolutionary neurological systems are tightly integrated with cortical mechanisms to shape moral values and behaviour.

1.6. Compassion

Another concept relevant to morality is compassion. It encompasses our urge to care for others, by displaying kindness, empathy and warmth (Spikins, 2015). It is a feeling whereby humans witness another's suffering, tolerate it, and are motivated to alleviate it (Goetz, Keltner, Simon-Thomas, 2010). Again, often viewed within an evolutionary context, Darwin (1871) highlighted how communities with the most compassionate members would flourish best, and rear the most offspring. Modern theorists highlight how compassion evolved as an adaptive mechanism to protect oneself and offspring, broadening out to protecting one's immediate social group (de Waal, 2009). In line with cooperative accounts of morality, compassion is theorised to support the needs of the social group (Gilbert, 2019) and facilitates cooperative relationships within this (de Waal, 2009, Keltner, 2009). As a concept,

though perhaps less broad, compassion therefore overlaps with morality: to be compassionate towards others is considered morally right. It is associated with moral reasoning (Loewenstein & Small, 2007) and altruism towards others (Preston, 2013). It may be therefore be interesting to further explore how compassion is implicated in Morality as Cooperation.

However, compassion to and from others has been distinguished from compassion to the self (Neff & Dahm, 2015). Self-compassion requires displaying this kindness and concern towards the self and one's own emotions and distress, and despite not being about relating to others, it has been linked with ethical behaviour (Yang, Guo & Kuo, 2020). In contrast, poor self-compassion and self-criticism are related to mental health difficulties (Kannan & Levitt, 2013). Cultivating compassion has become the central focus in developing psychological therapies (Neff, & Germer, 2013; Gilbert, 2014; Germer & Seigal, 2012). Research suggests that facilitating self-compassion within therapy may support individuals with high shame and mental distress (Gilbert & Irons, 2005). Thus, when exploring compassion and morality within literature, differentiating types of compassion is crucial.

1.7 Attachment, Shame, Compassion and Morality

Attachment, shame and compassion have thus been viewed within an evolutionary framework, and the literature suggests that they influence our experience in the world. This section will examine how they may interact.

1.7.1 Attachment: Links with Compassion and Morality

Compassion within the attachment relationship allows affect regulation to develop, through internalising the ability to soothe the self (Gilbert, 2009). There is evidence that the quality of caregiving, including compassion, influences our compassion towards others, such as prosocial behaviour (Mikulincer & Shaver, 2017). More specifically, attachment security may be key: theorists explain that those with high attachment anxiety may be more focussed upon internal threats, meaning resources may be drawn away from altruistic behaviours, or they become emotionally overwhelmed by others distress. On the other hand, those with high attachment avoidance may be less inclined to tend to others needs (Gillath, Shaver & Mikulincer, 2005). Studies show that avoidant attachment is associated with lower levels of altruistic behaviour, such as caring for the sick, consistently across 3 cultures (Mikulincer, Shaver, Gillath & Nitzburg, 2003b). However, attachment anxiety was not related to altruistic behaviour, only egoistic intentions for the behaviour. The authors concluded that attachment security is related to altruism and compassion, both in states of mind and real-world

behaviour. Given this evidence, it is therefore possible that both attachment may influence our ability to be compassionate, or behave ‘morally’ within the social group. It is also unclear how compassion experiences inform an individual’s moral sense, using domains derived from the Morality as Cooperation theory.

1.7.2. Shame: Links with Attachment

Alternatively, shame experiences within an attachment relationship may be formative. Scholars have noted that shame and attachment systems are very similar (Solomon, 2021). Attachment theory posits that negative internal working models of others and the self shape socioemotional responses to experiences throughout life, which can be informed by shame experiences (Matos & Pinto-Gouveia, 2010, Bowlby, 1980). Adverse attachment experiences (e.g. abuse, shaming, rejection) are related to the activation of the threat system (Dickerson & Kemeny, 2004b; Taylor, 2010), considering humans are motivated to be viewed positively by others (Gilbert, 1998). Early theorists consider rejection by a loved one as a rejection of the self, therefore inducing shame (Lewis, 1971), and feeling devalued or neglected create vulnerability to both internal and external shame (Gilbert, 2017). Shame is also considered a product of negative attachment relationships, coloured with loss or threat (Bowlby, 1980). Moreover, Lopez (1997) argues that insecure attachment styles with negative models of the self may be predisposed to shame-proneness, considering their negative perspectives about the self.

Specifically, studies show that insecure attachment is associated with higher levels of shame (Lopez et al, 1997), as well as punitive parenting (Stuewig & McCloskey 2005). Moreover, shame memories with attachment figures are more significantly correlated with internalised shame, whereas shame from others is more related to external shame (Matos & Pinto-Gouveia, 2014), suggesting the impact of shame is informed by the relationship with who the shamer was. Shame experiences with an attachment figure are related to higher depression symptomology (Matos, Pinto-Gouveia & Costa, 2013). Interestingly though, some evidence suggests affiliative relationships and feelings of social safeness can buffer the impact of shame memories on mental health (Matos, Pinto-Gouveia & Duarte, 2015). This research also highlights how early memories of warmth and safeness, arguably similar to compassion from others, can moderate the impact of shame memories on depression (Matos, Pinto-Gouveia & Duarte, 2015). Overall, the impact of shame within the attachment relationship has been well documented, as is the impact of shame on behaviour in the social group (Tangney et al, 2007a). However, much of this research relates to shame experiences within attachment relationships in childhood, and attachment patterns have not been applied to shame-proneness and morality as measured by the MAC.

It is therefore possible that shame, compassion and attachment shape our morality and behaviour within a social group, and may interact to create our moral worldview. These relationships and their parameters require further investigation.

1.8. Literature Review

A scoping review was conducted to explore the current research on the link between shame and morality, specifically in relation to the Morality as Cooperation theory. This was informed by Peters et al.'s (2020) guidance, aiming to provide understanding of the literature and develop a research agenda. A scoping review is helpful for exploring broader research areas, assessing and understanding the knowledge in an emerging field, and discussing the concepts within it (Peters et al, 2020).

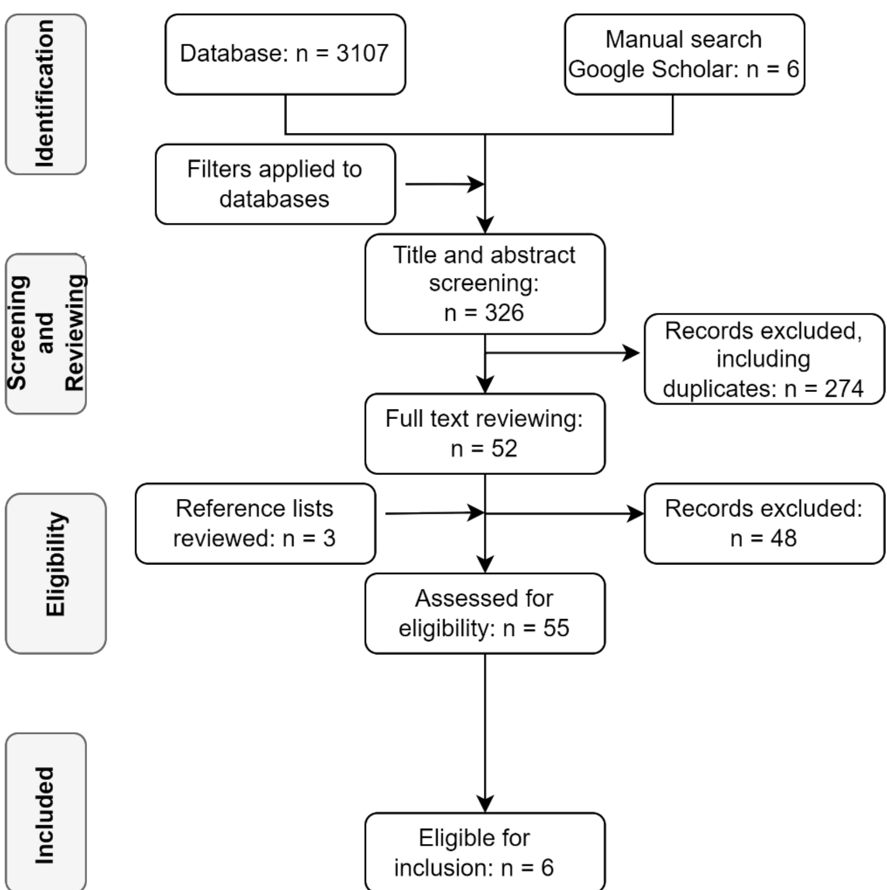
1.8.1. Search Strategy, Criteria, and Screening

The following databases were reviewed to identify relevant papers: EBSCO (Psycinfo, Academic Search Ultimate, PsycArticle), and Scopus. Google Scholar was also used, as well as reference lists of relevant papers. The search strategy was adapted based on evaluation of the search results. The search explored associations between shame and morality where full-text access was available, in English language, between 1990 and 2023, and with relevant subject terms (e.g. psychology). Across EBSCO databases, this produced 77 results. Across Scopus, this produced 247 papers. Google Scholar provided 6 studies for screening (see Appendix A for details of the search, including search terms, filters, exclusion and inclusion criteria). Titles and abstracts were reviewed for relevance. Studies used only adults, instead of children or adolescents, and specific populations were excluded e.g. veterans or criminals. Identifying clear inclusion criteria, specified prior to search, is key to an effective scoping review (Peters et al, 2020).

Phenomena of interest should be clearly explained and decided prior to the search (Peters et al, 2020). Shame was the independent or predictor variable, and only shame as a personal experience rather than shaming of others. Individual shame spanned levels of shame in adults, shame-proneness (trait shame), or experiences of shame in the moment (state shame). The researcher also reviewed morality measured in accordance with the MAC domains of cooperation, rather than morality more generally, e.g. studies looking specifically at honesty, prosocial behaviour or empathy were not included. Following the

review process, a total of 6 studies were identified: 5 research studies and 1 masters dissertation. See figure 1 for details.

Figure 1. Scoping review flowchart.



<u>1.8.2. Data Summary and Analysis</u>

Bică and Crețu (2022) explored the relationship between state shame and both fairness-driven decision making, and reciprocity-driven cooperation, relevant to the reciprocity MAC domain. 94 students were employed of varying ages, and assigned to an experimental condition (where they were induced to feel shame, guilt or no emotion: the control). They then completed an Ultimatum game against anonymous partners. Results showed that in the shame condition, participants had higher rejection rates when money was split unequally, and offered less money to unfair partners. The authors argued that the higher rates of punishment of unfairness in the shame condition were in an attempt to avoid potential shame (anticipated shame), rather than due the experience of shame itself. They also concluded that shame benefits reciprocity-driven cooperation, via negative reciprocity (discouraging future acts of unfairness). They linked these results with previous findings that not shame specifically, but anticipated shame, benefits cooperation (e.g. Jacquet et al,

2011). This study was limited to making a specific moral decision related to fairness and reciprocity, rather than moral domains that individuals value or judgements they may hold. The authors also did not explore more wide-reaching experiences of shame, such as shame-proneness, or childhood experiences, instead manipulating the emotional state.

De Buck and Pauwels (2021) explored a ‘cooperation failure’: theft by finding, where an individual takes possession of an item or money, without attempting to locate its owner. It is therefore relevant to the possession domain in the MAC. The authors explored the link between anticipated shame (participants' reports of likely emotional reactions) and responses to theft by finding. The study used an online survey of 3591 adolescents and young adults. The survey included video scenarios related to theft by finding, and participants were asked to rate behavioural responses after watching. They were then asked to imagine they had kept the money, and rate anticipated shame. Self-reported empathic concern was also measured using an established scale. Structural equation modelling revealed that anticipated shame was negatively related to the likelihood of theft by finding, as well as empathic perspective-taking. Thus, anticipated shame benefitted cooperation, consistent with Bică and Crețu (2022). The study was limited by its cross-sectional nature and thus inability to establish temporal patterns, and the use of imagined visual scenarios which could only measure anticipated shame and hypothetical moral responses. Control variables were also not included, so it is unclear how other factors may influence findings. This highlights that shame may impact cooperation in a range of scenarios, relevant to different MAC domains. However the impact of trait shame is unclear.

De Hooge, Zeelenberg and Breugelmans (2007) conducted research into whether shame increases cooperation in social bargaining games. 143 participants were recruited for a between subjects experimental study. In one condition, state shame was induced using an autobiographical recall task where participants recalled feeling very ashamed. There was also a guilt condition and control condition. This was followed by the completion of a social dilemma task where players had to choose the extent to which they would act cooperatively with the other player to gain money. A manipulation check for shame was completed. Finally, the study used a measure to determine whether participants were prosocials (those who maximise joint gain and aim for equality) and proselfs (who maximise personal gain). Results showed that shame had no impact on cooperation, and this did not differ between proselfs or prosocials. Authors concluded that shame does not motivate cooperation, in contrast to findings above about anticipated shame. However, this study manipulated shame feelings within the moment, rather than shame-proneness or the impact of past experiences, and only looked at responses in one social bargaining dilemma, rather than a wide-ranging

measure of moral domains like the MAC. The authors decided to conduct a second experiment, including a manipulation check directly after the shame induction, and a more general measure of cooperation, using 151 participants. Again, results suggested that shame did not impact cooperation. Overall this suggests that evidence about the link between shame and cooperative morality is mixed, and perhaps the measurement of shame, type of shame, or type of cooperation influences impact.

Declerck, Boone, and Kiyonari (2014) also explored the impact of state shame in relation to a task, and cooperative behaviour, and whether this relationship was conditional on the individual being proself, as above. 117 students were recruited within an experimental design, with a shame condition, including a manipulation check, and a control condition. Participants completed questionnaires and then engaged in a prisoners dilemma task, where players can choose between a mutually beneficial, but risky cooperative option, or individually beneficial yet uncooperative option. Two versions of this task were used, one where the non-cooperative decision could be covered up by risk aversion, and one where this decision was indicative of greed. Results showed that shame consistently reduced cooperation for prosocials. Shame also positively affected cooperation for proselfs, only when the non-cooperative choice was indicative of greed. This builds upon de Hooge et al (2007) by portraying that state shame can increase cooperative behaviour for proselfs, in a context where intentions are made apparent. The authors concluded that ashamed proselfs are inclined to cooperate in contexts where they cannot hide their greediness, rather than atoning for earlier wrongdoing, due to shame's self-regulatory function. Thus the influence of shame on cooperative behaviour was found to be context and value dependent. This study was limited to the link between shame in a specific context, with specific traits, and again explored state shame rather than previous experiences or trait shame. It also highlights that individual factors can be implicated in the relationship between shame and cooperative morality.

Jacquet, Hauert, Traulsen and Milinksi (2012) studied 180 student participants using a public goods game six player game. This involved division of goods, based on individual interest or group interest, relevant to the division MAC domain. In the shame condition, names were collected so that the people who donated the least could be identified. In round 10 of 12, this information was exposed by researchers. Results showed that in 10 out of 12 rounds, donations to the group were significantly higher in the shame condition than the control, with average group donations 53% higher in the shame condition. Following the exposure of the least generous donation, contributions to the group declined significantly. Authors concluded that the threat of shame (anticipated shame) can motivate cooperation in the context of

exposure to public scrutiny. However, this study did not use a manipulation check to ensure that anticipated shame was induced, and thus it is not certain that these feelings were present. Shame may be experienced both publicly or privately, and whether an individual *feels* exposed is most important (Tangney et al, 2007b).

Voorst, & Voorst (2017) conducted a dissertation research study examining the relationship between trait shame and cooperation. The researcher recruited 171 participants for an online questionnaire. Shame-proneness was measured using a scenario-based questionnaire, whilst cooperation was measured using a dyadic coin game, and a group social dilemma game. Results showed that shame had a negative correlation with cooperation: higher shame proneness lead to less cooperation with the group, conflicting with previous findings, such as De Hooge et al (2007) who found no impact of incidental shame, and Jacquet et al (2012) who found anticipated shame motivates cooperation. Interestingly, this study's design was not experimental, examining shame-proneness instead of experiences of shame in the moment, which may somewhat explain disparate findings. Authors posited that high shame-prone individuals encounter more shame experiences, and thus may become more distrustful of others, and that shame may only motivate cooperation when it is reciprocal and thus will lead to social inclusion.

1.8.3. Summary of Review

This scoping review has highlighted the mixed evidence on the impact of shame on morality, as understood in the context of cooperation, alongside gaps in the literature and need for further research. Studies have largely explored anticipated and induced state shame, within an experimental context. One study explored shame-proneness, however this was linked to cooperative moral behaviour in the moment, rather than moral judgements and values more generally, that may inform behaviour. It also used a scenario-based measure, rather than a validated shame-proneness scale. None of the studies within the review distinguished external and internal shame, which has been recommended through empirical study (Kim, et al, 2011). Five out of six studies agreed that shame was related to cooperative morality, though conflicted on the direction of this relationship: some found shame benefitted cooperation, whilst others found it reduced it. Differing results may reflect the differing conceptualisation and measurement of shame, as well as the different types of cooperation explored, and contexts.

No studies identified have explored the impact of childhood experiences of shame, or shame-proneness on Morality as Cooperation domains. Whilst there is evidence for the influence of shame on cooperation, within some contexts, to some extent, the boundaries

and factors involved in this are unclear. Research is therefore needed to examine alternative conceptualisations of shame on moral values: shame-proneness (i.e. trait shame), or shame experiences from the past. More specifically, no research has explored the impact of shame on the seven MAC domains. Studies tend to use experimental games, where participants are required to make moral decisions in the moment, rather than exploring moral domains they align to and an individual's moral worldview. It may be argued that these experimental tasks within controlled conditions do not represent considerations of morality in the real world, nor real interpersonal relations. Considering the context dependency of the influence highlighted by Jacquet et al (2012), and individual differences highlighted in DeClerck et al (2014), it may be that the relationship is multifactorial. It will be useful to gain understanding of the general relationship between trait shame and shame experiences and the moral domains people value, and other factors implicated in this relationship.

1.9. Rationale and Aims

Morality as Cooperation theory is an exciting new theory, emerging from evolutionary research and cross-cultural validation. How the MAC domains emerge is yet to be understood. Shame is a key concept with Clinical Psychology, also considered to have evolutionary roots and to be influential on overall wellbeing and social behaviour. Some research has investigated how shame impacts upon our moral values and judgements, including cooperative behaviour, though there are mixed results about whether cooperation is increased or reduced by shame. It is unclear how the concept of shame influences or maps on to the MAC domains. Most research also focuses upon anticipated or manipulated shame, and is context-dependent. Shame-proneness and shame experiences in childhood have not been explored. Moreover, a large portion of the literature on morality uses only student samples (Curry et al, 2019a), and thus wider investigations are required to enhance understanding.

The present research aims to explore the relationship between trait shame (shame-proneness), and shame experiences in childhood, on the MAC domains, using a standardised measure assessing these moral values, across a varied and diverse sample. Both shame experiences in childhood and current proneness to external and internal shame will be explored, using separate, standardised measures. The current research also aims to explore the parameters of the relationship between shame-proneness and morality, considering whether other factors are involved: attachment patterns and compassion. Currently, these links remain largely of theoretical extrapolation, not empirical study. Therefore this research is exploratory, without specific hypotheses.

1.9.1. Implications

This research will therefore shed light upon how moral values and judgements develop in our current society, and how morality is shaped by our experiences and emotions. Investigating past and current shame will have implications for therapeutic populations with high levels of shame, and aid understanding of how this influences an individual’s life. More generally, it will also enhance understanding of how an individual's moral worldview is developed. Exploring the impact of other factors on this relationship will also aid understanding of potential protective or risk factors that exacerbate this association. Overall, this research will contribute to understanding of how humans operate and cooperate in society, and the psychological factors relevant to this process. This will enhance knowledge on how and why people cooperate with the group in certain ways, offering insight into human behaviour that may be useful across contexts, particularly psychology. It may also be that understanding what shapes our morality may have real life application to political views, which may extend to voting behaviour and wider politics.

1.10. Research Questions

The following research questions (RQ) have been formulated for the present study:

RQ 1: Are past shame experiences related to moral attitudes, specifically the MAC domains?

RQ 2: Is compassion from others, to others, and towards the self related to moral attitudes, specifically the MAC domains?

RQ 3: Is internal shame-proneness related to moral attitudes, specifically the MAC domains?

RQ 4: Is external shame-proneness related to moral attitudes, specifically the MAC domains?

If such relationships exist:

RQ 4a: Does the relationship between external shame-proneness and moral attitudes depend on therapeutic concepts (attachment style, compassion)?

2. METHODOLOGY

2.1. Overview

This section presents the methodology of the study. First, it will explain the epistemological position of the research, and consider ethical aspects. Processes including the participants, design and procedures used will be outlined. Finally, the chapter will present the study sample characteristics and analytics strategy.

2.2. Epistemology

The current research takes a critical realist epistemological position. Epistemology relates to how knowledge is acquired and produced (Sabnis & Newman, 2022) whilst ontology is concerned with the knowledge that is available to know: what is 'real' and what is not (Crotty, 2003).

A critical realist epistemological approach asserts that material reality can be perceived, however, this is shaped by language and experience (Sims-Schouten, Riley, & Willig, 2007). In sum, there is knowledge to know, but this knowledge is fallible. Crucially, this position acknowledges the link between scientific study and the sociopolitical, historical, and cultural context it sits within (Bhaskar, 1998). Consequently, the knowledge available to know is bound by systems, conceptual frameworks and methods available.

This research recognises morality and shame as concepts that can be measured, though the theories investigated themselves acknowledge that this is shaped within social experience within a sociocultural context. It is within the MAC's theoretical position that morality is not within us, but between us, shaped by our interactions and cooperation with the social environment. It is therefore noteworthy that whilst we are exploring these phenomena, this exploration is limited to the measures we use to study them. Participants' interpretations of questions within measures will be shaped by their own perspectives and experiences, such as culture, or family beliefs. Moreover, the researchers involved in this project also hold their own positions, assumptions, and biases that will influence the exploration and interpretation of findings, either explicitly or implicitly. Therefore we cannot assert that this research reflects a true reality, and instead, interpretations are held tentatively. I use an experimental approach in line with this epistemology, using quantitative analysis.

2.3. Ethical Approval and Considerations

Ethical approval was acquired from the University of East London (UEL), School of Psychology Research Ethics Committee (see Appendix B and C for application and approval with amendments). As participants were not recruited via health settings, no further approval was necessary. The BPS Code of ethics and conduct (2018) was used to guide ethical considerations (BPS, 2021), as well as BPS Ethics guidelines for internet mediated research (BPS, 2021) and BPS e-Professionalism: guidance on the use of social media by clinical psychologists (BPS, 2023). The data management plan can be found in Appendix D.

2.3.1. Informed Consent.

The survey was conducted via Qualtrics. Participant information was presented at the start of the survey, outlining the details of the study: its voluntary nature, aims, process, confidentiality, and right to withdraw (PIS) (Appendix E). Templates were used to guide the preparation of this, and consultation was gained from potential participants (friends, colleagues) and other researchers to ensure usability and accessibility potential. Participants were also invited to email the researchers with questions. They were not able to progress to the next page without viewing this page and consenting, via a list of statements regarding data collection, storage and usage (Appendix F). If participants did not provide consent, they were taken to the final page of the study. If participants withdrew mid-survey, their data was not used for analysis.

2.3.2. Confidentiality

The survey was accessed via an anonymous link which did not identify IP addresses or location. The programme randomly generated unique identification numbers to store participant data against. Secure, password-protected documents were used to store data, and only the researchers had access, within UEL OneDrive accounts. Demographic information was general, gathered via a list of categories, meaning it would not be possible to later identify participants.

After completion, participants were offered the opportunity to receive a summary of findings via email and given the chance to enter a raffle (by providing their email address), and informed that should they win, their National Insurance number, address, and name would have to be provided via email. Should they wish to do this, they were directed to a separate survey, redirected away from the main survey, ensuring the identifiable data could not be matched to participant responses. Their details were deleted on completion of the research.

Other research data would be retained securely for up to three years and then destroyed, in accordance with the Caldicott Principle of the Data Protection Act (2018).

2.3.3. Possible Distress

The topics within the questionnaires may be considered sensitive, such as asking about shame experiences and relationships, and thus may cause psychological distress. This risk was minimised, using the information sheet, which outlined the content of the questionnaires, and allowed participants to make an informed choice (see risk management plan, Appendix G). Consent was only then obtained. Participants were able to end the survey at any point, where they would be taken to the debrief sheet (Appendix H). This included signposting to relevant agencies where support and advice could be accessed, including online information and advice websites, and how to access support. They were also encouraged to speak with family and friends. Participants were also given the contact details of the researcher and supervisor, should they wish to ask any questions or raise concerns.

Risks to the researchers were minimal, with no risk of physical or psychological risk. The researcher's online identity was exposed, however risk of this was minimised by only using university email addresses.

2.3.4. Debrief

After completing questionnaires, participants were presented with a debrief page reporting the aims of the study, how to access the completed research, and a range of support (Appendix H).

2.3.5. Reflexivity

Self-reflexivity involves the conscious process of realising, acknowledging, and accounting for our personal experiences, biases, values and position (Burnham, 1992). Within quantitative research, these positionalities will shape the design of the research, including concepts studied, measures and procedures chosen, and interpretation of results. It requires self-awareness of the potential impact of the researcher on the research they undertake (Kingdon, 2013) and critical thinking about what values underpin what and how we study (Willig, 2013). Whilst this idea has traditionally been more central to qualitative research, its use in quantitative work is significant and contributes to transparency in psychology (Jamieson, Govaart & Pownall, 2023). Quantitative research is typically concerned with establishing patterns (such as behaviour or attitude), however in social sciences we are

typically studying concepts which are inherently not tangible or concrete (Jamieson, Govaart, & Pownall, 2023) and there is a risk for research to be 'divorced from the context of their construction' (p.101) and thus stand in need of close definition. However, within the debate between utility and validity between methods, it has been argued that quantitative research is particularly useful in exploring social trends (Maynard, 1994) much like the present study. Reflexivity in quantitative research allows insight in the dynamics between researcher and participants (Ryan & Golden, 2006).

It is notable that all I am from a white, middle class, educated background, with a high level of psychological professional training. The research was conducted in a Western context where knowledge and education has been produced within Eurocentric assumptions. Such ideals promote Whiteness and contribute to epistemic racism, where research does not consider alternative cultural ideas.

Supervision can support reflexivity, to analyse biases and assumptions (Hedges, 2005) and I used this throughout the research process to maintain a critical approach, for example by considering epistemological positions. Position statements also situate the research within it's context, centralising and confronting bias (Jamieson, Govaart, & Pownall, 2023) and thus creating more reliability by transparently sharing our position (Siegel, Winter & Cook, 2021).

2.4. Design

A cross-sectional, correlational, and multi-factorial, quantitative design was used. Data was collected at one time-point and a number of variables were explored. Two researchers used the survey, with some diverging measures related to differing research questions. Analyses and interpretations were undertaken separately. The demographic variables included were age, gender, ethnicity, history of mental health concerns, and level of academic attainment.

The outcome variable was moral relevance preferences, as measured by the Morality As Cooperation-Questionnaire (MAC-Q, Curry, Chesters & Van Lissa, 2018). Various predictor variables were explored in relation to the MAC, including moderation analyses, based on self-report measures. For further details, see below.

2.5. Participants

2.5.1. Recruitment

Participants were recruited between July 2023 and February 2024, using opportunity, purposive and convenience sampling. Participants were encouraged to share the study with contacts. The following advertisement opportunities were pursued:

- Social media (Instagram, Facebook (including clinical psychology and research participation forums), and Whatsapp groups;
- Word of mouth between cohort/colleagues/friends/family;
- Research forums (Surveyswap and Surveycircle).

A short advertisement poster outlining the purpose of the study was used (Appendix I) and permission was sought to advertise where necessary, e.g. within Facebook groups and forums. The poster directed participants to the study link where they could read the information sheet and complete the study should they consent.

Notably, this sampling method may have limited the generalisability of the research, considering some sociodemographic groups will have been under-represented. However, considering the requirement to collect large amounts of data in a limited time, this method was deemed appropriate (Sharma, 2017). Sample limits will be further considered in the discussion.

2.5.2. Inclusion Criteria

Given the exploratory nature of the study, the inclusion criteria was broad. Researchers were interested in exploring a range of individuals from different sociodemographic groups and with a range of moral interests. Participants were required to be over the age of 18 and have sufficient English language, in order to read the information sheet, consent, understand the survey, and provide responses.

2.6. Materials

The researchers reviewed potential questionnaires to measure the concepts explored, with consideration of their length, validity, psychometric properties, and utility in other research. Researchers also wanted to ensure the measures were short, whilst maintaining good construct validity. Permission was obtained by authors of measures not publicly available.

2.6.1. Moral Values

Moral values were measured using the Morality as Cooperation Questionnaire (Curry, Chesters & Lissa, 2018), based upon Morality as Cooperation Theory (Curry, 2016) (Appendix J).

The MAC-Q is split into two subscales. We employed the 97-item scale measuring the moral relevance of domains, where questions are asked to determine whether examples of cooperative behaviour are deemed morally relevant. It asks participants to consider how they decide whether something is right or wrong, and to what extent the items are relevant to this. This subscale has good internal consistency (r= 0.76-0.86), and test re-test reliability (α= 0.79-0.89). Likert scales are used where participants rate from 0 (not at all relevant/strongly disagree) to 100 (extremely relevant/strongly agree). The MAC subscales (family, group, reciprocity, heroism, deference, fairness, property) are computed by creating an average for each, for relevance domains, with reverse coding as necessary.

2.6.2. Shame Experiences

Multiple measures of shame exist, meaning it can be explored in a number of ways. The present study was interested in past shame memories and experiences, and propensity to shame, or 'shame-proneness'.

2.6.2.1. Current measure. The Shame Experiences Interview (SEI, Matos & Pinto-Gouveia, 2006) was developed in response to concerns that existing shame measures lack ecological validity, and is the only measure of its kind assessing shame memories and their impact. It is based upon evolutionary theories of shame and empirical research (e.g. Gilbert, 2003; Tangney & Dearing, 2002; Kaufman, 1989; Gilbert & Mcguire, 1998). The measure was developed through consultation with clients about their experiences of shame memories, aiming for good content validity. To the researchers knowledge, this is the only existing measure that asks participants to consider shame memories and reflect on their impact, so had utility for the present research. The researchers were interested in aspects of the shame experience, e.g. level of external and internal shame experienced, and how they coped. These factors could then be explored in relation to morality.

The SEI was originally designed as a semi-structured interview to assess the phenomenology of shame experiences within childhood. It asks participants to consider a specific shame memory, and then measures different components of the shame experience, autobiographical memory characteristics, and how they coped.

This measure has since been adapted for use as a self-report questionnaire: the author gave permission to use in the online survey. For the purpose of the study, the aspects of the measure included were: description of shame memory (part 1) and age at time of memory. Then, impact of this memory was recorded, using sections of the interview. These included external shame (section 2.4) and internal shame (2.5) on a likert scale from 0-10. Finally, coping strategies were measured (list taken from 3.2 but adapted to consider across lifetime, rather than only in relation to specific memory) (Appendix K). Shame coping strategies were categorised into new variables, as is described by the SEI, deriving a total score over all of the relevant items: defensive behavioural strategies, psychological strategies, social strategies and cognitive strategies.

2.6.3. External and Internal Shame

2.6.3.1. Measurement. To understand shame-proneness in detail, it was important to measure both internal and external shame comparatively. Literature suggests that this distinction is important within empirical research, given evidence that the two types of shame relate to psychopathological constructs in different ways (Kim, et al, 2011). It was important that these were reasonably short, easy to complete, and relevant to the research questions.

Shame can be measured using scenarios, which can be a lengthy ask of participants. For example, the Test of Self-Conscious Affect (TOSCA) (Tangney et al, 2000), as is employed in some scoping review studies. In contrast to the SEI, participants rate action and feeling tendencies in response to certain scenarios. It is therefore assessing imagined responses, attitudes and intentions, to hypothetical events, and does not distinguish between internal and external shame. Research suggests that the TOSCA measures negative evaluations of the self, rather than proneness to feelings of shame (Luyten, Fontaine, & Corveleyn, 2002). The Experience of Shame Scale (ESS, Andrews, Qian, & Valentine, 2002) measures shame experiences, but items focus on the past e.g. ‘Have you felt ashamed of your body’, and do not distinguish external and internal shame. The Internalized Shame scale (Cook, 2001) measures only internal shame, it is not widely used in this research area. Considering these issues, the present research explored other measures of shame.

2.6.3.2. Current measure. The Other as Shamer Scale II (OAS) was developed by Matos et al., (2015) and is designed to measure external shame, defined as the perception that others perceive you negatively. It uses a series of 8 statements rating how often feelings of shame arise, and assessing how people think others judge them (Appendix L). The OAS requires a total of all items to find an overall score for external shame. This scale has good internal

consistency (α =0.82), and convergent and divergent validity with psychopathological symptoms (Saggino et al, 2017).

The Social Comparison Scale (SCS) (Allan & Gilbert, 1995) is designed to measure internal shame, including self-perceptions of social rank and relative social standing. It asks participants to rate how they feel in relation to their peers on a likert scale, across 11 items, again concerned with current feelings of shame in participants' lives (Appendix M). On review, these items held themes similar to the MAC, by considering social rank and how you fit relative to others in the group. Higher scores reflect more favourable self-perception. The SCS requires a total score, so items are summed. It has good internal consistency (α =0.91 in a student population, α=0.88 in a clinical population) (Allan & Gilbert, 1995).

Both scales thus measured propensity to feelings experienced in their life, instead of responses to imagined scenarios, and thus had relevant content validity to the current research questions.

2.6.4. Attachment

2.6.4.1. Measurement. There are multiple methods available to measure attachment. The Relationship Style Questionnaire (Griffin & Bartholomew, 1994) categorises four attachment styles, using average scores across 30 items, and like most other self-report measures, focuses on romantic relationships (e.g. Adult Attachment Questionnaire; Simpson, Rholes, & Nelligan, 1992; and Experiences in Close Relationship Scale; Brennan et al, 1998). The present study was concerned with measuring attachment across various relationships, which required the measure to be relevant to wider groups of people, including those with limited romantic experience. It was also important to measure attachment security on a continuum, rather than categorically. As highlighted in the introduction, distinct attachment categories assume that attachment styles are mutually exclusive and misses within group variability. Evidence also suggests that individuals can score highly in both attachment anxiety and avoidance: “fearful-avoidance” (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2003).

2.6.4.2. Current measure. The Attachment Style Questionnaire (ASQ) offers an alternative to category based measures, and the present study used the well validated short-form version (Alexander, Feeney, Hohaus & Noller, 2001). This is a 29-item measure of anxious and avoidant attachment tendencies, including how they tend to feel or behave within relationships. It is rated on a likert scale from 1 (totally disagree) to 6 (totally agree) (Appendix N). The ASQ provides continuous self-report data on the key dimensions underlying attachment styles (Karantzas, Feeney & Wilkinson, 2010). Attachment anxiety

and avoidant anxiety subscales are computed by totalling relevant items, with reverse coding where necessary. The measure has been shown to have good internal consistency (α=0.83-0.85) and test re-test reliability (r=0.74-0.80) (Alexander, et al, 2001).

2.6.5. Compassion

2.6.5.1. Measurement. Many of the available measures explore different types of compassion separately. Measures of compassion have been criticised for lacking content validity and psychometric properties (Strauss et al, 2016). The present research was interested in both the compassion we experience from others, for others, and for ourselves, and how these relate to/interact with the constructs of interest such as shame and the MAC.

2.6.5.2. Current measure. The Compassionate Engagement and Actions Scale (CEAS); Gilbert et al, 2017) measures compassion constructs separately but within one questionnaire, using the same items measuring compassionate engagement and action across the self, to others, and from others (Appendix O). This enabled the researchers to explore these constructs more efficiently. This scale also draws from an evolutionary approach to compassion (in line with the underpinnings of the MAC), and was validated by authors across three countries. It comprises three subsections each with an 8-item subscale and 5-item subscale, including attention checks. Within the CEAS, compassion to self, others and from others are scored separately, by summing items to a total score. Reverse items are not included in scoring. The scales have test-retest reliability (r=0.72-0.75) and internal consistency (α = 0.72-0.91) across the subscales (Gilbert et al, 2017).

2.7. Participant Demographics

At the end of the survey, participants were asked to provide the following demographic information, using pre-defined categories, with a ‘prefer not to say’ option, including:

- Age, categorised into 10 year groups from 18+
- Ethnicity, categorised based on the UK ethnic group variables (Office for National Statistics, 2021)
- Gender, male, female, non-binary, transgender male, transgender female
- Level of Education (secondary school, college/sixth form, undergraduate degree, postgraduate degree - masters/diploma, doctoral degree)

- Mental health diagnoses (asked whether they had ever aligned with a particular mental health difficulty)

Demographic variables were coded: gender, age, education, ethnicity e.g. 1 for male 2 for female. Two researchers reviewed whether participants aligned with mental health diagnoses, and these were coded (0 for no and 1 for yes).

2.8. Procedures

Online data collection allows large amounts of data to be collected in a short time period. The survey was accessed via Qualtrics, using an anonymous electronic link. Participants were asked whether they met inclusion criteria, and then provided with the study information (PIS) and consent form. If they did not consent, they were directed to the debrief page. The survey appearance was automatically adapted by the software to suit multiple devices, e.g. laptop, tablet, desktop and smartphone.

The survey took around 20 to 30 minutes to complete, and discontinuation was possible at any point. A debrief form was provided at the end, and the opportunity to input email address should a participant wish to receive results or enter the raffle.

At the end of the survey, one question directed participants to a separate survey to provide their email address if they wanted to receive a summary of the results and be entered into the raffle, to maintain confidentiality.

2.8.1. Order of Measures

The questionnaires were presented in the following order:

- Morality as Cooperation Questionnaire Attachment Style Questionnaire
- Shame Experiences Interview (SEI)
- Other as Shamer (OAS)
- Social Comparison Scale (SCS)
- Compassion Scale (CEAS)

Demographic details were then asked in the following order:

- Age
- Ethnicity
- Gender

- Education level
- Mental health

Given the wide-reaching inclusion criteria, researchers were able to include demographic questions at the end, which can support engagement and be more sensitive, and may be uncomfortable to answer without prior engagement in the survey or trust in the process (Stevenson, 2017).

2.9. Analytic Strategy

2.9.1. Sample Size and Power Calculation

As standard deviations are unknown, a prior power calculation was not possible to determine the preferred sample size. Researchers used an accepted calculation where $N \geq 104$ plus the number of predictor variables ($N > 104 + m$) with power =.8 and $\alpha = .05$ (Green, 1991). Using this, with 7 predictor variables, the study required 111 participants for acceptable statistical power.

2.10. Study Sample Characteristics

379 people accessed the survey online. Some did not progress through the survey following the PIS or consent page, or the first questionnaire, and were therefore removed. Anomalies were then identified, including those who consistently chose high scores, repeatedly entered the same score, or appeared to complete the survey at random. Four anomalies were removed. Overall, 231 people completed the survey. Anomalies included those who consistently chose high scores, or appeared to complete the survey at random. Demographic data is summarised in Table 1. Of these, there were 144 females (62.3%) and 48 males (20.8%). There were two trans males and give people who identified as non-binary. Ages ranged between the 18-28 category, and 78+ category. Most participants (46.3%) were in the age range 18-28. A majority of (64.1%) of participants identified themselves as from a White background, 13.8% Asian background, and 5.6% Black background. The level of education ranged from secondary school to doctoral, with the majority (68%) having completed an undergraduate or postgraduate degree. 38.5% shared a current or past mental health difficulty. However, 34.2% of the sample did not answer the mental health question.

Table 1. Study Sample Characteristics.

Age	n	%
18-28	107	46.3
29-38	37	16.0
39-48	24	10.4
59-68	9	3.9
69-78	3	1.3
78+	1	0.4
Missing	31	13.4
Ethnicity		
Arab	4	1.7
Asian - Indian	7	3.0
Asian - Pakistani	3	1.3
Asian - Bangladeshi	1	0.4
Asian - Chinese	8	3.5
Any other Asian background	9	3.9
Black - African	6	2.6
Mixed/multiple – White/Black Caribbean	2	0.9
Mixed/multiple – White/Black African	1	0.4
Mixed/multiple – White/Asian	4	1.7
White - English	90	39.0
White - Irish	2	0.9
Any other White background	56	24.2
Any other ethnic group	7	3
Missing	31	13.4
Gender		
Male	48	20.8

Female	144	62.3
Non-binary	5	2.2
Trans male	2	0.9
Missing/prefer not to say	32	13.8
Education		
Secondary school	9	3.9
College/sixth form	19	8.2
Undergraduate	89	38.5
Postgraduate	70	30.3
Doctoral	13	5.6
Missing	31	13.4

As the number of participants who did not ascribe to male or female gender was so small (n =7), these data were removed, leaving the total sample as 224.

3. RESULTS

3.1. Overview

This chapter will present the results of the research. It will cover the process of analysing the data, including exploratory data analysis, correlation and regression analysis, and investigation of moderations, and summarise the key findings.

3.2. Exploratory Data Analysis

Before the analysis began, we undertook an exploration of the collected data through statistical and graphical techniques. The aim of the exploratory data analysis was to gain insights into the distribution and structure of the dataset, to ensure appropriate tests were used. Data was downloaded into IBM SPSS Statistics Version 29.0.1.0 (171) (IBM Corp, 2022) software for analysis.

Firstly, missing values were coded (999). Data distributions were then examined for each variable, to decipher whether parametric assumptions were met. Histograms were employed to visualize the distribution of key variables in the study, as well as Kolmogorov-Smirnov tests of normality (used for data where $n>50$; Mishra et al, 2019), which indicated data was sufficiently normally distributed. Outliers were identified using boxplots (‘beyond the whiskers’); these were reviewed within the dataset by two researchers, and four were removed. These included participants who consistently entered the same score repetitively.

For each variable, the z-scores for skewness and kurtosis were also examined. Field (2005) recommends a criterion value of 2.58 for larger samples, though urges that reviewing normality through plots and graphs is a better indicator in such cases. Table 2 presents these values, as well as the key characteristics of the variables under investigation.

Table 2. Variables and descriptive statistics.

Variable	N	Range (min-max)	Mean	SD	Skew.	Kurt.	K-S sig.
Past Memory External Shame	199	1 - 11	8.15	2.604	-1.08	.549	<.001
Past Memory Internal Shame	200	1 - 11	8.38	2.628	-1.05	.309	<.001
ASQ Attachment-Avoidance	223	2 - 5	3.55	0.540	-.115	-.305	.200
ASQ Attachment Anxiety	223	2 - 5	3.49	0.606	.016	-.192	.200
CEAS Compassion-to Self	198	3 - 10	6.27	1.347	.047	-.485	.200
CEAS Compassion to Others	197	2 - 10	7.42	1.333	-.587	.636	.042
CEAS Compassion from Others	193	1 - 10	6.05	1.629	-.309	-.256	.200
SCS Internal Shame	202	11 - 96	56.76	15.425	-.316	.219	.005
OAS External Shame	203	8 - 40	21.37	7.665	.192	-.503	.200
SEI Coping Emotional	203	6 - 25	12.66	4.072	.467	-.284	<.001
SEI Coping Social	203	2 - 10	5.52	1.449	.000	.567	<.001
SEI Coping Cognitive	203	6 - 28	16.49	4.796	.180	-.496	.043
SEI Coping Defensive	203	10 - 42	24.81	5.721	-.039	-.116	.200
MAC-R Family	223	3 - 18	13.34	2.915	-.717	.528	<.001
MAC-R Group	223	3 - 18	11.99	2.973	-.457	-.022	<.001
MAC-R Reciprocity	223	3 - 18	13.60	3.539	-.985	.752	<.001
MAC-R Heroism	223	3 - 18	11.37	3.259	-.305	-.277	<.001
MAC-R Deference	223	3 - 18	9.59	3.385	.107	-.394	.009
MAC-R Fairness	223	3 - 18	11.31	3.550	-.275	-.581	<.001
MAC-R Property	223	3 - 18	13.42	3.723	-.926	.601	<.001

These exploratory analyses offer an initial overview of the central tendency, variability, and distribution of the variables under investigation. This provided a foundation for the subsequent inferential statistical analyses, to explore the relationships and potential patterns within the data using appropriate tests. Inspection of the plots and descriptive statistics confirmed that variables could be considered continuous, symmetric, and/or normally distributed.

3.3. Correlational Analysis

Considering the research questions, analysis was completed to address the relationships between shame and MAC relevance domains. A correlational analysis was undertaken (Appendix P). Some noteworthy relationships emerged. External shame was significantly positively related to the MAC Family domain ($r=.140$, $p=.46$). Whilst not statistically significant, external shame-proneness was positively related to all other MAC domains, whilst internal shame-proneness was negatively related to all MAC domains. This highlights differing relationships between external and internal shame-proneness and MAC domains. Moreover, both avoidant ($r=.351$, $p=<.001$) and anxious ($r=.565$, $p=<.001$) attachment styles were significantly positively related to external shame-proneness. The anxious attachment and external shame-proneness correlation was considered large. Thus, the higher propensity to external shame, the higher attachment avoidance and anxiety. In contrast, avoidant ($r= -.235$, $p=<.001$) and anxious ($r=-.399$, $p=<.001$) attachment styles were significantly negatively related to internal shame-proneness. These correlations were considered moderate. Thus the higher propensity internal shame, the lower attachment anxiety and avoidance.

3.4. Multiple Regression (GLM)

Considering the research questions, further analysis was completed to understand the parameters of the relationship between shame and MAC relevance domains. As above, the assumptions for a general linear model (GLM) were examined to check they were met: linearity, homoskedasticity (constant variance), normality, and independence (Field, 2005). Cohen's standards of effect size for *partial eta squared* (η^2) were used to interpret the output, where:

- <0.01 is negligible
- $\leq \eta^2 < 0.06$: small,
- $0.06 \leq \eta\ 2 < 0.14$: medium

Using a GLM enabled researchers to understand the unique contributions of the predictor variables on the MAC domains.

3.4.1. Past Shame

RQ 1: Are past shame experiences related to moral attitudes, specifically the MAC domains?

A separate general model was used to examine the relationships with past shame. Predictor variables included: shame age, internal and external shame at time of memory, and strategies for coping emotional, social, defensive behavioural and cognitive (Table 3).

Table 3. General Linear Model for past shame variables and MAC domains.

Source *Dependent Variable*	Type III Sum of Squares	DF	Mean Square	F	Sig.	Partial Eta Squared
External Shame						
MAC-R Family	18.840	1	18.840	2.317	.130	.012
MAC-R Group	4.167	1	4.167	.466	.496	.002
MAC-R Reciprocity	8.790	1	8.790	.761	.384	.004
MAC-R Heroism	8.021	1	8.021	.812	.369	.004
MAC-R Deference	71.257	1	71.257	6.583	.011	.034
MAC-R Fairness	12.299	1	12.299	1.008	.317	.005
MAC-R Property	46.335	1	46.335	3.566	.061	.019
Internal Shame						
MAC-R Family	44.352	1	44.352	5.455	.021	.028
MAC-R Group	33.141	1	33.141	3.707	.056	.019
MAC-R Reciprocity	53.186	1	53.186	4.605	.033	.024
MAC-R Heroism	98.174	1	98.174	9.934	.002	.050
MAC-R Deference	57.807	1	57.807	5.341	.022	.027
MAC-R Fairness	18.080	1	18.080	1.483	.225	.008
MAC-R Property	22.136	1	22.136	1.703	.193	.009
Shame Age						
MAC-R Family	9.238	1	9.238	1.136	.288	.006
MAC-R Group	2.677	1	2.677	.299	.585	.002
MAC-R Reciprocity	1.257	1	1.257	.109	.742	.001
MAC-R Heroism	26.104	1	26.104	2.641	.106	.014
MAC-R Deference	17.118	1	17.118	1.581	.210	.008
MAC-R Fairness	24.139	1	24.139	1.979	.161	.010
MAC-R Property	45.911	1	45.911	3.533	.062	.018

Source *Dependent Variable*	Type III Sum of Squares	DF	Mean Square	F	Sig.	Partial Eta Squared
Shame Coping Emotional						
MAC-R Family	.123	1	.123	.015	.902	.000
MAC-R Group	1.638	1	1.638	.183	.669	.001
MAC-R Reciprocity	13.625	1	13.625	1.180	.279	.006
MAC-R Heroism	28.814	1	28.814	2.916	.089	.015
MAC-R Deference	13.985	1	13.985	1.292	.257	.007
MAC-R Fairness	29.937	1	29.937	2.455	.119	.013
MAC-R Property	44.963	1	44.963	3.460	.064	.018
Shame Coping Social						
MAC-R Family	2.764	1	2.764	.340	.561	.002
MAC-R Group	.340	1	.340	.038	.846	.000
MAC-R Reciprocity	5.076	1	5.076	.439	.508	.002
MAC-R Heroism	.136	1	.136	.014	.907	.000
MAC-R Deference	6.023	1	6.023	.556	.457	.003
MAC-R Fairness	.253	1	.253	.021	.886	.000
MAC-R Property	9.074	1	9.074	.698	.404	.004
Shame Coping Cognitive						
MAC-R Family	5.354	1	5.354	.659	.418	.003
MAC-R Group	2.747	1	2.747	.307	.580	.002
MAC-R Reciprocity	32.311	1	32.311	2.797	.096	.015
MAC-R Heroism	.081	1	.081	.008	.928	.000
MAC-R Deference	5.362	1	5.362	.495	.482	.003
MAC-R Fairness	4.658	1	4.658	.382	.537	.002
MAC-R Property	7.841	1	7.841	.603	.438	.003
Shame Coping Defensive						
MAC-R Family	.431	1	.431	.053	.818	.000
MAC-R Group	.074	1	.074	.008	.928	.000
MAC-R Reciprocity	.120	1	.120	.010	.919	.000
MAC-R Heroism	6.638	1	6.638	.672	.413	.004
MAC-R Deference	21.302	1	21.302	1.968	.162	.010
MAC-R Fairness	26.918	1	26.918	2.207	.139	.012
MAC-R Property	5.779	1	5.779	.445	.506	.002

3.4.1.1. Age. Age at the shame memory did not influence any MAC domain.

3.4.1.2. External shame. External shame at the time of the memory had a small effect on MAC Deference (F(1) = 6.583, r^2 0.050, p=0.011) and very small effect on MAC Property (F(1) = 3.566, r^2 0.019, p=0.61) and Family (F(1) = 2.317, r^2 0.012, p=0.130). Internal shame at the time of the shame memory was predictive of MAC Family (F(1) = 5.455, r^2 0.028, p=0.021), Group (F(1) = 3.707, r^2 0.019, p=0.56), Heroism (F(1) = 9.934, r^2 0.050, p=0.002), Reciprocity (F(1) = 4.605, r^2 0.024, p=0.033), and Deference (F(1) = 5.341, r^2 0.027, p=0.22). These effect sizes were all considered small. This means that the more internal shame experienced at the time of the notable shame memory, the more participants aligned with these MAC domains.

3.4.1.3. Coping strategies. Finally, ways of coping with shame throughout life were examined. Emotional strategies exerted a small effect over MAC Heroism (F(1) = 2.916, r^2 =0.015, p=0.89), Fairness (F(1) = 2.455, r^2 0.013, p=0.119) and Property (F(1) = 3.460, r^2 =0.018, p=0.64). Defensive-behavioural strategies exerted a very small effect over MAC Deference (F(1) = 3.707, r^2 0.019, p=0.56) and MAC Fairness (F(1) = 2.207, r^2 =0.012, p=0.139). Cognitive strategies exerted a very small effect over MAC Reciprocity (F(1) = 2.797, r^2 =0.015, p=0.096). Social strategies were not associated with any of the MAC domains.

3.4.2. Compassion

RQ 2: Is compassion from others, to others, and towards the self, related to moral attitudes, specifically the MAC domains?

Next, a general linear model was completed where CEAS: compassion to self, compassion to others, and compassion from others were entered as predictors for each of the MAC relevance domains (Appendix Q). Compassion to the self was associated with the MAC Family domain, with a small effect size (F(1) = 4.299, r^2 =0.022, p=0.039). Compassion to others was associated with the MAC Family domain, of large effect size (F(1) = 24.515, r^2 0.115, p=<0.001). Compassion to others was also associated with the MAC Group domain, with a small effect size (F(1) = 11.287, r^2 0.056, p=<0.001). Compassion from others did not have any reliable associations.

3.4.4. Present Shame

RQ 3: Is internal shame-proneness related to moral attitudes, specifically the MAC domains?

RQ 4: Is external shame-proneness related to moral attitudes, specifically the MAC domains?

3.4.4.1 Demographic Variables. In the preliminary data analysis, different demographic variables were included in the model with shame-proneness variables. Age exerted a small effect over MAC Family ($F(13) = 2.328$, $r^2 = 0.116$, $p = 0.05$), with an effect size considered small (See Appendix R). Ethnicity was associated with deference, though notably this was not statistically significant ($F(5) = 1.778$, $r^2 = 0.059$, $p = 0.044$) (Appendix S). Gender and mental health diagnosis (present or absent) exerted no significant effect over the outcomes variables (Appendix T and U). Overall, after reviewing the data, considering the small cell sizes of the demographic categories, and research questions, the demographic variables were removed from the analysis.

To examine the relationship between present shame-proneness on the moral dimensions, a separate General Linear Model was used. The MAC relevance domains were the criterion variables and the Other as Shamer (external shame) and Social Comparison Scale (internal shame) were predictor variables (Table 4).

Table 4. General Linear Model output for shame-proneness and MAC domains.

Source *Dependent Variable*	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
External Shame (OAS)						
MAC-R Family	15.553	1	15.553	1.841	.176	.009
MAC-R Group	8.727	1	8.727	.972	.325	.005
MAC-R Reciprocity	21.715	1	21.715	1.836	.177	.009
MAC-R Heroism	16.906	1	16.906	1.656	.200	.008
MAC-R Deference	63.334	1	63.334	5.857	.016	.029
MAC-R Fairness	17.120	1	17.120	1.386	.240	.007
MAC-R Property	10.745	1	10.745	.774	.380	.004
Internal Shame (SCS)						
MAC-R Family	3.249	1	3.249	.385	.536	.002
MAC-R Group	1.979	1	1.979	.220	.639	.001
MAC-R Reciprocity	.008	1	.008	.001	.979	.000
MAC-R Heroism	.836	1	.836	.082	.775	.000
MAC-R Deference	3.398	1	3.398	.314	.576	.002
MAC-R Fairness	1.213	1	1.213	.098	.754	.000
MAC-R Property	1.937	1	1.937	.140	.709	.001

This analysis revealed that external shame had a small, unique contribution to MAC deference (F(1) = 5.857, r^2 0.029, p=0.016). Internal shame-proneness was not associated with any of the MAC domains.

3.4.5. Assumptions Check; Normality of Residuals

Unstandardized residuals were evaluated using residual plots and statistics, as seen in Table 2. The residuals for present trait shame variables were normally distributed for all predicted variables, except for the MAC relevance deference domain (Kolmogorov Smirnov .044, df 201, p .200) and MAC relevance heroism scale (Kolmogorov Smirnov .063, 201, .047). These two variables were also highlighted when past shame variables residuals were checked: MAC relevance deference (Kolmogorov Smirnov .051, df 194, .200) and MAC relevance heroism (Kolmogorov Smirnov .051, df 194, .200.) Conclusions for these domains

therefore must be tentative. Overall, the data was appropriate for the statistical tests employed.

3.5. Moderation

RQ 4a: Does the relationship between external shame-proneness and moral attitudes depend on therapeutic concepts (attachment style, compassion)?

Moderation requires continuous variables, therefore categorical variables were not included. It also requires normally distributed data, which had been previously checked during the exploratory data analysis. It also requires a significant relationship between the predictor and outcome variable, checked using scatterplots (Appendix U). Finally, these analyses require meeting the assumption of multicollinearity, whereby the moderator or mediator variable are not correlated with the predictor variable. Prior to analysis, these assumptions were checked using the correlation matrix (Appendix P) (Fein, Gilmour, Machin & Henry, 2022).

Considering the scope of the study, researchers chose relevant MAC domains to explore. The GLM highlighted the effect of external shame-proneness on the MAC deference domain, therefore it was included in the moderation. The researchers also included the MAC Group and Reciprocity domain, as based on previous research, these were of theoretical interest, and relate to social behaviour and cohesion. These also emerged as key variables relevant to shame throughout the regression analyses above. These variables were reviewed using scatterplots and the correlation matrix, as above. Moreover, only present shame-proneness was explored with the moderation, considering the scope of the research, and gaps in the literature highlighted in the introduction.

Table 5. Moderation effects of Attachment and Compassion on the relationship between external shame-proneness and MAC domains.

	Coeff.	*SE*	*t*	*95% CI LL*	*95% CI UL*	*p*
MAC Deference and **Attachment Anxiety**						
External Shame (OAS)	.1290	.1879	.6863	-.2416	.4996	.4933
Attachment Anxiety	1.1091	1.2635	.8779	-1.3824	3.6007	.3811
Interaction	-.0228	.0530	-.4295	-.1273	.0818	.6680
MAC Deference and **Attachment Avoidance**						
External Shame (OAS)	-.5568	.1975	-2.8188	-.9464	-.1673	.0053
Attachment Avoidance	-2.7775	1.1950	.-2.3243	.-5.1341	-4.210	0.211
Interaction	-.0228	.0530	-.4295	.6680	-.1273	.0818
MAC Deference and **Compassion to Self**						
External Shame (OAS)	.3209	.1323	2.4253	.0600	.5891	.0162
Compassion to self	.9990	.4767	2.0957	.0588	1.9391	.0374
Interaction	-.0364	.0200	-1.8162	-.0759	.0031	0.0709
MAC Deference and **Compassion from Others**						
External Shame (OAS)	.2569	.1114	2.3059	.0371	.4767	.0222
Compassion from others	.6318	.4081	1.5483	-.1732	1.4368	.1232
Interaction	-.0284	.0177	-1.6067	-0.0633	.0065	.1098
MAC Group and **Attachment Anxiety**						
External Shame (OAS)	.0656	.1702	.3852	-.2701	.4023	.7005
Attachment Anxiety	1.1255	1.1443	.0835	-1.1311	3.3821	.3265
Interaction	-.0167	.0480	-.3487	-.1114	.0779	.7727
MAC Group and **Attachment Avoidance**						
External Shame (OAS)	-0.497	.1847	-.2962	-.4140	.3145	.7881
Attachment Avoidance	-.8457	1.1174	-.7568	-3.0492	1.3579	.4501
Interaction	.0264	.0496	-.5330	-.0714	.1242	.5947
MAC Group and **Compassion to Self**						
External Shame (OAS)	-.0090	.1215	-.0738	-.2487	.2307	.0738
Compassion to Self	-.0068	.4378	-.0156	-.8703	.8567	.9876
Interaction	.0092	.0184	.5006	-.271	.0455	.6173
MAC Group and **Compassion from Others**						
External Shame (OAS)	.1603	.1014	1.5809	.1186	-.1503	.1156
Compassion from Others	.5823	.3714	1.5678	.1186	-.1503	.1186
Interaction	-.0178	.0161	-1.1042	-.0495	.0140	.2709
MAC Reciprocity and **Attachment Anxiety**						
External Shame (OAS)	.0610	.1960	.3111	-.3255	.4475	.7561
Attachment Anxiety	.8615	1.3176	.6538	-1.7367	3.4597	.5140
Interaction	-.0109	.0553	-.1970	-.1199	.0981	.8440
MAC Reciprocity and **Attachment Avoidance**						
External Shame (OAS)	-.4720	.2043	-2.3105	-.8748	-.0691	.0219
Attachment Avoidance	-2.2734	1.2358	-1.0304	-3.7103	1.1635	.3041
Interaction	.1322	.0548	2.4105	.0241	.2404	0.168
MAC Reciprocity and **Compassion to Self**						
External Shame (OAS)	-.0705	.1402	-5.026	-.3469	-.2060	.6158
Compassion to Self	-.3279	.5050	-.6494	.5169	-1.3238	.5169
Interaction	.0191	.0212	.9006	-.0228	.0610	.3689

MAC Reciprocity and Compassion from Others						
External Shame (OAS)	.2195	.1163	1.8875	-.0099	.4490	.0606
Compassion from Others	.5038	.4260	1.1826	-.3366	-1.3442	.2385
Interaction	-0.297	.0185	-1.6106	.1089	-.0662	.1809

PROCESS software was used within SPSS, to complete moderation analyses. The predictor variable was OAS (external shame) and outcome variables were MAC Deference, Group, and Reciprocity. The moderators included were: attachment anxiety, attachment avoidance, compassion from others, compassion to self. As can be seen in Table 5, none of the moderations were substantive.

4. DISCUSSION

This section discusses the key findings within this research, aiming to understand and contextualise them, by integrating with previous research. Implications of the findings will then be explored. Strengths and weaknesses will be considered, followed by directions for future research.

4.1. Summary of Results

This research aimed to explore the relationship between past and present shame on personal morality, as measured by Morality as Cooperation questionnaire. The nature of the research was exploratory, as whilst previous research has highlighted the relationship between shame and mental health, and behaviour within social groups, no study yet has explored how it is associated with the morally relevant values, as measured by the theory of Morality as Cooperation.

4.2. Integration with Previous Research

4.2.1. Compassion

Firstly, levels of compassion towards others had a strong relationship with the family orientation. Participants with high levels of compassion towards others were more likely to align with altruism towards family members. Compassion to others also had a relationship with loyalty to the group (Curry et al, 2019a). Considering compassion involves an urge to care for others (Spikins, 2015), and motivation to alleviate their suffering (Goetz, Keltner, Simon-Thomas, 2010), it makes sense that those who are highly compassionate might value altruism towards family members, known as a duty of care (Curry et al, 2019b) and loyalty to the group, involving solidarity and conformity (Curry et al, 2019b). This coheres with the view that compassion is considered important to support the needs of the group (Gilbert, 2019) and has been related to altruism towards others (Preston, 2013) and cooperative relationships (Keltner, 2009). Compassion is thereby associated with moral reasoning (Loewenstein & Small, 2007), via cooperation. Notably, compassion to others was not associated with other MAC domains, which may suggest that it does not influence all aspects of cooperative morality

Self-compassion, a separate concept (Neff & Dahm, 2015), also had a small relationship with family. Evidence suggests that self-compassion is associated with ethical behaviour (Yang, Guo & Kuo, 2020), and the present research offers support that the more self-compassionate a person is, the more they will believe altruism towards family is morally

right. So, this duty of care (Curry et al, 2019a) may extend from others to the self. Therefore, whilst self-compassion does not have a relationship with all MAC domains, it may somewhat be implicated in how an individual values cooperation with the group.

Compassion from others did not have a substantive relationship with any MAC domains: perceived levels of compassion individuals receive does not impact their alignment with cooperative morality. It may be that how compassionate people perceive others to have less relevance to their individual moral sense. Notably, the questionnaire measures perceptions at a single time-point within adulthood, so may not represent compassion within important relationships across an individual's life. This was not predicted by previous literature, which suggests compassion within attachment relationships is related to prosocial behaviour (Mikulincer & Shaver, 2017). However, the measure used was general, not specifically related to attachment relationships, and thus may not have captured this nuance.

Overall, this research implies that compassion to others, and towards the self, is more relevant to individual's moral values than compassion from others.

4.2.2. Past Shame

The present research explored past shame experiences, both in relation to a specific shame memory, and coping styles across the lifespan.

4.2.2.1. Shame memories. External shame experienced from a shame memory was only associated with deference. This was consistent with results for present shame-proneness, as external shame-proneness also had an effect on deference, discussed below. However internal shame experienced from a shame memory was associated with multiple MAC domains: deference, heroism, group and family. The impact of internal and external shame on MAC domains may be because shame memories have been said to influence our brain development and emotional processing (Schore, 1998) and propel our moral conscience (Scheff, 2011). Indeed, research suggests that shame memories are highly formative, and used as references for future expectations (Pinto-Gouveia & Matos, 2011). These findings thus also support Centrality of Event Theory, where negative emotional memories influence our identity, life story, reasoning and meaning (Bernsten & Rubin, 2006). Indeed, theorists suggest that shame is an important means to recalibrate our behaviour based on group norms and expectations (Gilbert, 2007), and this study highlights further evidence, specifically to deferring to authority, loyalty towards the group, altruism towards family, and displaying heroism.

More specifically, both deference and heroism are viewed as evolutionary mechanisms to manage group conflict: deferring to hierarchy, submitting to authority, or exhibiting heroism, bravery and dominance (Curry, Jones-Chesters & Van Lissa, 2019). Whilst research does suggest shame-proneness may be linked to aggression to others (Tangney, Stuewig & Mashek, 2007), these findings suggest that shame related to a past memory might be attributable to dominance and heroism, rather than aggression per se. Children who experience abuse and high levels of shaming in childhood are likely to experience themselves as powerless (Donaldson-Pressman & Pressman, 1997), which may be connected to why internal shame at the time of a shame memory has an effect on valuing both submissive and heroic behaviour, as the individual may feel powerless and thus defer to authority, viewing their behaviour as heroic and signalling their ability to win (Gintis, Smith & Bowles, 2001). Both internal and external shame are conceptually defined as perspectives with regard to social rank: internal shame as how one views the self in relation to others, and external shame as how one views others perceive them. Therefore cooperating with the group according to rank may be particularly important. Indeed, shame evolved to navigate social hierarchies: those with the capacity for shame produced future generations, due to social rank and subscription to group hierarchy (Gilbert & McGuire, 1998).

Overall, there were more notable results for internal shame (related to a shame memory) than external shame. Internal shame reflects negative perceptions of the self (Gilbert, 2003). It may therefore capture an aspect of self-identity and self-efficacy, in contrast to external shame, which considers perceptions of other's opinions within the social group. However overall, these findings tell us that internal and external shame (related to a specific childhood memory) may shape moral values in adulthood.

4.2.2.2 Shame coping strategies. Of the four categories of coping style addressed in this study, cognitive coping, defensive-behavioural coping, and emotional coping were weakly associated with various MAC domains. Defensive-behavioural coping includes behavioural approaches to defend against the shame, such as submission, avoidance, attacking, or seeking reassurance. It therefore makes sense that this coping style slightly influenced deference (i.e. submission) and fairness. Research suggests that withdrawing physically to manage shame can predict less effective relationships (Black et al, 2013) which therefore may have some influence on how we view cooperation with the group. Emotional strategies include denying the emotion, doing things that one does well, or dissociation, and were associated with MAC heroism, fairness and property. Indeed, evidence suggests that coping with shame using psychological withdrawal can reduce the quality of relationships (Black et al, 2013). Cognitive strategies include thought-based strategies to manage shame, such as

blaming others, self-criticism, and self-correction. This coping style was associated with reciprocity. Whilst research suggests that attacking the self as a response to shame is associated with impaired functioning within relationships (Black et al, 2013) this study suggests it may be linked to valuing reciprocal altruism within the group. Considering social strategies are conceptually relevant to behaviour within the social group, such as seeking support or isolating the self, it is interesting that they did not influence MAC domains. Whilst research suggests that certain types of shame coping (self-concealment) can explain the relationship between shame-proneness and psychological symptoms (Pineles, Street & Koenen, 2006), it was unclear whether it would influence ideas about cooperative morality. Only weak relationships were highlighted in this study between shame coping and moral views, suggesting that the experience of shame itself is more influential in forming a moral sense, than how it is managed.

4.3. Present Shame-proneness

For shame-proneness, external shame and internal shame were explored. Internal shame was not connected to any moral domains. Past research suggests that shame benefits cooperation in certain contexts, for certain people (e.g. Declerck, Boone, & Kiyonari (2014); some find no significant impact of shame (e.g. De Hooge, Zeelenberg & Breugelmans, 2007), and one study suggested that shame-proneness is negatively linked to cooperation. Most research that suggests shame effects cooperative behaviour has manipulated shame within a given context (e.g. Bică & Crețu, 2022), as opposed to addressing shame-proneness. Usually, this has been within a group task or dilemma, which may be more likely to elicit external shame, about other's opinions, rather than internal shame about the self (Gilbert, 2003). These studies also did no differentiate internal and external shame.

Moreover, interestingly, though small, the relationships between external shame-proneness and all MAC domains were positive: the higher shame, the more likely to value MAC domains, in stark contrast to internal shame-proneness. All internal shame relationships were negative: the higher shame, the less likely to value MAC domains. These relationships were also generally not as strong. Taken together, this supports a theoretical and empirical distinctions between external and internal shame (Kim et al, 2011), with external shame more likely to relate to cooperative morality than internal shame. Of course, any number of factors may explain why internal shame-proneness did not significantly relate to alignment with MAC domains. It appears that external shame-proneness within adulthood, as relevant to our position within the social group, is most influential.

External shame is the perceived negative evaluation by others (Gilbert, 2002). It is thus more related to a person's perception of themselves within the social group than internal shame. The present research found that external shame-proneness was associated with MAC deference: the more prone to external shame, the more an individual considered deference morally relevant. External shame-proneness was also related to MAC family, though these were weak correlations. This may be contrasted to the evidence that shame-proneness predicts aggression towards others (Tangney, Stuewig & Mashek, 2007), lower empathy towards others (Tangney & Dearing, 2002), and predicts lower levels of cooperative behaviour (Burmeister, Fasbender, & Gerpott, 2019). Since shame is activated when we fall outside of group norms (Gilbert, 2007), individuals with a high propensity to external shame are sensitive to group hierarchies and the operation of authority.

Deference evolved in humans as a way to resolve conflict (Gintis, Smith & Bowles, 2001; Maynard, Smith & Price, 1973). Given shame is often viewed within an evolutionary context, as specialising over time to achieve goals to survive (Buss, 1995), such as accessing resources (Nichols, 2016), it makes sense that it may impact cooperative morality, as it is hardwired into us for survival. Shame can be conceived as a warning signal that others are not perceiving us favourably (Gilbert, 2003), causing us to recalibrate behaviour to conform with the pecking order (Gilbert, 2007; Nichols, 2016). This supports ideas that shame can be understood as a social threat (Gilbert, 1995; Scheff & Mateo, 2016) and motivates conformity (Gilbert, 2007). Not conforming risks social exclusion (Gilbert, 2007), with potentially dire consequences.

Notably, shame-proneness was not associated with most MAC domains. Some scholars suggest that highly shame-prone individuals may struggle to develop responsive and responsible relationships with others, for fear of further shame experiences (Pattison, 2010), so are unable to behave morally with efficacy, freedom and choice. Individuals with high trait shame may be focussed more on the self, and less able to engage in reparative behaviour, which would interrupt cooperative relationships in some contexts. This is consistent with research showing that the shame-proneness may be related to only certain cooperative behaviour: Lopez et al (1997) found shame-proneness links to lower collaboration and higher conflict-avoidance. Also, induced shame motivates cooperation for certain types of people (proselfs), who maximise personal gain, in certain contexts (Declerck, Boone, & Kiyonari, 2014). This underlines our findings that external shame-proneness only influences one cooperative moral domain.

4.4. Further Explorations of Shame and MAC

4.4.1. External Shame-proneness, Attachment, and MAC Domains.

This research explored the relationships between shame and morality. As analyses indicated that for present shame-proneness, only external shame was reliably associated with moral domains, this was explored in further detail, in an attempt to further understand shame's impact.

Previous evidence suggests that attachment may influence how individuals learn prosocial behaviour (Gross, Stern, Brett & Cassidy, 2017; George & Solomon, 2008), and how attachment styles influence our morality in social environments, such as altruism or empathic concern (Moll & Schulkin, 2009). Literature also highlights the link between shame and attachment: theorists suggest that rejection by an attachment figure can induce shame (Lewis, 1971), as it is viewed as a rejection of the self, and empirical research suggests that insecure attachment is related to higher levels of shame (Lopez et al, 1997). Theoretically, shame and attachment systems operate in a similar way (Solomon, 2021) and both reflect difficulties within attachment relationships (Lewis, 1971). Indeed, our results suggested that both attachment avoidance and attachment anxiety are significantly positively related to external shame. The higher external shame scores were, the higher attachment anxiety and avoidance. However, whilst the link between attachment, shame and morality has been explored to some extent, it was not clear whether patterns of attachment affect the relationship between shame-proneness and moral values, specifically MAC domains. The present research did not find evidence to suggest attachment intersects with shame and personal morality.

This might be because research linking attachment and shame largely explores childhood experiences (e.g. Gilbert, 2017; Matos & Pinto-Gouveia, 2014), and specific experiences within attachment relationships, rather than attachment styles in adulthood. There is some evidence that affiliative relationships, such as those that foster warmth and safeness, can buffer the impact of shame memories on mental health (Matos, Pinto-Gouveia & Duarte, 2015). So it may be that the measures used did not capture this conceptually. It is also possible that attachment was more significantly implicated in the relationship between past shame and MAC domains, rather than present shame-proneness, given attachment experiences within shame relationships shape socio-emotional reactions throughout life (Matos & Pinto-Gouveia, 2014). Alternatively, shame-proneness and attachment may indeed be linked, but not to morality. Whilst shame and attachment both concern how we interact

with and relate to others, attachment is about patterns of relating with close others, rather than cooperating with the group.

Research into marital relationships suggests that in adulthood, internal and external shame mediate the relationship between attachment dimensions and dyadic adjustment (Martins, Canavarro, & Moreira, 2018). Others highlight how shame-proneness might mediate the relationship between attachment and collaborative problem-solving (Lopez et al, 1997), or the relationship between attachment anxiety (though not avoidance) and narcissism (Calderon, 2021). The present study did not explore mediation, and it appears results are mixed on this. It may therefore be that shame is a particularly differential factor, and may affect *or* explain the relationship between attachment and morality. Further research is required to ascertain the direction of these relationships.

4.4.2. External Shame-proneness, Compassion, and MAC Domains

This research explored whether the relationship between shame-proneness and morality depends on compassion to the self and to others. Compassion has a similar theoretical background to the MAC and to shame, viewed within an evolutionary context as ways to behave in the group to promote survival (Darwin, 1871). Previous research also told us that compassion may be linked to morality (Loewenstein & Small, 2007), and cooperation with the group (de Waal, 2009, Keltner, 2009). Scholars also suggest that shame experiences can reduce our ability to receive compassion or show it to ourselves (Van de Kolk, 2014). Indeed, our results support that both compassion from others and compassion to the self are significantly negatively related to external shame. This means that the lower compassion from others and to the self, the higher external shame-proneness, and vice versa. It was not clear however, whether compassion was implicated in the relationship between shame-proneness and morality. The present findings suggested that the relationship between external shame-proneness and moral domains (deference, reciprocity and group loyalty) does not depend on compassion.

Firstly, compassion from others was not a significant moderator. One explanation for this may be that shame is a particularly powerful emotion (Kaufman, 1989), which is well established by middle childhood (Tangney & Dearing, 2002) and important to our self-identity (Gilbert, 1998). Considering the power of shame, it may be that compassion from others within adulthood is not powerful enough to influence our moral values, as shame-proneness is a stable affective style within individuals (Tangney & Dearing, 2002). External shame in particular, understood as a negative perspective on how others perceive us (Gilbert & McGuire), may have affect how individuals perceive compassion from others.

Compassion to the self was also not a significant moderator of shame and morality domains. Whilst there is a body of literature suggesting that self-compassion relates to ethical behaviour (Yang, Guo & Kuo, 2020), it was unclear whether this would affect the relationship between shame-proneness and morality. It may be that shame-prone individuals, are less able to display kindness towards themselves, but may not relate to how they value cooperation with others.

4.5. Clinical Implications and Utility

Understanding human morality, and how it is shaped by emotions and relationships, is a complex task. There is no doubt that a huge array of factors determine an individual's ideas of right and wrong. Evidence suggests that some relevant factors include emotions (Kroll & Egan, 2004) relationships (Gross, Stern, Brett & Cassidy, 2017) and experiences with other people (Mikulincer & Shaver, 2017). Morality as Cooperation is a recent framework conceptualising morality, and such interpersonal and emotional factors have yet to be explored in relation to it.

4.5.1. Clinical Implications

Shame appears to be particularly formative on an individual's life experiences, and how they perceive and behave in the world. Evidence suggests this is true both for shame experiences in childhood (Matos & Pinto-Gouveia, 2010), and trait shame in adulthood (Tangney & Dearing, 2002). Shame as a concept is relevant to both mental health experiences (Gilbert, 2009), accessing treatment (Rüsch et al, 2014), and within treatment itself (Macdonald & Morley, 2001).

On an individual level, this research adds to a growing body of literature suggesting that past experiences of shame influence views about morality, and cooperation within a group. Indeed, shame memories can create strong emotional reactions, and shape expectations for the future (Pinto-Gouveia & Matos, 2011), so it may be important for clinicians to navigate them carefully in therapy. Moreover, given the differential impact of internal and external shame (experienced at the time of shame memories), it may be important to explore the experience and feelings in depth, with particular consideration to internal shame and how it may have shaped identity.

Whilst this research supports that the need to explore an individuals' worldview, it is important for clinicians to navigate this sensitively, considering the potentially difficult impact of memories (Matos & Pinto-Gouveia, 2010) and tendencies to avoid disclosing them (Macdonald & Morley, 2001). Indeed, for highly shame-prone individuals, shame is a

compassionate art; a gradual process that requires the rebuilding of identity (Pattison, 2010). This research provides some evidence that how one tends to cope with shame, specifically emotional coping styles, may be connected to moral values.

The impact of both past and present shame-proneness on morality also has implications for clinicians, in terms of understanding important factors within an individual's worldview. It is notable that individual's values, often explored in therapy, can be shaped by their past experiences of shame, or their present propensity to shame. It may be important for clinicians to formulate how one's values were developed, with the inclusion of key shame experiences and general explorations of shame. These values may be implicated in how they respond to situations in relationships or social settings, including in the therapeutic alliance, and may thus give the clinician insight into why and how someone's difficulties or behaviour arises.

Given the moral domain most relevant to shame was deference, it is important to understand that clients with high levels of shame, or shame experiences, may have a tendency to conform, submit, or be susceptible to coercion. This may be related to research that highlights how those in therapy tend to avoid disclosing shame (Macdonald & Morley, 2001), and given the inherent power imbalance apparent between clinician and client, may conform (or defer) to the expectations of therapist, as a perceived authority figure. It is vital for clinicians to acknowledge and explore power imbalances within therapy, to ensure their values are not the only ones directing the process (Boyd, 1996). Considering the present findings, it is also important for clinicians to deconstruct their own values, and understand that their own shame experiences may inform their values, and thus their approaches to work and therapy.

Our findings overall suggested that external shame-proneness is more influential on moral orientation than internal shame. Though notably, the direction of relationships differed: external shame was positively related to cooperative domains, whereas internal shame-proneness was negatively related. It may therefore be crucial for clinicians to understand the type of shame experienced and how this may influence ideas about the world. If clinicians are curious, they could use measures of shame-proneness within therapy. Indeed, research supports the use of shame-focussed assessments within therapy (Black et al, 2013). Moreover, the relationship between shame and morality was not affected by attachment patterns, or compassion variables, meaning clinicians may consider these therapeutic concepts separately.

Overall, these findings provide support for the use of therapies that prioritise managing feelings of shame, such as Compassion Focussed Therapy (Gilbert & Irons, 2010), as they can influence our worldview. Systematic reviews evidence that multiple commonly used, evidence-based therapies, particularly Cognitive Behavioural Therapy, have utility in reducing shame, concluding that it is a malleable experience (Goffnett, Liercy & Kidder, 2020).

4.5.2. Wider Implications

This research was the first to explore psychological predictors of the domains within Morality as Cooperation theory. It contributes to a growing body of research on morality, though is novel in its use of MAC theory, a recent theory still relatively unexplored. The sample was not limited to students, as most of the existing literature has been (Curry et al, 2019) so may have offered more wide-reaching understanding to the general population.

This study provides evidence that experiences of both past and present shame can influence the moral values we hold, particularly how we value cooperation within our social worlds. This is an important message for wider society: it suggests that what we believe is right and wrong may be affected by our psychological experiences and emotions. Understanding why individuals align with particular moral values is key to developing knowledge on how society operates as a whole. Moreover, given the relevance of morality to politics (Curry, 2021), there are implications for how our emotional experiences and disposition shaping our political attitudes.

4.6. Study Strengths

4.6.1. Data Collection and Study Design

4.6.1.1. Data collection. The present study used online data collection to explore the research questions. This method allows research to be collected over wide geographical regions, subject to constraints such as language and internet access, to recruit high numbers of participants in a short period (Casler, Bickel & Hackett, 2013; Follmer, Sperling & Suen, 2017). It also increases the likelihood of reaching harder to access populations (Cantrell, & Lupinacci, 2007) including varied cultural groups and 'hidden populations' (Ahern, 2005).

The design also included categorical demographic variables to understand the sample. Grouping demographic variables into categories risks broad assumptions of homogeneity within the group (Aspinall, 2021), therefore a wide range of options were provided for demographic variables. For example, for the ethnicity variable, 14 options were given, based

on the UK census categories, allowing distinct experiences to be captured. Religion was not included as a demographic variable (discussed below).

4.6.1.2. Online research. Online data collection can increase methodological rigour, for example by reducing errors in data entry and analysis (Ahern, 2005; Hanscom, Luri, Homa & Weinstein, 2002). The present data was carefully reviewed and subjects with missing data on key variables were removed. For participants, this method offers convenience (Ahern, 2005), for example in the present study, a direct link was posted during recruitment to ensure ease of access (Klein, 2002). These methods allow participants to contribute data at their own pace and a sense of control (Ahern, 2005).

Anonymity is also a key advantage for online data collection (Ahern, 2005). Given a key construct was shame, which, relates to how an individual feels they are perceived by others (Gilbert & McGuire, 1998), an in-person task where participants are easily identified may have led to hiding information (Macdonald, 1998), thus producing invalid results. Moreover, morality, as theorised by the MAC, is largely related to group cooperation. The use of anonymous online methods may have encouraged more valid responses than group settings where individuals may have felt pressured to conform. An online survey approach may have enabled participants to feel more comfortable, and thus more readily disclose information, which is important given the sensitive nature of some questions. Online remote methods offer greater confidence to participants to respond to sensitive questions freely, which in turn reduces social response bias and researcher bias (Cantrell & Lupinacci, 2007).

4.6.1.3. Researcher position. Researchers inevitably have power to impact the research they undertake (Kingdon, 2013) and their values will underpin what and how they study (Willig, 2013). Psychological research has socio-political power and can inform individuals' lives (Jamieson, Govaart, & Pownall, 2023). Consequently, the researchers carefully considered the ethical implications of investigation during the research design and selection of measures. One example of this consideration was asking participants whether they ascribed to a mental health diagnosis, rather than asking whether they had one imposed by a person in power. Positively, this research did not require direct researcher involvement in the data collection itself, rather the process of deciding what data to collect, and where data was found, thus limiting potential bias.

4.6.2. Measurement

4.6.2.1. Measuring morality. Morality was measured using the MAC-Q, constructed to address MAC theory (Curry, 2016). The MAC poses seven moral domains, which have been

validated as applicable across various cultures and to correlate with alternative measures of morality (Curry, Chesters & Van Lissa, 2019; Curry, Mullins & Whitehouse, 2019). This was thus a well-established and supported measure to include.

4.6.2.2. Measuring shame. Both past and present shame was measured using well validated measures, relevant to research questions. Past shame was measured using an adapted version of the Shame Experiences Interview (Matos & Pinto-Gouveia, 2006) whereby relevant items were selected and included. Positively, the study was anonymous, which can support openness to respond (Cantrell & Lupinacci, 2007). It is also arguable that using this measure, followed by the present shame-proneness measures, may have allowed participants to reflect more easily on their experiences of shame, and thus understand the items and answer them more accurately.

4.7. Study Limitations

4.7.1. The Sample

The samples collected in research may be over-representative of certain demographic groups (Follmer et al, 2017) and not represent the general population, particularly for groups who have less access to the internet. In the present sample, certain groups were over-represented: 62.3% of the sample identified as female, 64.1% as white, 72.7% under age 48, and 68% educated to at least undergraduate level. This limits the generalisability of the research outcomes to differing demographic groups: older people, people from differing cultural groups, and males.

4.7.1.1. Gender. Specifically, experiences of the constructs addressed may differ according to demographic factors. Meta-analyses suggest that both state and trait shame differ between men and women, with greater gender differences for trait shame or shame-proneness than state shame (Else-Quest, Higgins, Allison, & Morton, 2012). They provide evidence for generally higher levels of shame in women, and that men and women experience shame about different things, for example higher body shame in women. The authors argued this is consistent with predictions that trait shame scales measure global assessment of the self, thus reflecting gender roles. Importantly, these gender differences were only apparent within White ethnic samples and cannot be generalised. This underlines the intersectional nature of identity and experience (Crenshaw, 1991) which highlights how the present findings, with a largely white female sample, cannot capture the nuance of all individual experience. Conclusions beyond this therefore must be made tentatively.

Some research finds no effects of sex in cooperation in social dilemmas (Sell, Griffith, & Wilson, 1993), whilst other literature that suggests that there are gender differences in cooperative behaviour: using a prisoner's dilemma, women may be more inclined to cooperate with strangers, whereas men are more cooperative when their friends are in the group (Peshkovskaya, Myagkov, Babkina, & Lukinova, 2017). In the prisoner's dilemma, women are generally more cooperative than men (Capraro, 2018). However, there are no differences for gender within the MFT framework (Parihar et al, 2018), and our research found no effect of gender on MAC domains.

4.7.1.2. Ethnicity and culture. Considering the researchers position, it is possible that recruitment processes may have missed certain groups of people not accessible or familiar to the researchers. The design also used measures all developed in a Western context, and thus may have missed cross-cultural experiences.

Research suggests that shame varies cross culturally (Gilbert, 2003; Yakeley, 2018), for example in Eastern cultures, it is considered a collective phenomenon where behaviour risks shaming a community, and is thus used to promote group cohesion (Yakeley, 2018). Therefore, the shame measures may not capture shame experiences in these cultures. Our sample was mostly made up of White participants, meaning there was less data from other cultures or ethnicities, and thus we cannot draw conclusions about shame in other populations.

In relation to the MAC-Q, whilst it been validated across various cultures (Curry, Mullins & Whitehouse, 2019), predictors have not been explored. MFT has been explored across varying ethnicities, with no significant differences being observed (Kivikangas et al, 2021). There was some variation of ethnicity in the present sample, and our analyses revealed that ethnicity only exerted a small, yet significant, effect over the MAC domain deference. However, some cell sizes were small, and it is almost certain most resided in Western countries. More importantly, ethnicity is not synonymous with culture. It may therefore be interesting to conduct this study in more collective cultures to understand potential differences.

4.7.2. Validity of Design

The use of online research can result in high numbers of missing data, or incorrect completion, due to the lack of researcher involvement (Nosek, Banaji & Greenwald, 2002), which can create bias in results (Cantrell, & Lupinacci, 2007). Indeed, many participants were removed in the reviewing process and it is possible that this skewed results.

Moreover, the use of psychological measures within any study risks interpretation by participants: they are subjective. Psychological measures require participants to interpret items on a measure taken to be underpinned by a construct, which has been operationalized through development. Whilst the measures in the current study were well validated, participants may have interpreted items differently to each-other, or to the intended construct.

4.7.2.1. MAC-Q. Notably, in the MAC-Q, the *relevance* subscales were used within the research, which the authors highlight may assess second-order views, not direct measurement of how individuals make moral judgements (Curry et al., 2019a). It is also quite possible that MAC may miss crucial aspects of morality in modern society. For example, discrimination based on identity markers such as race or sex is widely deemed as morally wrong, as is reflected in common UK law (Equality Act, 2010), but the MAC proposes that morality is based upon cooperation with the group to a mutual advantage, meaning that racism and sexism could be deemed morally right when coordinating to mutual group benefit. This may be understood in the context of a critique of the MAC, that we might moralise other, non-cooperative behaviour, and thus it does not sufficiently account for all morality (Bloom, 2019). However, the research was addressed to moral values and how these are connected with experience and emotion. Moreover, MAC theorists affirm that not all aspects of morality will be accounted for within the MAC framework (Curry et al, 2019). This study explored only those aspects of morality, as informed by a cooperation-based theory, and though useful, concrete inferences about morality as a whole are limited. As affirmed in the theory itself, they can only be considered within their socio-cultural context.

4.7.2.2. Shame. It is important to note that the present measures of shame-proneness will not capture an individual's propensity to shame across multiple contexts. Considering humans have evolved to take varying social roles (e.g. lovers, friends, colleagues, allies, subordinates etc), individuals may experience shame-proneness in certain contexts and not others (Gilbert, 2007), based on past experiences (Tangney et al, 2007).

For past shame, SEI measure asks participants to recall a shame memory and reflect on this, shame may have been induced itself. Inducing shame can influence participant behaviour and decisions (Bică & Crețu, 2022). Some level of past recall was required for participants, and to reflect on the shame experience, including how much shame they felt, and how they cope, to explore the research question. However, this may have limited the validity of responses to the subsequent measures, as participants may have been feeling shameful and thus not respond freely: shame is generally considered a 'self-conscious'

emotion (Tangney et al, 2007) and research shows that both shame and distress are less likely to be disclosed in some settings (Macdonald, 1998; DeLong & Khan, 2014).

Moreover, there was no guarantee this was a particularly traumatic memory within childhood. Theories suggest that traumatic memories shape identity and are used for future reference (Bernsten & Rubin, 2006). Whilst more emotional memories are likely to be more salient, and easy to recall (Kensinger, 2004), meaning it is likely the memory was somewhat significant, the present research may not have captured the most significant shame memories from childhood.

4.8. Implications and Recommendations for Future Research

Through exploring the merits and fallbacks of this research, some directions have already been highlighted for further exploration. However, there are some other notable ideas for future research. Overall, this research offers a large sample using multiple variables, with a myriad of possibilities to explore and analyse multiple questions.

4.8.1. Building on Present Questions

To the researchers' knowledge, the present research was the first of its kind: to explore shame in relation to the MAC. This research has cast light upon how our experiences and emotions are connected to our moral sense, and thus may shape our behaviour and experiences.

Particularly in relation to shame, the past shame measure used was an interview adapted into questionnaire format, meaning it was limited to single questions related to different aspects of a shame memory. Thus it was not possible to conduct further analysis to explore the parameters of the relationship between these factors and the MAC. Future research may explore this, including attachment, given the impact of shame memories appears to depend on whether an attachment figure shamed them, (vs peers) (Matos & Pinto-Gouveia, 2014). It was not possible to explore the impact of who shamed the person, or who shamed them most regularly throughout life. It may be that qualitative research provides further insight into how such memories connect to our identity and moral values. Despite being more time and resource intense to do, it may be interesting to follow children through to adulthood, conducting longitudinal work into their experiences, attachment and shame.

Given the relevance of cooperative morality to politics (Curry, 2021), future research into the MAC may shed light on society in a way that informs the political preferences and landscape. To date, empirical investigations into politics and society use the MFT framework; therefore further investigation is required to understand how MAC shapes politics. Doing so, in combination with understanding predictors of the MAC, will help us to understand and influence how our society operates cooperatively. There is evidence that people with different political views (e.g. conservatives and liberals) align with differing moral values within the MFT (Graham, Haidt, & Nosek, 2009). Future research may explore the link between the MAC and moral behaviour in real life, in various contexts. It may also further develop understanding about what aspects of compassion, shame and attachment relate to aspects of cooperation, given the present research found only certain subdimensions of these concepts had a substantial impact on morality.

4.8.2. Other Considerations

4.7.2.1. Religion. Religion, however defined, will be inevitably relevant to morality and shame (Pattison, 2010). Morality has been historically intertwined with religion, though the relationship between the two is contested (McKay, & Whitehouse, 2015). In relation to the MAC, there is some research suggesting that people who affiliate with a religion show higher endorsement of the fairness moral domain (Mobayed, 2019). Some evidence suggests no difference in shame-proneness between religious and non-religious individuals (Luyten, Corveleyn & Fontaine, 1998). In relation to shame memories, religious trauma has been thought to increase risk for enduring and disabling shame (Downie, 2022). It may be interesting to explore religion in relation to the MAC-Q, including varying faiths and atheism.

4.7.2.2. Neurodiversity. Through the categorisation process of mental health diagnoses in the present survey, some participants mentioned diagnoses of Attention Deficit and Hyperactivity Disorder, and Autistic Spectrum Disorder (ASD). This was not categorised as a mental health difficulty, however gave pause to consider another group of interest may involve neurodiversity. The symptoms used to classify Autism include both social and communication difficulties (American Psychiatric Association, 2013). Studies highlight how young people with ASD do not differ to their neurotypical peers in a cooperative task (Li, Zhu & Gummerum, 2014), though the authors highlight a perhaps more rigid approach to morality in those with ASD. Others highlight how those with ASD may struggle to shift strategies in cooperative tasks (Sally & Hill, 2006) which may relate to sociocultural tools within the MAC. Research also suggests that adults with ASD exhibit higher shame-proneness than their neurotypical peers (Davidson, Vaengas & Hilvert, 2017). Of course, ASD is a broad spectrum with a wide range of presentations (American Psychiatric Association, 2013), so it

may be interesting to further explore feelings of shame and endorsement of cooperation within neurodiverse populations.

4.9. Conclusion

The investigation of morality is incredibly complex and multi-factorial. The MAC has provided a new framework within which to understand how and why human beings cooperate. This thesis provides evidence that both past internal shame, related to a shame memory, and a capacity to experience external shame are closely connected to certain cooperative moral domains. This offers support for the differential impact of external and internal shame, and past and present shame-proneness. Whilst further research is required to understand the parameters of this relationship, and investigations in real-world contexts, this study offers the first of its kind to understand how the psychology of interpersonal and emotional development might intersect with Morality as Cooperation.

5. REFERENCES

Ahern, N. R. (2005). Using the Internet to conduct research. *Nurse Researcher, 13*(2), 55–69. https://doi.org/10.7748/nr.13.2.55.s7

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Lawrence Erlbaum.

Alesina, A., & Giuliano, P. (2014). Chapter 4—Family Ties. In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (Vol. 2, pp. 177–215). Elsevier. https://doi.org/10.1016/B978-0-444-53538-2.00004-6

Alexander, R., Feeney, J., Hohaus, L., & Noller, P. (2001). Attachment style and coping resources as predictors of coping strategies in the transition to parenthood. *Personal Relationships*, *8*(2), 137–152. https://doi.org/10.1111/j.1475-6811.2001.tb00032.x

Alfano, M., Cheong, M., & Curry, O. S. (2024). Moral universals: A machine-reading analysis of 256 societies. *Heliyon*, *10*(6).https://doi.org/10.1016/j.heliyon.2024.e25940

Allan, S., & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences*, *19*(3), 293–299. https://doi.org/10.1016/0191-8869(95)00086-L

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890425596.dsm10

Andrews, B., & Hunter, E. (1997). Shame, Early Abuse, and Course of Depression in a Clinical Sample: A Preliminary Study. *Cognition and Emotion*, *11*(4), 373–381. https://doi.org/10.1080/026999397379845

Andrews, B., Qian, M., & Valentine, J. D. (2002). *Experience of Shame Scale (ESS)* [Database record]. APA PsycTests. https://doi.org/10.1037/t39071-000

Aspinall, P. J. (2021). BAME (black, Asian and minority ethnic): The “new normal” in collective terminology. *Journal of Epidemiol Community Health, 75(*2). https://doi.org/10.1136/jech-2020-215504

Baier, A. (1995). *Moral Prejudices: Essays on Ethics*. Harvard University Press.

Baldwin, D. A. (1997). The concept of security. *Review of International Studies*, *23*(1), 5–26. https://doi.org/10.1017/S0260210597000053

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, *112*(3), 461–484. https://doi.org/10.1037/0033-2909.112.3.461

Barnieh, L., J. S. Gill, S. Klarenbach, and B. J. Manns. (2013). The cost-effectiveness of using payment to increase living donor kidneys for trans-plantation. *Clinical Journal of the American Society of Nephrology, 8*(12), 2165–2173. https://doi.org/10.2215/CJN.03350313

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61,* 226–244. https://psycnet.apa.org/doi/10.1037/0022-3514.61.2.226

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Baumeister, R. F., & K. D. Vohs. (2004). Sexual economics: sex as female resource for social exchange in heterosexual interactions. *Personality and Social Psychology Review, 8*(4): 339–363. https://doi.org/10.1207/s15327957pspr0804_2

Becker, L. C. (1977). *Property Rights: Philosophic Foundations*. Routledge.

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research and Therapy*, *44*(2), 219–231. https://doi.org/10.1016/j.brat.2005.01.009

Bică, A., & Crețu, R. Z. (2023). The carrot and the stick: How guilt and shame facilitate reciprocity-driven cooperation. *Cognition and Emotion*, *37*(1), 117–127. https://doi.org/10.1080/02699931.2022.2146057

Black, R. S., Curran, D., & Dyer, K. F. (2013). The impact of shame on the therapeutic alliance and intimate relationships. *Journal of Clinical Psychology*, *69*(6), 646-654. https://doi.org/10.1002/jclp.21959

Boehm, C. (2001). *Hierarchy in the Forest*: *Evolution of Egalitarian Behaviour.* Harvard University Press. https://www.hup.harvard.edu/books/9780674006911

Boehm, C. (2018). Collective intentionality: A basic and early component of moral evolution. *Philosophical Psychology*, *31*(5), 680–702. https://doi.org/10.1080/09515089.2018.1486607

Boos, M., Kolbe, M., Kappeler, P. M., & Ellwart, T. (2011). *Coordination in Human and Primate Groups*. Springer Science & Business Media.

Bowlby, J. (1969). *Attachment and loss* (2nd ed). Basic Books. https://books.google.co.uk/books?hl=en&lr=&id=1h89j7-Oe5kC&oi=fnd&pg=PR13&dq=Attachment+and+Loss:+Attachment.+B&ots=8JECofDpKv&sig=hRU8irAov-B0nf3US5XpUS5SPto&redir_esc=y#v=onepage&q=Attachment%20and%20Loss%3A%20Attachment.%20B&f=false

Boyd, K. K. (1996). Power imbalances and therapy. *Focus, 11*(9), 1-4.

Brams, S. J., & Taylor, A. D. (1996). *Fair Division: From Cake-Cutting to Dispute Resolution*. Cambridge University Press.

Brennan, K.A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult romantic attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships,* (pp. 46–76). Guilford Press.

Bretherton, I. (1985). Attachment Theory: Retrospect and Prospect. *Monographs of the Society for Research in Child Development*, *50*(1/2), 3–35. https://doi.org/10.2307/3333824

British Psychological Society (2021b). *Ethics guidelines for internet-mediated research.* The British Psychological Society. https://doi.org/10.53841/bpsrep.2021.rep155

British Psychological Society (2021). *Guidance on the use of social media.* British Psychological Society. https://doi.org/10.53841/bpsrep.2023.inf350

British Psychological Society. (2021a). *Code of Ethics and Conduct*. British Psychological Society. https://www.bps.org.uk/guideline/code-ethics-and-conduct

Brosnan, S. F., & de Waal, F. B. M. (2014). Evolution of responses to (un)fairness. *Science*, *346*(6207), 1251776. https://doi.org/10.1126/science.1251776

Brown, B. (2010). *The gifts of imperfection: Let go of who you think you're supposed to be and embrace who you are*. Hazelden. https://www.google.co.uk/books/edition/The_Gifts_of_Imperfection/0bvm3UgSIQcC?hl=en

Burmeister, A., Fasbender, U., & Gerpott, F. H. (2019). Consequences of knowledge hiding: The differential compensatory effects of guilt and shame. *Journal of Occupational and Organizational Psychology*, *92*(2), 281-304. https://doi.org/10.1111/joop.12249

Burnham, J. (1992). Approach-method-technique: Making distinctions and creating connections. *Human Systems*, *3*(1), 3-26. https://www.complextrauma.uk/uploads/2/3/9/4/23949705/burnham_amt.pdf

Buss, D. M. (1995). Evolutionary Psychology: A New Paradigm for Psychological Science. *Psychological Inquiry*, *6*(1), 1–30. https://doi.org/10.1207/s15327965pli0601_1

Calderon, C. (2021). *The relationship between attachment style and narcissism: mediating effects of shame* (Doctoral dissertation, Alliant International University). https://www.proquest.com/openview/7608aebb165e5759175d311a9b1505f5/1?pq-origsite=gscholar&cbl=18750&diss=y

Camus, A. (1951). *The Rebel*. Vintage International.

Capraro, V. (2018). Women are slightly more cooperative than men (in one-shot Prisoner's dilemma games played online). [Middlesex University]. https://arxiv.org/ftp/arxiv/papers/1805/1805.08046.pdf

Carter, G. (2014). The Reciprocity Controversy. *Animal Behavior and Cognition*, *1*(3), 368. https://doi.org/10.12966/abc.08.11.2014

Carter, S. (1998). Neuroendocrine Perspectives on Social Attachment and Love. Psychoneuroendocrinology, 23(8), 779–818. https://doi.org/10.1016/S0306-4530(98)00055-9

Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior, 29*(6), 2156-2160. https://doi.org/10.1016/j.chb.2013.05.009

Chapais, B. (2014). Complex Kinship Patterns as Evolutionary Constructions, and the Origins of Sociocultural Universals. *Current Anthropology*, *55*(6), 751–783. https://doi.org/10.1086/678972

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

Cook, D. R. (1996). Empirical studies of shame and guilt: The Internalized Shame Scale. In D. L. Nathanson (Ed.), *Knowing feeling: Affect, script, and psychotherapy* (pp. 132–165). W. W. Norton & Company. https://books.google.co.uk/books?hl=en&lr=&id=imloDQAAQBAJ&oi=fnd&pg=PT5&dq=Empirical+studies+of+shame+and+guilt:+The+Internalized+Shame+Scale.+In+D.+L.+Nathanson+(Ed.),+Knowing+feeling:+Affect,+script,+and+psychotherapy+(pp.+132%E2%80%93165).+W.+W.+Norton+%26+Company.&ots=cxOEbutkhi&sig=tZtKlUn8eXCfyQSZnV90BWdn4QY&redir_esc=y#v=onepage&q=doi&f=false

Cook, D. R., & Coccimiglio, J. (2001). *Internalized shame scale: Technical manual*. Multi-Health Systems.

Cozolino, L. (2006). The social brain. *Psychotherapy in Australia*. https://search.informit.org/doi/abs/10.3316/informit.546083156468222

Crenshaw, K. (1991). Mapping the margins: Identity politics, intersectionality, and violence against women. *Stanford Law Review*, *43*(6), 1241-1299.

Cross, S. E., Uskul, A. K., Gerçek-Swing, B., Sunbay, Z., Alözkan, C., Günsoy, C., Ataca, B., & Karakitapoğlu-Aygün, Z. (2014). Cultural Prototypes and

Dimensions of Honor. *Personality and Social Psychology Bulletin*, *40*(2), 232–249. https://doi.org/10.1177/0146167213510323

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. SAGE Publications.

Curry, O. S. (2007). The Conflict-Resolution Theory of Virtue. In W. P. Sinnott-Armstrong (Ed.). *Moral Psychology: The Evolution of Morality: Adaptations and Innateness*, (pp. 251-261). MIT Press. https://doi.org/10.7551/mitpress/7481.003.0028

Curry, O. S. (2016). Morality as Cooperation: A problem-centred approach. In T. K. Shackelford & R. D. Hansen (Eds.), *The Evolution of Morality* (pp. 27–51). Springer International Publishing. https://doi.org/10.1007/978-3-319-19671-8_2

Curry, O. S. (2021). What is the relationship between morals and politics?. *OSF preprints.* https://doi.org/10.31219/osf.io/d7ugb

Curry, O. S., Hare, D., Hepburn, C., Johnson, D. D. P., Buhrmester, M. D., Whitehouse, H., Macdonald, D. W. (2019b). Cooperative conservation: Seven ways to save the world. *Conservation Science and Practice*, *2*(1), e123 https://doi.org/10.1111/csp2.123

Curry, O. S., Jones-Chesters, M., & Van Lissa, C. J. (2019a). Mapping morality with a compass: Testing the theory of 'morality-as-cooperation' with a new questionnaire. *Journal of Research in Personality*, *78*, 106–124. https://doi.org/10.1016/j.jrp.2018.10.008

Curry, O. S., Mullins, D. A., & Whitehouse, H. (2019b). Is It Good to Cooperate?: Testing the Theory of Morality-as-Cooperation in 60 Societies. *Current Anthropology*, *60*(1), 47–69. https://doi.org/10.1086/701478

Curry, O. S., Price, M. E., & Price, J. G. (2008). Patience is a virtue: Cooperative people have lower discount rates. *Personality and Individual Differences*, *44*(3), 780–785. https://doi.org/10.1016/j.paid.2007.09.023

Curry, O., & Chesters, M. J. (2012). 'Putting Ourselves in the Other Fellow's Shoes': The Role of 'Theory of Mind' in Solving Coordination Problems. *Journal of Cognition and Culture*, *12*(1–2), 147–159. https://doi.org/10.1163/156853712X633974

Darwin, C. (1871). *The descent of man, and selection in relation to sex.* Murray.

Data Protection Act 2018. UK government. https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted

Davey, L. M., Bobocel, D. R., Son Hing, L. S., & Zanna, M. P. (1999). Preference for the Merit Principle Scale: An Individual Difference Measure of Distributive Justice Preferences. *Social Justice Research*, *12*(3), 223–240. https://doi.org/10.1023/A:1022148418210

Davidson, D., Vanegas, S. B., & Hilvert, E. (2017). Proneness to self-conscious emotions in adults with and without autism traits. *Journal of Autism and Developmental Disorders*, *47*, 3392-3404. https://doi.org/10.1007/s10803-017-3260-8

Davis, D. E., Rice, K., Van Tongeren, D. R., Hook, J. N., DeBlaere, C., Worthington Jr., E. L., & Choe, E. (2016). The moral foundations hypothesis does not replicate well in Black samples. *Journal of Personality and Social Psychology*, *110*(4), e23–e30. https://doi.org/10.1037/pspp0000056

Dawkins, R. (1979). Twelve Misunderstandings of Kin Selection. *Zeitschrift Für Tierpsychologie*, *51*(2), 184–200. https://doi.org/10.1111/j.1439-0310.1979.tb00682.x

Dawkins, R. (1998). Science, delusion and the appetite for wonder. *Skeptical Inquirer*, *22*, 28-33. https://cdn.centerforinquiry.org/wp-content/uploads/sites/29/1998/03/22164921/p28.pdf

De Buck, A., & Pauwels, L. J. R. (2021). Empathy and theft by finding: The intermediary role of moral emotions and norms. *Journal of Community Psychology*, *49*(6), 1648–1676. https://doi.org/10.1002/jcop.22571

De Hooge, I. E., Zeelenberg, M., & Breugelmans, S. M. (2007). Moral sentiments and cooperation: Differential influences of shame and guilt. *Cognition and Emotion*, *21*(5), 1025–1042. https://doi.org/10.1080/02699930600980874

De Waal, F. (2010). *The age of empathy: Nature's lessons for a kinder society*. Harmony Books.

Declerck, C. H., Boone, C., & Kiyonari, T. (2014). The effect of oxytocin on cooperation in a prisoner's dilemma depends on the social context and a person's social value orientation. *Social Cognitive and Affective Neuroscience*, *9*(6), 802-809. https://doi.org/10.1093/scan/nst040

DeLong, L. B., & Kahn, J. H. (2014). Shameful secrets and shame-prone dispositions: How outcome expectations mediate the relation between shame and disclosure.

Counselling Psychology Quarterly, *27*(3), 290-307. https://doi.org/10.1080/09515070.2014.908272

DeScioli, P., & Kurzban, R. (2009). Mysteries of morality. *Cognition*, *112*(2), 281-299. https://doi.org/10.1016/j.cognition.2009.05.008

DeScioli, Peter, M. Massenkoff, A. Shaw, M. B. Petersen, & R. Kurzban, (2014). Equity or equality? moral judgments follow the money. *Proceedings of the Royal Society, 281*(1797), 2014- 2112. https://doi.org/10.1098/rspb.2014.2112

Dickerson, S. S., & Kemeny, M. E. (2004b). Acute Stressors and Cortisol Responses: A Theoretical Integration and Synthesis of Laboratory Research. *Psychological Bulletin*, *130*(3), 355–391. https://doi.org/10.1037/0033-2909.130.3.355

Donaldson-Pressman, S., & Pressman, R. M. (1997). *The narcissistic family: Diagnosis and treatment*. Jossey-Bass. https://psycnet.apa.org/record/1994-97558-000

Dumitrescu, C. (2005). Shame and honor: Biblical understandings and Islamic cultural reflections. *Journal of Adventist Mission Studies*, *1*(1), 14-39. https://dx.doi.org/10.32597/ja

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319–345. https://doi.org/10.1016/S0005-7967(99)00123-0

Eisenberg, h., & Miller, P. A. (1987). Empathy, sympathy and altruism: Empirical and conceptual links. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 292-3 16). Cambridge University Press. https://books.google.co.uk/books?hl=en&lr=&id=PVQ4AAAAIAAJ&oi=fnd&pg=PR9&dq=N.+Eisenberg+%26+J.+Strayer+(Eds.),+Empathy+and+its+development&ots=KoZO6snhzt&sig=RdW7Y7OV3u9fYcawpYKRq-heQ50#v=onepage&q=N.%20Eisenberg%20%26%20J.%20Strayer%20(Eds.)%2C%20Empathy%20and%20its%20development&f=false

Eisenberger, R., Lynch, P., Aselage, J., & Rohdieck, S. (2004). Who Takes the most Revenge? Individual Differences in Negative Reciprocity Norm Endorsement. *Personality and Social Psychology Bulletin*, *30*(6), 787–799. https://doi.org/10.1177/0146167204264047

Elison, J., Lennon, R., & Pulos, S. (2006). Investigating the compass of shame: The development of the Compass of Shame Scale. *Social Behavior and Personality: An International Journal*, *34*(3), 221-238. https://doi.org/10.2224/sbp.2006.34.3.221

Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin, 138*(5), 947–981. https://doi.org/10.1037/a0027930

Emmons, R. A., & McCullough, M. E. (2004). *The Psychology of Gratitude*. Oxford University Press.

Equality Act 2010. (UK Government). https://www.legislation.gov.uk/ukpga/2010/15/contents

Fein, E. C.; Gilmour, J., Machin, T., & Henry, L. (2022). *Statistics for Research Students.* University of Southern Queensland. https://usq.pressbooks.pub/statisticsforresearchstudents/

Feshbach, N. D. (1975a). Empathy in children: Some theoretical and empirical considerations. *Counselling Psychologist, 5,* 25-30. https://doi.org/10.1177/001100007500500207

Fessler, D. (2004). Shame in Two Cultures: Implications for Evolutionary Approaches. *Journal of Cognition and Culture*, *4*(2), 207–262. https://doi.org/10.1163/1568537041725097

Field, A. (2005). *Discovering Statistics Using IBM SPSS Statistics* (2nd ed.). Sage Publications. https://books.google.co.uk/books?hl=en&lr=&id=c0Wk9IuBmAoC&oi=fnd&pg=PP2&dq=2005).+Discovering+Statistics+Using+IBM+SPSS+Statistics+&ots=LdAlMJWv0C&sig=aCrxHPjHgn0btMW6yz_NbjwfofY&redir_esc=y#v=onepage&q=doi&f=false

Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, *99*(4), 689–723. https://doi.org/10.1037/0033-295X.99.4.689

Follmer, D.J., Sperling, R.A., & Suen, H.K. (2017) The role of MTurk in education research: Advantages, issues, and future directions. *Educational Researcher, 46*(6), 329–334. https://doi.org/10.3102/0013189X17725519

Fukuyama, F. (1996). *Trust: The Social Virtues and the Creation of Prosperity*. Simon and Schuster.

Germer, C. K., & Siegel, R. D. (Eds.). (2012). *Wisdom and compassion in psychotherapy: Deepening mindfulness in clinical practice*. Guilford Press. https://books.google.co.uk/books?hl=en&lr=&id=MZWZGQ8EYtEC&oi=fnd&pg=PP2&dq=Wisdom+and+compassion+in+psychotherapy:+Deepening+mindfulness+in+clinical+practice.+Guilford+Press.&ots=noLv_VH_SM&sig=KaSlbNtDkANcZppF1OgmEA6RBDE&redir_esc=y#v=onepage&q=Wisdom%20and%20compassion%20in%20psychotherapy%3A%20Deepening%20mindfulness%20in%20clinical%20practice.%20Guilford%20Press.&f=false

Gert, B. (2013). Loyalty and Morality. *Nomos*, *54*, 3–21. https://doi.org/10.18574/nyu/9780814785935.003.0001

Gibbard, A. (1990a). Norms, Discussion, and Ritual: Evolutionary Puzzles. *Ethics*, *100*(4), 787–802. https://doi.org/10.1086/293234

Gibbard, A. (1990b). *Wise Choices, Apt Feelings: A Theory of Normative Judgment*. Harvard University Press.

Gilbert, P. (1995). Biopsychosocial approaches and evolutionary theory as aids to integration in clinical psychology and psychotherapy. *Clinical Psychology & Psychotherapy*, *2*(3), 135–156. https://doi.org/10.1002/cpp.5640020302

Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. *British Journal of Medical Psychology*, *70*(2), 113–147. https://doi.org/10.1111/j.2044-8341.1997.tb01893.x

Gilbert, P. (1998). What is shame? Some core issues and controversies. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 3–38). Oxford University Press.

Gilbert, P. (2003). Evolution, Social Roles, and the Differences in Shame and Guilt. Social Research: *An International Quarterly, 70*(4), 1205-1230. https://doi.org/10.1353/sor.2003.0013

Gilbert, P. (2007). The evolution of shame as a marker for relationship security: A biopsychosocial approach. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The*

Self-Conscious Emotions: Theory and Research (pp. 283–309). The Guilford Press. https://books.google.co.uk/books?hl=en&lr=&id=b7zOX2ZIBHQC&oi=fnd&pg=PA1&dq=The+Self-Conscious+Emotions:+Theory+and+Research+(pp.+283%E2%80%93309).+&ots=87yLlUPnIn&sig=2XGz-x9ZSsKi_dYqIL_g90OsFFA&redir_esc=y#v=onepage&q&f=false

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment*, *15*(3), 199-208. https://doi.org/10.1192/apt.bp.107.005264

Gilbert, P. (2017). Compassion as a social mentality: An evolutionary approach. In P. Gilbert (Ed.), *Compassion: Concepts, research and applications* (pp. 31–68). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781315564296-3

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, *53*(1), 6-41. https://doi.org/10.1111/bjc.12043

Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert, (Ed.), *Compassion: conceptualisations*, research and use in psychotherapy (pp. 263-325). Routledge. https://doi.org/10.4324/9780203003459

Gilbert, P., & McGuire, M. T. (1998). Shame, status, and social roles: Psychobiology and evolution. In *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 99–125). Oxford University Press.

Gilbert, P., & Miles, J. (2002). *Body Shame: Conceptualisation, Research, and Treatment*. Brunner-Routledge. https://books.google.co.uk/books?hl=en&lr=&id=rpy54R7ash8C&oi=fnd&pg=PR1&dq=Gilbert,+P.,+%26+Miles,+J.+(2002).+Body+Shame:+Conceptualisation,+Research,+and+Treatment.+Psychology+Press.&ots=MBh71_sMaa&sig=9eduoG3PSi_pJa1A5pusVfrT4n8&redir_esc=y#v=onepage&q=Gilbert%2C%20P.%2C%20%26%20Miles%2C%20J.%20(2002).%20Body%20Shame%3A%20Conceptualisation%2C%20Research%2C%20and%20Treatment.%20Psychology%20Press.&f=false

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*(3), 239-255. https://doi.org/10.1348/147608310X526511

Gilbert, P. (2009). *The Compassionate Mind*. Constable. https://books.google.co.uk/books/about/The_Compassionate_Mind.html?id=cP4HLAAACAAJ&redir_esc=y

Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P, Gilbert (Eds.), *Compassion: Conceptualisations, research and use in psychotherapy.* Routledge. (pp. 121–47). https://www.taylorfrancis.com/chapters/edit/10.4324/9780203003459-4/attachment-theoretical-approach-compassion-altruism-omri-gillath-phillip-shaver-mario-mikulincer

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Harvard University Press. https://books.google.co.uk/books?hl=en&lr=&id=XItMnL7ho2gC&oi=fnd&pg=PR9&dq=In+a+different+voice:+Psychological+theory+and+women%27s+development.+Harvard+University+Press.&ots=6XeEOOHgZ5&sig=QZY-mVIcZVV_z1JzB83CYKEA8g8&redir_esc=y#v=onepage&q=In%20a%20different%20voice%3A%20Psychological%20theory%20and%20women's%20development.%20Harvard%20University%20Press.&f=false

Gilligan, C. (1993). *In a Different Voice: Psychological Theory and Women's Development*. Harvard University Press.

Gintis, H. (2007). The evolution of private property. *Journal of Economic Behavior & Organization*, *64*(1), 1–16. https://doi.org/10.1016/j.jebo.2006.02.002

Gintis, H. (2019). *Universal Principles of Human Morality*. Current Anthropology, *60*. https://www.umass.edu/preferen/gintis/MoralityAsCooperation.pdf

Gintis, H., Smith, E. A., & Bowles, S. (2001). Costly Signaling and Cooperation. *Journal of Theoretical Biology*, *213*(1), 103–119. https://doi.org/10.1006/jtbi.2001.2406

Gintis, H., Van Schaik, C., & Boehm, C. (2015). Zoon politikon: The evolutionary origins of human political systems. *Current Anthropology*, *56*(3), 327-353. https://www.journals.uchicago.edu/doi/full/10.1086/681217?casa_token=9L_mjMt0lagAAAAA%3AAmF8V94vDE5zFSLQtoVSOclslTaWdT2ne5x1ypD66HFtBeDezgFKAnokAJbgdKcFDmwdJXyJDg

Godfray, H. C. (1992). The evolution of forgiveness. *Nature*, *355*(6357), 206–207. https://doi.org/10.1038/355206a0

Goffnett, J., Liechty, J. M., & Kidder, E. (2020). Interventions to reduce shame: A systematic review. *Journal of Behavioral and Cognitive Therapy*, *30*(2), 141-160. https://doi.org/10.1016/j.jbct.2020.03.001

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*(5), 1029. https://doi.org/10.1037/a0015141

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral Foundations Theory: The Pragmatic Validity of Moral Pluralism. In P. Devine & A. Plant (Eds.), *Advances in Experimental Social Psychology* (Vol. 47., pp. 55–130). Academic Press. https://doi.org/10.1016/B978-0-12-407236-7.00002-4

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, *101*(2), 366–385. https://doi.org/10.1037/a0021847

Grecucci, A., Neresini, A., & Job, R. (2021). A Moral Algorithm. Toward a Neuropsychological Model of Shame. In P. Giacomoni, N. Valentini, & S. Dellantonio (Eds.), *The Dark Side: Philosophical Reflections on the "Negative Emotions"* (pp. 217–232). Springer International Publishing. https://doi.org/10.1007/978-3-030-55123-0_13

Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research*, *26*(3), 499-510. https://doi.org/10.1207/s15327906mbr2603_7

Greene, J. D. (2015). The rise of moral cognition. *Cognition*, *135*, 39–42. https://doi.org/10.1016/j.cognition.2014.11.018

Gross, J. T., Stern, J. A., Brett, B. E., & Cassidy, J. (2017). The multifaceted nature of prosocial behavior in children: Links with attachment theory and research. *Social Development*, *26*(4), 661-678. https://doi.org/10.1111/sode.12242

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*(4), 814–834. https://doi.org/10.1037/0033-295X.108.4.814

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion.* Vintage.

Haidt, J., & Joseph, C. (2004). Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues. *Daedalus*, *133*(4), 55–66.

Hammerstein, P. (2003). *Genetic and Cultural Evolution of Cooperation*. MIT Press. https://books.google.co.uk/books?hl=en&lr=&id=aVh9jtWbG0wC&oi=fnd&pg=PA1&dq=Hammerstein,+P.+(2003).+Genetic+and+Cultural+Evolution+of+Cooperation&ots=gxpcrIIlug&sig=Z_AFIsxdArSnRm04vc3JBdBpbdY&redir_esc=y#v=onepage&q=Hammerstein%2C%20P.%20(2003).%20Genetic%20and%20Cultural%20Evolution%20of%20Cooperation&f=false

Hanscom, B., Lurie, J. D., Homa, K., & Weinstein, J. N. (2002). Computerized questionnaires and the quality of survey data. *Spine*, *27*(16), 1797-1801. https://journals.lww.com/spinejournal/abstract/2002/08150/computerized_questionnaires_and_the_quality_of.20.aspx

Hardy, I. C. W., & Briffa, M. (2013). *Animal Contests*. Cambridge University Press.

Harper, F. W. K., Austin, A. G., Cercone, J. J., & Arias, I. (2005). The Role of Shame, Anger, and Affect Regulation in Men's Perpetration of Psychological Abuse in Dating Relationships. *Journal of Interpersonal Violence*, *20*(12), 1648–1662. https://doi.org/10.1177/0886260505278717

Harper, J. M. (2011). Regulating and coping with shame. In R. Trnka, K. Balcar, & M. Kuska (Eds.), *Reconstructing emotional spaces: From experience to regulation* (pp. 189-206). Prague of College of Psychological Studies Press. https://books.google.co.uk/books?hl=en&lr=&id=uLe2fJRHQGoC&oi=fnd&pg=PR7&dq=Reconstructing+emotional+spaces:+From+experience+to+regulation&ots=m4ohq6D009&sig=rM5Tl4SIWangyjiPr_IX9DxoU-0#v=onepage&q=doi&f=false

Heaven, P. C., Ciarrochi, J., & Leeson, P. (2009). The longitudinal links between shame and increasing hostility during adolescence. *Personality and Individual Differences*, *47*(8), 841-844. https://doi.org/10.1016/j.paid.2009.07.002

Hedges, F. (2005). *An Introduction to Systemic Therapy with Individuals: a Social Constructionist Approach*. Bloomsbury Publishing.

Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H., McElreath, R., Alvard, M., Barr, A., Ensminger, J., Henrich, N. S., Hill, K., Gil-White, F., Gurven, M., Marlowe, F. W., Patton, J. Q., & Tracer, D. (2005). “Economic man” in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. *Behavioral and Brain Sciences*, *28*(6), 795–815. https://doi.org/10.1017/S0140525X05000142

Herskovits, M. J. (1952). *Economic anthropology: A study in comparative economics*. Knopf. https://library.wur.nl/WebQuery/titel/1610238

Hook, A., & Andrews, B. (2005). The relationship of non-disclosure in therapy to shame and depression. *British Journal of Clinical Psychology*, *44*, 425–438. doi:10.1348/014466505X3416510.1348/014466505X34165

Hosser, D., Windzio, M., & Greve, W. (2008). Guilt and Shame as Predictors of Recidivism: A Longitudinal Study With Young Prisoners. *Criminal Justice and Behavior*, *35*(1), 138–152. https://doi.org/10.1177/0093854807309224

Huntingford, F. A. (2013). *Animal Conflict*. Springer Science & Business Media. https://books.google.co.uk/books?hl=en&lr=&id=lgn9CAAAQBAJ&oi=fnd&pg=PR11&dq=Huntingford,+F.+A.+(2013).+Animal+Conflict.+&ots=XvrJrLGVF1&sig=EYIue4cuaeqm5BkEmg2Z0IxF4gM&redir_esc=y#v=onepage&q=Huntingford%2C%20F.%20A.%20(2013).%20Animal%20Conflict.&f=false

IBM Corp. (2022). IBM SPSS Statistics for Windows (Version 27.0) [Computer software]. IBM Corp.

Inglehart, R., & Baker, W. E. (2000). Modernization, Cultural Change, and the Persistence of Traditional Values. *American Sociological Review*, *65*(1), 19–51. https://doi.org/10.2307/2657288

Irons, C., & Gilbert, P. (2005). Evolved mechanisms in adolescent anxiety and depression symptoms: The role of the attachment and social rank systems. *Journal of Adolescence*, *28*(3), 325-341. https://doi.org/10.1016/j.adolescence.2004.07.004

Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The Psychological Dispositions of Self-Identified Libertarians. *PLoS ONE*, 7, e42366. https://doi.org/10.1371/journal.pone.0042366

Jacquet, J., Hauert, C., Traulsen, A., & Milinski, M. (2011). Shame and honour drive cooperation. *Biology Letters*, *7*(6), 899–901. https://doi.org/10.1098/rsbl.2011.0367

Jaeggi, A. V., & Gurven, M. (2013). Reciprocity explains food sharing in humans and other primates independent of kin selection and tolerated scrounging: A phylogenetic meta-analysis. *Proceedings of the Royal Society B: Biological Sciences*, *280*(1768), 20131615. https://doi.org/10.1098/rspb.2013.1615

Jamieson, M. K., Govaart, G. H., & Pownall, M. (2023). Reflexivity in quantitative research: A rationale and beginner's guide. *Social and Personality Psychology Compass*, *17*(4), e12735. https://doi.org/10.1111/spc3.12735

Jinpa, T. (2015). *A fearless heart: why compassion is the key to greater wellbeing*. Hachette UK. https://books.google.co.uk/books?hl=en&lr=&id=M1PXBAAAQBAJ&oi=fnd&pg=PT7&ots=cJDU14ACMp&sig=1cMdLVcmo2UPYBadqv4kA_fnr5M&redir_esc=y#v=onepage&q&f=false

Johnson, D. D. P., & Toft, M. D. (2014). Grounds for War: The Evolution of Territorial Conflict. *International Security*, *38*(3), 7–38. https://doi.org/10.1162/ISEC_a_00149

Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, *47*(2), 263–291. https://doi.org/10.2307/1914185

Kannan, D., & Levitt, H. M. (2013). A review of client self-criticism in psychotherapy. *Journal of Psychotherapy Integration*, *23*(2), 166. https://doi.org/10.1037/a0032355

Kant, I. (1785). *Groundwork of the Metaphysics of Morals.* (H. J. Paton, Trans.). Harper Perennial Modern Thought. (Original work published in 1785).

Karantzas, G. C., Feeney, J. A., & Wilkinson, R. (2010). Is less more? Confirmatory factor analysis of the Attachment Style Questionnaires. *Journal of Social and Personal Relationships*, *27*(6), 749-780. https://doi.org/10.1177/0265407510373756

Keltner, D. (2009). *Born to be good: The science of a meaningful life*. WW Norton & Company.

Kensinger, E. A. (2004). Remembering emotional experiences: The contribution of valence and arousal. *Reviews in the Neurosciences*, *15*(4), 241-252.https://doi.org/10.1515/REVNEURO.2004.15.4.241

Ketelaar, T., & Tung Au, W. (2003). The effects of feelings of guilt on the behaviour of uncooperative individuals in repeated social bargaining games: An affect-as-information interpretation of the role of emotion in social interaction. *Cognition and Emotion*, *17*(3), 429–453. https://doi.org/10.1080/02699930143000662

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, *137*(1), 68–96. https://doi.org/10.1037/a0021466

Kingdon, C. (2005). Reflexivity: Not just a qualitative methodological research tool. *British Journal of Midwifery*, *13*(10), 622-627. https://doi.org/10.12968/bjom.2005.13.10.19835

Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J.-E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin, 147*(1), 55–94. https://doi.org/10.1037/bul0000308

Klein, J. (2002). Issues surrounding the use of the Internet for data collection. *The American Journal of Occupational Therapy*, *56*(3), 340-343. https://doi.org/10.5014/ajot.56.3.340

Kluge, F. (1891). *An Etymological Dictionary of the German Language*. (J. F. Davis, Trans). George Bell and Sons. https://books.google.co.uk/books?hl=en&lr=&id=RxELAwAAQBAJ&oi=fnd&pg=PA1&dq=Kluge,+F.+(1891).+Scham.+In+An+Etymological+Dictionary+of+the+German+Language,+S.+Wikisource.&ots=fjonZJgLXI&sig=jDrcINAJuvarHytMiL-gbSOYXTI&redir_esc=y#v=onepage&q&f=false

Kohlberg, L. (1981). *The Philosophy of Moral Development: Moral Stages and the Idea of Justice.* Harper & Row.

Kroll, J., & Egan, E. (2004). Psychiatry, Moral Worry, and the Moral Emotions. *Journal of Psychiatric Practice®*, *10*(6), 352.

Kurzban, R., DeScioli, P., & Fein, D. (2012). Hamilton vs. Kant: Pitting adaptations for altruism against adaptations for moral judgement. *Evolution and Human Behavior*, *33*(4), 323-333. https://doi.org/10.1016/j.evolhumbehav.2011.11.002

Laidlaw, J. (2002). For An Anthropology Of Ethics And Freedom. *Journal of the Royal Anthropological Institute*, *8*(2), 311–332. https://doi.org/10.1111/1467-9655.00110

Lewis, D. K. (2008). *Convention: A Philosophical Study*. Blackwell Publishers. https://books.google.co.uk/books?hl=en&lr=&id=GgCkLtTqBsMC&oi=fnd&pg=PR7&dq=Lewis,+D.+K.+(2008).+Convention:+A+Philosophical+Study.+&ots=2163j515Ow&sig=a7RnS75AKQavwLWeAvSbRW2A0Fs&redir_esc=y#v=onepage&q&f=false

Lewis, H. B. (1971). Shame and guilt in neurosis. *Psychoanalytic Review*, *58*(3), 419. https://www.proquest.com/openview/8c3f0a509660be98cde0d9b359214024/1?pq-origsite=gscholar&cbl=1820904

Li, J., Zhu, L. & Gummerum, M. (2014). The relationship between moral judgment and cooperation in children with high-functioning autism. *Scientific Report, 4*, 4314. https://doi.org/10.1038/srep04314

Lieberman, D., Tooby, J., & Cosmides, L. (2003). Does morality have a biological basis? An empirical test of the factors governing moral sentiments relating to incest. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, *270*(1517), 819–826. https://doi.org/10.1098/rspb.2002.2290

Locke, J. (2000). Labour as the basis of property. In M. Rosen, W. Wolff, C. McKinnon (Eds.), *Political thought.* Oxford University Press.

Loewenstein, G., & Small, D. A. (2007). The Scarecrow and the Tin Man: The Vicissitudes of Human Sympathy and Caring. *Review of General Psychology*, *11*(2), 112–126. https://doi.org/10.1037/1089-2680.11.2.112

Lopez, F. G., Gover, M. R., Leskela, J., Sauer, E. M., Schirmer, L., & Wyssmann, J. (1997). Attachment styles, shame, guilt, and collaborative problem-solving orientations. *Personal Relationships*, *4*(2), 187–199. https://doi.org/10.1111/j.1475-6811.1997.tb00138.x

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, *33*(3), 335–343. https://doi.org/10.1016/0005-7967(94)00075-u

Luyten, P., Corveleyn, J., & Fontaine, J. R. (1998). The relationship between religiosity and mental health: Distinguishing between shame and guilt. *Mental Health, Religion & Culture*, *1*(2), 165-184. https://doi.org/10.1080/13674679808406507

Luyten, P., Fontaine, J. R. J., & Corveleyn, J. (2002). Does the Test of Self-Conscious Affect (TOSCA) measure maladaptive aspects of guilt and adaptive aspects of shame? An empirical investigation. *Personality and Individual Differences*, *33*(8), 1373–1387. https://doi.org/10.1016/S0191-8869(02)00197-6

Macdonald, J. (1998). Disclosing shame. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 141–157). Oxford University Press. https://books.google.co.uk/books?hl=en&lr=&id=OM3HMheFZHkC&oi=fnd&pg=PR11&dq=.+In+P.+Gilbert+%26+B.+Andrews+(Eds.),+Shame:+Interpersonal+behavior,+psychopathology,+and+culture+(p&ots=tCd-RdyRT6&sig=b4ASPucJmwaTAOAa_02_A9ps_Ww#v=onepage&q=doi&f=false

Macdonald, J., & Morley, I. (2001). Shame and non-disclosure: A study of the emotional isolation of people referred for psychotherapy. *British Journal of Medical Psychology*, *74*, 1–21. doi:10.1348/00071120116073110.1348/000711201160731

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253. doi:10.1037/0033-295X.98.2.22410.1037/0033-295X.98.2.224

Marschall, D. E. (1996). Effects of induced shame on subsequent empathy and altruistic behavior. [Master's thesis, George Mason University].

https://books.google.co.uk/books/about/Effects_of_Induced_Shame_on_Subsequent_E.html?id=jXPHNwAACAAJ&redir_esc=y

Martins, T. C., Canavarro, M. C., & Moreira, H. (2017). Adult attachment and dyadic adjustment: The mediating role of shame. In A. Rokach (Ed.). *Marital Relationships and Parenting: Intimate relations and their correlates* (pp. 15-30). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315208633-3/adult-attachment-dyadic-adjustment-mediating-role-shame-teresa-martins-maria-cristina-canavarro-helena-moreira

Matos, M. & Pinto-Gouveia, J. (2006). *The shame experiences interview.* Unpublished manuscript.

Matos, M. Pinto-Gouveia, J., & Duarte, C. (2015). Constructing a self protected against shame: The importance of warmth and safeness memories and feelings on the association between shame memories and depression. *International Journal of Psychology and Psychological Therapy*, *15*(3), 317-335. https://www.redalyc.org/pdf/560/56041784001.pdf

Matos, M., & Pinto-Gouveia, J. (2014). Shamed by a Parent or by Others: The Role of Attachment in Shame Memories Relation to Depression. *International Journal of Psychology*.

Matos, M., Duarte, J., & Pinto-Gouveia, J. (2017). The origins of fears of compassion: Shame and lack of safeness memories, fears of compassion and psychopathology. *The Journal of Psychology*, *151*(8), 804-819. https://doi.org/10.1080/00223980.2017.1393380

Matos, M., Pinto-Gouveia, J., & Costa, V. (2013). Understanding the Importance of Attachment in Shame Traumatic Memory Relation to Depression: The Impact of Emotion Regulation Processes. *Clinical Psychology & Psychotherapy*, *20*(2), 149–165. https://doi.org/10.1002/cpp.786

Matos, M., Pinto-Gouveia, J., & Gilbert, P. (2013). The effect of shame and shame memories on paranoid ideation and social anxiety. *Clinical Psychology & Psychotherapy*, *20*(4), 334-349. https://doi.org/10.1002/cpp.1766

Matos, M., Pinto-Gouveia, J., Gilbert, P., Duarte, C., & Figueiredo, C. (2015). The Other As Shamer Scale – 2: Development and validation of a short version of a measure of external shame. *Personality and Individual Differences*, *74*, 6–11. https://doi.org/10.1016/j.paid.2014.09.037

Maynard, M. (1994). 'Methods, Practice and Epistemology'. In M. Maynard & J. Purvis (Eds), *Researching Women's Lives from a Feminist Perspective*, pp.10–26. Taylor and Francis. https://doi.org/10.4324/9781315041025

Mazur, A. (2005). *Biosociology of Dominance and Deference*. Rowman & Littlefield Publishers. https://books.google.co.uk/books/about/Biosociology_of_Dominance_and_Deference.html?id=8pQzdUmYF4AC&redir_esc=y

McElreath, R., Boyd, R., & Richerson, P. J. (2003). Shared Norms and the Evolution of Ethnic Markers. *Current Anthropology*, *44*(1), 122–130. https://doi.org/10.1086/345689

McKay, R., & Whitehouse, H. (2015). Religion and morality.*Psychological Bulletin, 141*(2), 447–473. https://doi.org/10.1037/a0038455

Downie, A. (2022). Christian shame and religious trauma. *Religions*, *13*(10), 925. https://doi.org/10.3390/rel13100925

Mikhail, J. (2007). Universal moral grammar: theory, evidence and the future. *Trends in Cognitive Sciences, 11*(4), 143–152. https://doi.org/10.1016/j.tics.2006.12.007

Mock, D. W. (2004). *More than kin and than kind: the evolution of family conflict*. Harvard University Press. https://books.google.co.uk/books?hl=en&lr=&id=24xEeq0EKmwC&oi=fnd&pg=PA1&dq=More+than+kin+and+than+kind:+the+evolution+of+family+conflict.+Harvard+University+Press.+&ots=kUNRapa2UU&sig=aJY6pWQYWSh-tFLBoYZCIU9BJPU&redir_esc=y#v=onepage&q=More%20than%20kin%20and%20than%20kind%3A%20the%20evolution%20of%20family%20conflict.%20Harvard%20University%20Press.&f=false

Mikulincer, M., & Shaver, P. (2004). Security-Based Self-Representations in Adulthood: Contents and Processes. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical mplications* (pp. 159–195). Guilford Publications.

Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology, 35*, (pp. 53–152). Academic Press. https://www.researchgate.net/profile/Mario-Mikulincer/publication/285623488_The_Attachment_Behavioral_System_In_Adulthood_Activation_Psychodynamics_And_Interpersonal_Processes/links/573d709808ae298602e5a533/The-Attachment-Behavioral-System-In-Adulthood-Activation-Psychodynamics-And-Interpersonal-Processes.pdf

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change.* Guilford Press. https://books.google.co.uk/books?hl=en&lr=&id=5egODAAAQBAJ&oi=fnd&pg=PR1&dq=Mikulincer,+M.,+%26+Shaver,+P.+R.+(2007).+Attachment+in+adulthood:+Structure,+dynamics,+and+change.+Guilford+Press.&ots=IRNy8hORfu&sig=0KoMUEgiyMgHtSvK5KEEoxLaEmU&redir_esc=y#v=onepage&q=Mikulincer%2C%20M.%2C%20%26%20Shaver%2C%20P.%20R.%20(2007).%20Attachment%20in%20adulthood%3A%20Structure%2C%20dynamics%2C%20and%20change.%20Guilford%20Press.&f=false

Mikulincer, M., & Shaver, P. R. (2017). An attachment perspective on compassion and altruism. In P. Gilbert. (Eds.), *Compassion* (pp. 187-202). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315564296-11/attachment-perspective-compassion-altruism-mario-mikulincer-philip-shaver

Mikulincer, M., Gillath, O., Halevy, V., Avihou, N., Avidan, S., & Eshkoli, N. (2001). Attachment theory and reactions to others' needs: Evidence that activiation of the sense of attachment security promotes empathic responses. *Journal of Personality and Social Psychology*, *81*(6), 1205–1224. https://doi.org/10.1037/0022-3514.81.6.1205

Mikulincer, M., Shaver, P.R., Gillath, O. & Nitzberg, R. (2003b). *Attachment, Compassion and Altruism.* [Paper presentation]. Compassionate Love Conference 2013: Bloomington.

Mill, J. S. (2001). *Utilitarianism.* Batoche Books (Original work published in 1861). http://socserv.mcmaster.ca/econ/ugcm/3ll3/mill/utilitarianism.pd

Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin, 103*, 324-344. https://doi.org/10.1037/0033-2909.103.3.324

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1), 67-72. https://doi.org/10.4103/aca.ACA_157_18

Mobayed, T. (2019). Religious differences across moral foundations. *LSE*. https://blogs.lse.ac.uk/religionglobalsociety/2019/12/religious-differences-acrossmoral-foundations/.

Moll, J., & Schulkin, J. (2009). Social attachment and aversion in human moral cognition. *Neuroscience & Biobehavioral Reviews*, *33*(3), 456–465. https://doi.org/10.1016/j.neubiorev.2008.12.001

Cambridge Dictionary. (n.d.). Morality. In Cambridge-Dictionary.com dictionary. Retrieved June, 2023, from https://dictionary.cambridge.org/dictionary/english/morality

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in Mental Health Services: A Review of the Problem and Its Remediation. *Administration and Policy in Mental Health*, *39*(5), 341–352. https://doi.org/10.1007/s10488-011-0352-1

Murray, K., & Ciarrocchi, J. W. (2007). The dark side of religion, spirituality and moral emotions: shame, guilt and negative religiosity as markers for life dissatisfaction. *Journal of Pastoral Counseling*, *42*. https://openurl.ebsco.com/EPDB%3Agcd%3A13%3A3804061/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A33363020&crl=c

Nash, J. F. (1950). The Bargaining Problem. *Econometrica*, *18*(2), 155–162. https://doi.org/10.2307/1907266

Nathanson, D. L. (1992). *Shame and pride: Affect, sex, and the bird of the self*. Norton. https://books.google.co.uk/books?hl=en&lr=&id=JkT3CQAAQBAJ&oi=fnd&pg=PA9&

dq=Shame+and+pride:+Affect,+sex,+and+the+bird+of+the+self.+&ots=rdxFo_Y06h&sig=bEEZC203R-zEzsJWKd_KjjA8Goo&redir_esc=y#v=onepage&q=doi&f=false

Neff, K. D., & Dahm, K. A. (2015). Self-Compassion: What It Is, What It Does, and How It Relates to Mindfulness. In B. D. Ostafin, M. D. Robinson, & B. P. Meier (Eds.), *Handbook of Mindfulness and Self-Regulation* (pp. 121–137). Springer. https://doi.org/10.1007/978-1-4939-2263-5_10

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, *69*(1), 28-44. https://doi.org/10.1002/jclp.21923

Neusner, J., & Chilton, B. D. (2008). *The Golden Rule: The Ethics of Reciprocity in World Religions*. Bloomsbury Publishing. https://books.google.co.uk/books?hl=en&lr=&id=b3ISBwAAQBAJ&oi=fnd&pg=PR5&dq=Neusner,+J.,+%26+Chilton,+B.+D.+(2008).+The+Golden+Rule:+The+Ethics+of+Reciprocity+in+World+Religions.+Bloomsbury+Publishing.&ots=uMh2KHBj7Q&sig=nk95V5ThUIA8ZGafgYAwOMOQ7CY&redir_esc=y#v=onepage&q=Neusner%2C%20J.%2C%20%26%20Chilton%2C%20B.%20D.%20(2008).%20The%20Golden%20Rule%3A%20The%20Ethics%20of%20Reciprocity%20in%20World%20Religions.%20Bloomsbury%20Publishing.&f=false

Nichols, R. (2016). A sense of shame among the virtues. *Journal of Moral Education*, *45*(2), 166–178. https://doi.org/10.1080/03057240.2016.1174677

Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). E-research: Ethics, security, design, and control in psychological research on the Internet. *Journal of Social Issues, 58*, 161-176. https://doi.org/10.1111/1540-4560.00254

Oates, K., & Wilson, M. (2002). Nominal kinship cues facilitate altruism. *Proceedings of the Royal Society of London. Series B: Biological Sciences*. https://doi.org/10.1098/rspb.2001.1875
Office for National Statistics. (2021). *Ethnic group variable: Census 2021—Office for National Statistics*. https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/ethnicgroupnationalidentitylanguageandreligionvariablescensus2021/ethnicgroup

Ohtsubo, Y., & Watanabe, E. (2009). Do sincere apologies need to be costly? Test of a costly signaling model of apology. *Evolution and Human Behavior*, *30*(2), 114–123. https://doi.org/10.1016/j.evolhumbehav.2008.09.004

Øktedalen, T., Hagtvet, K. A., Hoffart, A., Langkaas, T. F., & Smucker, M. (2014). The Trauma Related Shame Inventory: Measuring trauma-related shame among patients with PTSD. *Journal of psychopathology and Behavioral Assessment*, *36*, 600-615. https://doi.org/10.1007/s10862-014-9422-5

Ostrom, E., & Walker, J. (2003). *Trust and Reciprocity: Interdisciplinary Lessons for Experimental Research*. Russell Sage Foundation. https://books.google.co.uk/books?hl=en&lr=&id=cfkWAwAAQBAJ&oi=fnd&pg=PR7&dq=Trust+and+Reciprocity:+Interdisciplinary+Lessons+for+Experimental+Research.+Russell+Sage+Foundation.&ots=WTU_cBnYpb&sig=q-O5eefXmWsv5kxezbDxwLO6Qzg&redir_esc=y#v=onepage&q=Trust%20and%20Reciprocity%3A%20Interdisciplinary%20Lessons%20for%20Experimental%20Research.%20Russell%20Sage%20Foundation.&f=false

Parihar, P., Tiwari, G. K., Pandey, R., & Rai, P. K. (2018). Assessing the relative impacts of gender and educational levels on the moral foundations of the students. *International Journal of Indian Psychology, 6 (4),* 11-25. https://doi.org/10.25215/0604.082

Park, N., Peterson, C., & Seligman, M. E. P. (2006). Character strengths in fifty-four nations and the fifty US states. *The Journal of Positive Psychology*, *1*(3), 118–129. https://doi.org/10.1080/17439760600619567

Pattison, S. (2010). Shame and the unwanted self. In *The shame factor.*In R. Jewett, W. Alloway, & J. G. Lacey. (Eds.). (2010). *The shame factor: How shame shapes society*. Wipf and Stock Publishers. https://books.google.co.uk/books?hl=en&lr=&id=tNNMAwAAQBAJ&oi=fnd&pg=PR7&dq=religion+and+shame&ots=5hbvTN4uyr&sig=HGXMbf-WJ_n_N5o3guwmtcDhgro&redir_esc=y#v=onepage&q&f=false

Pennisi, E. (2005). How Did Cooperative Behavior Evolve? *Science*, *309*(5731), 93–93. https://doi.org/10.1126/science.309.5731.93

Peshkovskaya, A., Myagkov, M., Babkina, T., & Lukinova, E. (2017). *Do Women Socialize Better? Evidence from a Study on Sociality Effects on Gender Differences in*

Cooperative Behavior. CEUR Workshop Proceeding, 1968, 41-51. https://mpra.ub.uni-muenchen.de/82797/

Cantrell, M. A., & Lupinacci, P. (2007). Methodological issues in online data collection. *Journal of Advanced Nursing*, *60*(5), 544-549. https://doi.org/10.1111/j.1365-2648.2007.04448.x

Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, *18*(10), 2119. https://doi.org/10.11124/JBIES-20-00167

Petersen, M. B., Sznycer, D., Sell, A., Cosmides, L., & Tooby, J. (2013). The ancestral logic of politics: Upper-body strength regulates men’s assertion of self-interest over economic redistribution. *Psychological Science*, *24*(7), 1098-1103. https://doi.org/10.1177/095679761246641

Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. American Psychological Association. https://books.google.co.uk/books?hl=en&lr=&id=vKzmCwAAQBAJ&oi=fnd&pg=PR9&dq=Character+Strengths+and+Virtues:+A+Handbook+and+Classification.+American+Psychological+Association.&ots=sTfi9Fm7FZ&sig=OZfkssxalvSL8j7zlao0IFuvUzA&redir_esc=y#v=onepage&q=Character%20Strengths%20and%20Virtues%3A%20A%20Handbook%20and%20Classification.%20American%20Psychological%20Association.&f=false

Piaget, J. (1932). *The Moral Judgment of the Child*. Routledge.

Pineles, S. L., Street, A. E., & Koenen, K. C. (2006). The differential relationships of shame-proneness and guilt-proneness to psychological and somatization symptoms. *Journal of Social and Clinical Psychology*, *25*, 688–704. doi:10.1521/jscp.2006.25.6.68810.1521/jscp.2006.25.6.688

Pinker, S. (2010). The cognitive niche: Coevolution of intelligence, sociality, and language. *Proceedings of the National Academy of Sciences*, *107*(supplement_2), 8993–8999. https://doi.org/10.1073/pnas.0914630107

Pinker, S. (1997). How the mind works. In M. Ruse (Ed*), Philosophy After Darwin* (pp. 275-288). Princeton University Press. https://doi.org/10.2307/j.ctv1jk0jrs (pp. 275-288

Pinto-Gouveia, J., & Matos, M. (2011). Can shame memories become a key to identity? The centrality of shame memories predicts psychopathology. *Applied Cognitive Psychology*, *25*(2), 281–290. https://doi.org/10.1002/acp.1689

Preston, S. D. (2013). The origins of altruism in offspring care. *Psychological Bulletin*, *139*(6), (pp 1305 1341). https://doi.org/10.1037/a0031755

Preuschoft, S., & van Schaik, C. P. (2000). Dominance and communication. In F. Aureli., & Waal, F. B. Waal., (Eds.). *Natural Conflict Resolution*, (pp 77-105). University of California Press. https://www.researchgate.net/profile/Carel-Schaik/publication/239518654_Dominance_and_communication_Conflict_management_in_various_social_settings/links/5725c3b208aef9c00b847034/Dominance-and-communication-Conflict-management-in-various-social-settings.pdf

Prinz, J. (2007). Is Morality Innate? In W. P. Sinnott-Armstrong (Ed.). *Moral Psychology: The Evolution of Morality: Adaptations and Innateness*, (pp 367-407). MIT Press. https://doi.org/10.7551/mitpress/7481.003.0028

Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review*, *118*(1), 57–75. https://doi.org/10.1037/a0021867

Ratanasiripong, P. P. (1997). *Effects of culture and religious belief on self-conscious emotions and depression: Acculturation, self-construal, belief in grace, shame, guilt, and depression among Asian-American and European-American Protestants*. The Wright Institute. https://www.proquest.com/openview/7e91f90ae7e48575ab626a49e5316611/1?pq-origsite=gscholar&cbl=18750&diss=y

Rockliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry*, 5, 132–139. https://repository.derby.ac.uk/item/94q17/a-pilot-exploration-of-heart-rate-variability-and-salivary-cortisol-responses-to-compassion-focused-imagery

Rørtveit, K., Åström, S., & Severinsson, E. (2010). The meaning of guilt and shame: A qualitative study of mothers who suffer from eating difficulties. *International Journal of Mental Health Nursing*, *19*(4), 231-239. https://doi.org/10.1111/j.1447-0349.2010.00672.x

Rose Spratt, T. J. (2023). Understanding 'fat shaming' in a neoliberal era: Performativity, healthism and the UK's 'obesity epidemic'. *Feminist Theory*, *24*(1), 86–101. https://doi.org/10.1177/14647001211048300

Rose, C. M. (1985). Possession as the Origin of Property. *The University of Chicago Law Review*, *52*(1), 73–88. https://doi.org/10.2307/1599571

Royce, J. (2005b). *The philosophy of loyalty*. In J. J. McDermott (Ed.), *The basic writings of Josiah Royce* (Vol. 2, pp. 855-1014). University of Chicago Press.

Rubin, D. C., Burt, C. D. B., & Fifield, S. J. (2003). Experimental manipulations of the phenomenology of memory*. Memory & Cognition, 31*, 877-886. https://doi.org/10.3758/BF03196442

Rubin, P. H. (2000). Hierarchy. *Human Nature*, *11*(3), 259–279. https://doi.org/10.1007/s12110-000-1013-3

Rüsch, N., Müller, M., Ajdacic-Gross, V., Rodgers, S., Corrigan, P. W., & Rössler, W. (2014). Shame, perceived knowledge and satisfaction associated with mental health as predictors of attitude patterns towards help-seeking. *Epidemiology and Psychiatric Sciences*, *23*(2), 177-187. https://doi.org/10.1017/S204579601300036X

Ryan, L., & Golden, A. (2006). 'Tick the box please': A reflexive approach to doing quantitative social research. *Sociology*, *40*(6), 1191-1200. https://doi.org/10.1177/0038038506072287

Sabnis, S. V., & Newman, D. S. (2023). Epistemological Diversity, Constructionism, and Social Justice Research in School Psychology. *School Psychology Review*, *52*(5), 625–638. https://doi.org/10.1080/2372966X.2022.2094283

Saggino, A., Carlucci, L., Sergi, M. R., D'Ambrosio, I., Fairfield, B., Cera, N., & Balsamo, M. (2017). A Validation Study of the Psychometric Properties of the Other As Shamer Scale–2. *SAGE Open*, *7*(2). https://doi.org/10.1177/2158244017704241

Sally, D., & Hill, E. (2006). The development of interpersonal strategy: Autism, theory-of-mind, cooperation and fairness. *Journal of Economic Psychology*, *27*(1), 73-97.https://doi.org/10.1016/j.joep.2005.06.015

Schaumberg, R. L., & Skowronek, S. E. (2022). Shame Broadcasts Social Norms: The Positive Social Effects of Shame on Norm Acquisition and Normative Behavior. *Psychological Science*, *33*(8), 1257–1277. https://doi.org/10.1177/09567976221075303

Scheel, C. N., Bender, C., Tuschen-Caffier, B., Brodführer, A., Matthies, S., Hermann, C., ... & Jacob, G. A. (2014). Do patients with different mental disorders show specific aspects of shame?. *Psychiatry Research*, *220*(1-2), 490-495. https://doi.org/10.1016/j.psychres.2014.07.062

Scheff, T. J. (1987). The shame-rage spiral: A case study of an interminable quarrel. In H. B. Lewis (Ed.), *The role of shame in symptom formation* (pp. 109–149). Lawrence Erlbaum Associates, Inc. https://psycnet.apa.org/record/1987-97906-005

Scheff, T. J. (2011). Shame as the master emotion: Examples from pop songs. In R. Jewett, W. Alloway, & J. G. Lacey. (Eds.). (2010). *The shame factor: How shame shapes society*. Wipf and Stock Publishers. https://books.google.co.uk/books?hl=en&lr=&id=tNNMAwAAQBAJ&oi=fnd&pg=PR7&dq=In+R.+Jewett,+W.+Alloway,+%26+J.+G.+Lacey.+(Eds.).+(2010).+The+shame+factor:+How+shame+shapes+society.+&ots=5hbvVK8syk&sig=b3k6VWfz0ipMWaAOY58AwGSaipA&redir_esc=y#v=onepage&q=doi&f=false

Scheff, T., & Mateo, S. (2016). The S-word is taboo: shame is invisible in modern societies. *Journal of General Practice*, *4*(1), 1-6. http://dx.doi.org/10.4172/2329-9126.1000217

Schore, A. N. (1994). *Affect regulation and the origin of the self: The neurobiology of emotional development* (pp. xxxiv, 670). Lawrence Erlbaum Associates, Inc. https://doi.org/10.4324/9781315680019

Schore, A. N. (2001). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, *22*(1–2), 201–269. https://doi.org/10.1002/1097-0355(200101/04)22:1<201::AID-IMHJ8>3.0.CO;2-9

Schore, A. N. (2005). Attachment, Affect Regulation, and the Developing Right Brain: Linking Developmental Neuroscience to Pediatrics. *Back to Basics*. https://doi.org/10.1542/pir.26-6-204

Schwartz, S. H. (1992). Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25, pp. 1–65). Academic Press. https://doi.org/10.1016/S0065-2601(08)60281-6

Sedighimornani, N., Rimes, K., & Verplanken, B. (2021). Factors contributing to the experience of shame and shame management: Adverse childhood experiences, peer acceptance, and attachment styles. *The Journal of Social Psychology*, *161*(2), 129-145. https://doi.org/10.1080/00224545.2020.1778616

Sell, A., Bryant, G. A., Cosmides, L., Tooby, J., Sznycer, D., Rueden, C. von, Krauss, A., & Gurven, M. (2010). Adaptations in humans for assessing physical strength from the voice. *Proceedings of the Royal Society B: Biological Sciences*. https://doi.org/10.1098/rspb.2010.0769

Sell, A., Cosmides, L., Tooby, J., Sznycer, D., von Rueden, C., & Gurven, M. (2008). Human adaptations for the visual assessment of strength and fighting ability from the body and face. *Proceedings of the Royal Society B: Biological Sciences*, *276*(1656), 575–584. https://doi.org/10.1098/rspb.2008.1177

Sell, J., Griffith, W. I., & Wilson, R. K. (1993). Are Women More Cooperative Than Men in Social Dilemmas? *Social Psychology Quarterly*, *56*(3), 211–222. https://doi.org/10.2307/2786779

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749-752. www.allresearchjournal.com

Sheen, M., Kemp, S., & Rubin, D. (2001). Twins dispute memory ownership: A new false memory phenomenon. *Memory & Cognition, 29*, 779-788. https://doi.org/10.3758/BF03196442

Shultz, S., Opie, C., & Atkinson, Q. D. (2011). Stepwise evolution of stable sociality in primates. *Nature*, *479*(7372), Article 7372. https://doi.org/10.1038/nature10601

Shweder, R. A., Nancy C. M., Mahapatra, M., & Park, L. (2013). "The “big three” of morality (autonomy, community, divinity) and the “big three” explanations of suffering." In A. M. Brandt, & P. Rozin (Eds.), *Morality and Health*, (pp.119-169). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203707463-9/big-three-morality-autonomy-community-divinity-big-three-explanations-suffering-richard-shweder-nancy-much-manamohan-mahapatra-lawrence-park

Siegel, J. A., Winter, V. R., & Cook, M. (2021). "It really presents a struggle for females, especially my little girl": Exploring fathers' experiences discussing body image with their young daughters. *Body Image*, *36*, 84-94. https://doi.org/10.1016/j.bodyim.2020.11.001

Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). *Adult Attachment Style Questionnaire* [Database record]. APA PsycTests.https://doi.org/10.1037/t08041-000

Sims-Schouten, W., Riley, S. C. E., & Willig, C. (2007). Critical Realism in Discourse Analysis: A Presentation of a Systematic Method of Analysis Using Women's Talk of Motherhood, Childcare and Female Employment as an Example. *Theory & Psychology*, *17*(1), 101–124. https://doi.org/10.1177/0959354307073153

Skyrms, B. (1996). *Evolution of the social contract*. Cambridge University Press. https://doi.org/10.1017/CBO9780511806308

Smith, J. M. (1988). Evolution and the Theory of Games. In J. M. Smith (Ed.), *Did Darwin Get It Right? Essays on Games, Sex and Evolution* (pp. 202–215). Springer US. https://doi.org/10.1007/978-1-4684-7862-4_22

Smith, J. M., & Price, G. R. (1973). The Logic of Animal Conflict. *Nature*, *246*(5427), Article 5427. https://doi.org/10.1038/246015a0

Solomon, J. (2021). Shame as a behavioral system: its links to attachment, defense, and dysregulation. In *Shame Matters* (pp. 6-20). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781003175612-2/shame-behavioral-system-judith-solomon

Spadaro, G., Graf, C., Jin, S., Arai, S., Inoue, Y., Lieberman, E., Rinderu, M. I., Yuan, M., Van Lissa, C. J., & Balliet, D. (2022). Cross-cultural variation in cooperation: A meta-analysis. *Journal of Personality and Social Psychology*, *123*(5), 1024–1088. https://doi.org/10.1037/pspi0000389

Spikins, P. (2015). *How Compassion Made Us Human: The Evolutionary Origins of Tenderness, Trust and Morality*. Pen and Sword. https://books.google.co.uk/books?hl=en&lr=&id=bEvdCQAAQBAJ&oi=fnd&pg=PA8&dq=How+Compassion+Made+Us+Human:+The+Evolutionary+Origins+of+Tenderness,+Trust+and+Morality.+&ots=7F5ZAC_7Th&sig=Snyrd6zpVu-uz7dmmMJKtrqP1Pc&redir_esc=y#v=onepage&q=How%20Compassion%20Made%20Us%20Human%3A%20The%20Evolutionary%20Origins%20of%20Tenderness%2C%20Trust%20and%20Morality.&f=false

Stevenson, R. (2017). Reasons to position your demographic section at the end of a survey. *Ruthless Research.* Retrieved 1 December 2023, from

https://ruthlessresearch.wordpress.com/2017/09/04/reasons-to-position-your-demographic-section-at-the-end-of-a-survey/

Stier, A., & Hinshaw, S. P. (2007). Explicit and implicit stigma against individuals with mental illness. *Australian Psychologist*, *42*(2), 106-117. https://doi.org/10.1111/ap.2007.42.2.106

Strauss, C., Taylor, B. L., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical Psychology Review*, *47*, 15-27. https://doi.org/10.1016/j.cpr.2016.05.004

Stuewig, J., & McCloskey, L. A. (2005). The Relation of Child Maltreatment to Shame and Guilt Among Adolescents: Psychological Routes to Depression and Delinquency. *Child Maltreatment*, *10*(4), 324–336. https://doi.org/10.1177/1077559505279308

Suhler, C. L., & Churchland, P. (2011). Can Innate, Modular "Foundations" Explain Morality? Challenges for Haidt's Moral Foundations Theory. *Journal of Cognitive Neuroscience*, *23*(9), 2103–2116. https://doi.org/10.1162/jocn.2011.21637

Szathmáry, E., & Smith, J. M. (1995). The major evolutionary transitions. *Nature*, *374*(6519), Article 6519. https://doi.org/10.1038/374227a0

Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology*, *61*(4), 598–607. https://doi.org/10.1037/0022-3514.61.4.598

Tangney, J. P. (1995). Shame and guilt in interpersonal relationships. In *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 114–139). Guilford Press. https://psycnet.apa.org/record/1995-97661-000

Tangney, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy*, *34*(9), 741-754. https://doi.org/10.1016/0005-7967(96)00034-4

Tangney, J. P. (1998). How does guilt differ from shame?. In J. Bybee (Ed). *Guilt and children* (pp. 1-17). Academic Press. https://doi.org/10.1016/B978-012148610-5/50002-3

Tangney, J. P. (2001). Constructive and destructive aspects of shame and guilt. In A. C. Bohart & D. J. Stipek (Eds.), *Constructive & destructive behavior: Implications for family, school, & society.* (2001-18146-006; pp. 127–145). American Psychological Association. https://doi.org/10.1037/10433-006

Tangney, J. P., & Dearing, R. L. (2003). *Shame and Guilt*. Guilford Press. https://books.google.co.uk/books?hl=en&lr=&id=ZdeK6TK6pAoC&oi=fnd&pg=PA1&dq=Tangney,+J.+P.,+%26+Dearing,+R.+L.+(2003).+Shame+and+Guilt.+&ots=gLx7n7e-Ib&sig=eD9tgXuZOPfewDaEokLTQ4TyEiw&redir_esc=y#v=onepage&q=Tangney%2

C%20J.%20P.%2C%20%26%20Dearing%2C%20R.%20L.%20(2003).%20Shame%20and%20Guilt.&f=false

Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (2015). *Test of Self-Conscious Affect–3* [dataset]. https://doi.org/10.1037/t06464-000

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007a). What's moral about the self-conscious emotions. In J. L. Tracey, R. W. Robins, J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research*, (pp 21-37). https://books.google.co.uk/books?hl=en&lr=&id=b7zOX2ZIBHQC&oi=fnd&pg=PA1&dq=what%27s+moral+about+the+self+The+Self-conscious+Emotions:+Theory+and+Research&ots=87yLIUXjFq&sig=Amxcwttlf-Wk3TYMCbwnwkE1tW4&redir_esc=y#v=onepage&q=what's%20moral%20about%20the%20self%20The%20Self-conscious%20Emotions%3A%20Theory%20and%20Research&f=false

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007b). Moral Emotions and Moral Behavior. *Annual Review of Psychology*, *58*, 345–372. https://doi.org/10.1146/annurev.psych.56.091103.070145

Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology, 62*(4), 669–675. https://doi.org/10.1037/0022-3514.62.4.669

Taylor, S. E. (2010). Mechanisms linking early life stress to adult health outcomes. *Proceedings of the National Academy of Sciences*, *107*(19), 8507-8512. https://doi.org/10.1073/pnas.1003890107

Taylor, S. E., Lerner, J. S., Sage, R. M., Lehman, B. J., & Seeman, T. E. (2004). Early environment, emotions, responses to stress, and health. *Journal of Personality*, *72*(6), 1365-1394. https://doi.org/10.1111/j.1467-6494.2004.00300.x

Trivers, R. L. (1971). The evolution of reciprocal altruism*. The Quarterly Review of Biology, 46(1),* 35-57. https://www.journals.uchicago.edu/doi/10.1086/406755

Tibbetts, S. G. (1997). Shame and Rational Choice in Offending Decisions. *Criminal Justice and Behavior*, *24*(2), 234–255. https://doi.org/10.1177/0093854897024002006

Tomasello, M. (2016). *A Natural History of Human Morality*. Harvard University Press. https://books.google.co.uk/books?hl=en&lr=&id=_8IZEAAAQBAJ&oi=fnd&pg=PP1&dq=Tomasello,+M.+(2016).+A+Natural+History+of+Human+Morality.+&ots=uiUrS0vtvZ&sig=qgXgODQZppfFACQJyuk-OzAhIdw&redir_esc=y#v=onepage&q=Tomasello%2C%20M.%20(2016).%20A%20Natural%20History%20of%20Human%20Morality.&f=false

Tomasello, M., & Vaish, A. (2013). Origins of Human Cooperation and Morality. *Annual Review of Psychology*, *64*(1), 231–255. https://doi.org/10.1146/annurev-psych-113011-143812

Tracy, J. L., & Robins, R. W. (2006). Appraisal antecedents of shame and guilt: Support for a theoretical model. *Personality and Social Psychology Bulletin*, *32*(10), 1339-1351. https://doi.org/10.1177/014616720629021

Vaish, A., & Tomasello, M. (2023). The early ontogeny of human cooperation and morality. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development.,* (3rd Ed*).* (pp. 200–216). Routledge.

Van der Kolk, B. (2014). *The body keeps the score: brain, mind, and body in the healing of trauma.* Viking.

Voorst, C. v., & Voorst, C. van. (2017). Cooperation and the role of shame and guilt [Dissertation, Tilburg University. Sociale Psychologie]. http://arno.uvt.nl/show.cgi?fid=144643

Watson, J. B. (1913). Psychology as the Behaviorist Views It. *Psychological Review*, *20*(2), 158-177. https://doi.org/10.1037/h0074428

Weber, M. (2002). *The protestant ethic and the spirit of capitalism.* (S. Kahlberg, Trans). Roxbury. (Original work published 1905). https://doi.org/10.4324/9781315063645

Weeden, J., & Kurzban, R. (2013). What predicts religiosity? A multinational analysis of reproductive and cooperative morals. *Evolution and Human Behavior*, *34*(6), 440–445. https://doi.org/10.1016/j.evolhumbehav.2013.08.006

Weeden, J., & Kurzban, R. (2016). Do people naturally cluster into liberals and conservatives?. *Evolutionary Psychological Science*, *2*, 47-57. https://doi.org/10.1007/s40806-015-0036-2

Weiss D, S, & Marmar C, R. (1997). *Trauma and PTSD* (pp. 399-411). Guilford Press.

Willig, C. (2013). *Introducing Qualitative Research in Psychology*. McGraw-Hill Education. https://books.google.co.uk/books?hl=en&lr=&id=yDtFBgAAQBAJ&oi=fnd&pg=PR7&dq=Willig,+C.+(2013).+Introducing+Qualitative+Research+in+Psychology.&ots=EldGkOnU8b&sig=1DVeYuwDZ0qjNrqrOaXwl4C7aPQ&redir_esc=y#v=onepage&q=Willig%2C%20C.%20(2013).%20Introducing%20Qualitative%20Research%20in%20Psychology.&f=false

Wilson, R. W. (1981). Conformity and deviance regarding moral rules in Chinese society: A socialization perspective. In A. Kleinman, L. Tsung-Yi. (Eds.), *Normal and abnormal behavior in Chinese culture* (pp. 117-136). Springer. https://books.google.co.uk/books?hl=en&lr=&id=JFnqr74bCxAC&oi=fnd&pg=PR9&dq=A.+Kleinman,+L.+Tsung-Yi.+(Eds.),+Normal+and+abnormal+behavior+in+Chinese+culture+(pp.+117-

136).+Springer.&ots=mTLqzka3ao&sig=9i8fbx0r17qzJvsf8T5VWa7WQG8&redir_esc=y#v=onepage&q&f=false

Wong, Y., & Tsai, J. (2007). Cultural models of shame and guilt. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 209–223). Guilford Press. https://books.google.co.uk/books?hl=en&lr=&id=b7zOX2ZIBHQC&oi=fnd&pg=PA1&dq=In+J.+L.+Tracy,+R.+W.+Robins,+%26+J.+P.+Tangney+(Eds.),+The+self-conscious+emotions&ots=87yLITXiBn&sig=T-16wBrzTQQtztUYZE_nCF8t3bQ#v=onepage&q=In%20J.%20L.%20Tracy%2C%20R.%20W.%20Robins%2C%20%26%20J.%20P.%20Tangney%20(Eds.)%2C%20The%20self-conscious%20emotions&f=false

Yakeley, J. (2018). Shame, culture and mental health. *Nordic Journal of Psychiatry*, *72*(1), (pp 20-22). https://doi.org/10.1080/08039488.2018.1525641

Yang, Y., Guo, Z., Wu, J., & Kou, Y. (2020). Self-Compassion Relates to Reduced Unethical Behavior Through Lower Moral Disengagement. *Mindfulness*, *11*(6), 1424–1432. https://doi.org/10.1007/s12671-020-01354-1

Zakharin, M., Bates, T. C., Curry, O. S., & Lewis, G. (2023). Modular morals: The genetic architecture of morality as cooperation. *OSF preprints*. https://doi.org/10.31234/osf.io/srjyq

6. APPENDICES

Appendix A. Literature Review Search Strategy.

Guiding question: Is there a relationship between shame and morality as cooperation?

Search terms: The following search terms were input using Boolean operators 'AND'.

- Shame: Shame
- Morality: Moral*

The above search terms were used across EBSCO (Academic Search Ultimate, PsyInfo, PsyArticles) and Scopus. Where possible, keyword searches were used. See below for search details across different databases:

Table 6. Scoping review output.

Database	Date	Search	Area/Thesaurus Term	Subject Terms /Keywords	Filters	Results
PsycArticle	06/10/23	shame and moral*	n/a	Morality, Shame	1991-2023, English language, full text	8
PsycInfo	10/12/23	shame and moral*	n/a	Morality, Shame	1991-2023, English language, full text	28
Scopus	13/10/2023	shame and moral*	Psychology (area)	Morality, Moral, Shame	1991-2023, English language, journal article	247
Academic Search Ultimate (select psych in thesaurus term)	06/10/23	shame and moral*	Psychology (thesaurus term)	n/a	1991-2023, English language, academic journals, full text	41

Within Google Scholar, the terms ‘shame and morality’ were searched, with 6 relevant results for review. Reference lists of relevant studies were also reviewed. Studies were then reviewed

Inclusion criteria:

- Population: adults above 18 years old
- Empirical studies
- With shame as the independent or predictor variable, upon morality as defined by the MAC domains (possession, division, reciprocity, allocation of resources to kin, group loyalty, displaying heroism, displaying deference).

Exclusion criteria:

- Population: not specific to certain groups e.g. criminals/veterans
- No theories/frameworks/models or general exploration of concept
- Studies investigating how moral transgression leads to shame
- Shame as an ingroup experience or the shaming of others
- Qualitative studies

Overall, 326 studies were reviewed for relevance to the present research. Following title and abstract review, 52 texts were read in full, resulting in 4 eligible studies. References lists of these studies were then reviewed which produced 3 additional relevant results, totalling 6 studies included in the review.

Appendix B. Ethics Application dated May 2023.

UNIVERSITY OF EAST LONDON

School of Psychology

APPLICATION FOR RESEARCH ETHICS APPROVAL

FOR RESEARCH INVOLVING HUMAN PARTICIPANTS

(Updated October 2021)

FOR BSc RESEARCH;

MSc/MA RESEARCH;

PROFESSIONAL DOCTORATE RESEARCH IN CLINICAL, COUNSELLING & EDUCATIONAL PSYCHOLOGY

Section 1 – Guidance on Completing the Application Form (please read carefully)	
1.1	Before completing this application, please familiarise yourself with: • British Psychological Society's Code of Ethics and Conduct • UEL's Code of Practice for Research Ethics • UEL's Research Data Management Policy • UEL's Data Backup Policy
1.2	Email your supervisor the completed application and all attachments as ONE WORD DOCUMENT. Your supervisor will look over your application and provide feedback.
1.3	When your application demonstrates a sound ethical protocol, your supervisor will submit it for review.
1.4	Your supervisor will let you know the outcome of your application. Recruitment and data collection must **NOT** commence until your ethics application has been approved, along with other approvals that may be necessary (see section 7).
1.5	Research in the NHS: • If your research involves patients or service users of the NHS, their relatives or carers, as well as those in receipt of services provided under contract to

	the NHS, you will need to apply for HRA approval/NHS permission (through IRAS). You DO NOT need to apply to the School of Psychology for ethical clearance. • Useful websites: https://www.myresearchproject.org.uk/Signin.aspx https://www.hra.nhs.uk/approvals-amendments/what-approvals-do-i-need/hra-approval/ • If recruitment involves NHS staff via the NHS, an application will need to be submitted to the HRA in order to obtain R&D approval. This is in addition to separate approval via the R&D department of the NHS Trust involved in the research. UEL ethical approval will also be required. • HRA/R&D approval is not required for research when NHS employees are not recruited directly through NHS lines of communication (UEL ethical approval is required). This means that NHS staff can participate in research without HRA approval when a student recruits via their own social/professional networks or through a professional body such as the BPS, for example. • The School strongly discourages BSc and MSc/MA students from designing research that requires HRA approval for research involving the NHS, as this can be a very demanding and lengthy process.
1.6	If you require Disclosure Barring Service (DBS) clearance (see section 6), please request a DBS clearance form from the Hub, complete it fully, and return it to applicantchecks@uel.ac.uk. Once the form has been approved, you will be registered with GBG Online Disclosures and a registration email will be sent to you. Guidance for completing the online form is provided on the GBG website: https://fadv.onlinedisclosures.co.uk/Authentication/Login You may also find the following website to be a useful resource: https://www.gov.uk/government/organisations/disclosure-and-barring-service
1.7	Checklist, the following attachments should be included if appropriate: • Study advertisement • Participant Information Sheet (PIS) • Participant Consent Form • Participant Debrief Sheet • Appendix f • Form/Country-Specific Risk Assessment Form (see section 5) • Permission from an external organisation (see section 7)

	• Original and/or pre-existing questionnaire(s) and test(s) you intend to use • Interview guide for qualitative studies • Visual material(s) you intend showing participants

Section 2 – Your Details		
2.1	**Your name:**	Megan Waterman Sarah Turner
2.2	**Your supervisor's name:**	Dr Matthew Jones Chesters
2.3	**Name(s) of additional UEL supervisors:**	Dr Trishna Patel
2.4	**Title of your programme:**	Professional Doctorate in Clinical Psychology
2.5	**UEL assignment submission date:**	May 2024
		July 2024

Section 3 – Project Details		
Please give as much detail as necessary for a reviewer to be able to fully understand the nature and purpose of your research.		
3.1	**Study title:** Please note - If your study requires registration, the title inserted here must be the same as that on PhD Manager	Morality-as-Cooperation and its relationships with psychological wellbeing.
3.2	**Summary of study background and aims (using lay language):**	The conceptualisation of morality has been widely debated across the last century. Increasing, theorists have come to understand it from an evolutionary perspective, highlighting how cooperation within and

		between social groups realises mutual benefit, helping to sustain and advance the group. These ideas underpin the *Morality as Cooperation* (MAC) theory (Curry, 2016), which defines seven core domains of morality, which can be addressed via the *Morality as Cooperation Questionnaire (MAC-Q)* (Curry, Jones Chesters & Lissa, 2018). Morality has been linked to many concepts related to mental health, such as distress. Moral identity has been shown to predict wellbeing (Hardy et al, 2012), with meta-analyses showing how moral distress is reliably associated with poor mental health outcomes (McEwen, Alisic, & Jobson, 2021). Regardless of diagnosis, common concerns for those with mental health difficulties have also been linked to morality; for example, morality has been linked to transdiagnostic concepts, such as shame (Nazarov et al, 2015). Shame is understood as a self-conscious emotion, impacting one's moral sense of self, and associated with vulnerability to psychological distress (Gilbert, 1998; Kim et al, 2011; (Tangney, Stuewig & Mashek, 2007)), and interpersonal problems (Matos, Pinto-Gouveia & Gilbert, 2013). Compassion is also key to morality, referring to kindness, warmth and empathy to others, as it encompasses our urge to look after others (Spikins, 2015). Compassion towards the self has been shown to moderate the relationship between moral conflict and mental distress, such as in post-traumatic stress and depression (Forkus, Brienes & Weiss, 2019).

		Self compassion has also been associated with ethical behaviour (Yang, Guo & Kuo, 2020). Compassion towards others may be considered an evolutionary mechanism to support the group (Gilbert, 2019) and has been related to moral reasoning (Loewenstein & Small, 2007). Another important facet of how we treat others is set out in attachment theory, which concerns patterns learnt in childhood and how these influence how individuals relate to one another, throughout their lives (Bowlby, 1969). Attachment theory is prominent in understandings of mental distress: secure attachment has been linked to moral and ethical behaviour (Chugh, Kern, Zhu & Lee, 2014); attachment anxiety and avoidance are related to differential moral concerns (Koleva, Selterman & Graham, 2013) Yet to be examined is the relationship between MAC and these intra- and inter- personal concepts.
3.3	**Research question(s):**	• Are there relationships between MAC and attachment, early shame, early warmth, compassion, and wellbeing or distress? • How do the seven MAC domains relate to these psychological constructs? • Are these relationships influenced by other constructs or demographics included in the study?
3.4	**Research design:**	This study will be a cross-sectional correlation design: the predictor variable is MAC; and dependent variables are attachment, early shame, early warmth, compassion, and wellbeing/distress.

3.5	**Participants:** Include all relevant information including inclusion and exclusion criteria	A priori power calculation is not possible as population standard deviations are unknown. However, an accepted calculation (Green, 1991) suggests N>104 plus the number of predictor variables (N>104+*m*) with power =.8 and α=.05, meaning the study requires 110 participants. Participants will be recruited from online sources and sources such as Instagram, Facebook, and online mental health forums. Researchers aim to involve a range of participants, so the only inclusion criteria will be (a) sufficient English language to understand the study, and agree to take part; and (b) aged 18 years+. Demographic information will be recorded at the end of the survey, including age, gender, years of education, and where appropriate a short statement concerning psychological wellbeing or symptoms.
3.6	**Recruitment strategy:** Provide as much detail as possible and include a backup plan if relevant	Advertisements for the study will be placed in various online, open forums (e.g., social media, mental health forums, and crowdsourcing websites). The online advertisement will direct potential participants to the study, where they can read the study information sheet for further information regarding the process. Should they wish to be involved, they will then indicate their consent using the online consent form. If a back-up plan is needed, we will undertake recruitment via a convenience sample of contacts, colleagues, peers, and students, with subsequent snowball sampling.
3.7	**Measures, materials or equipment:** Provide detailed information, e.g., for measures, include scoring instructions, psychometric properties, if	The study will require access to Qualtrics survey software online and the scales identified below. Administration instructions and scoring instructions will be a set out in the questionnaire rubrics. An application to UEL will be made, in line with Trainee

	freely available, permissions required, etc.	budgets, to access £100 for a voucher to be used for the raffle. Scales involved include: • Morality as Cooperation Questionnaire (Curry, Chesters & Lissa, 2018). The MAC-Q is split into two subscales: a 57-item scale around morality judgement (internal consistency 0.53-0.83, test re-test reliability 0.66-0.87) and a 97-item scale measuring the moral relevance of domains (internal consistency 0.76-0.86, test re-test reliability 0.79-0.89). • Compassion & Engagement & Actions Scale (Gilbert et al, 2017): three subsections assess compassion we experience: for others, from others, and self-compassion (each comprising an 8-item subscale and 5 item subscale), including attention checks. The scale has good test-retest reliability (*r*=0.74-0.88). • Attachment Style Questionnaire (short-form; Alexander, Feeney, Hohaus & Noller ,2001): a 29-item measure of anxious and avoidant attachment tendencies, with good internal consistency (α=.83-.85) and test re-test reliability (*r*=.74-.80). • Early Memories of Warmth & Safeness (Richter, Gilbert, & McEwan, 2009): a 21-item scale measuring recall of feeling warm, safe, and cared for in childhood. • ● Shame Experiences Interview (SEI; Matos & Pinto-Gouveia, 2006): a semi-structured interview designed to assess the phenomenology of shame experiences from childhood or adolescence. This interview has been adapted for use as an online questionnaire and permission has been granted from the author to use a streamlined version. This will include shame memory description and impact of shame

		memory (part 1), coping (part 3), others' responses (part 4) and frequency (part 6) domains (provided in appendix).	
3.8	**Data collection:** Provide information on how data will be collected from the point of consent to debrief	Data will be collected via an online questionnaire on Qualtrics (held by the UEL account). The information page will be presented on the first page of the online survey. On the second page, participants will need to fill the consent form. This will outline the study purpose and ethical procedures as well as reminding participants of their right to withdraw. Participants will be able to fill the questionnaires only if they give consent. They will then answer the questionnaires on the following pages. If participants do not provide consent, they will be taken to the final page of the study. The debrief form will be presented on the last page of the online survey. Please see the Appendices for the information sheet, consent form and the debrief sheet.	
3.9	**Will you be engaging in deception?**	**YES** ☐	**NO** X
	If yes, what will participants be told about the nature of the research, and how/when will you inform them about its real nature?	n/a	
3.10	**Will participants be reimbursed?**	**YES** ☐	**NO** X
	If yes, please detail why it is necessary.	n/a	
	How much will you offer?	n/a	

	Please note - This must be in the form of vouchers, not cash.	
3.11	**Data analysis:**	A quantitative approach will be taken, using SPSS for statistical analysis. Regression will address the relationships between morality (measured by the MAC-Q) and the transdiagnostic constructs (as described above). The individual domains within the MAC-Q will also be investigated using regression in relation to the transdiagnostic concepts. An exploratory factor analysis will also examine the dimensions within the measures used. If necessary and useful, a moderation or mediation may be undertaken.

Section 4 – Confidentiality, Security and Data Retention			
It is vital that data are handled carefully, particularly the details about participants. For information in this area, please see the UEL guidance on data protection, and also the UK government guide to data protection regulations. If a Research Data Management Plan (RDMP) has been completed and reviewed, information from this document can be inserted here.			
4.1	**Will the participants be anonymised at source?**	**YES** X	**NO** ☐
	If yes, please provide details of how the data will be anonymised.	Participants will not be asked to provide their name or other identifying details when completing the survey. They will be given a participant ID which will allow them to withdraw their data from the study if they wish to do so. This participant ID will enable the researcher to identify their data and delete it easily.	

4.2	**Are participants' responses anonymised or are an anonymised sample?**	**YES** X	**NO** ☐
	If yes, please provide details of how data will be anonymised (e.g., all identifying information will be removed during transcription, pseudonyms used, etc.).	Participants will not be asked to provide their name or other identifying details when completing the survey. Participants will be assigned a unique participant ID number. Consent forms will be stored away from questionnaire responses.	
4.3	**How will you ensure participant details will be kept confidential?**	Any personal data that is collected will be held securely and processed in accordance with the UK GDPR and the Data Protection Act 2018. Participants will not be identified by the data collected, on any material resulting from the data collected, or in any write-up of the research. The only personal information that will be retained will be information willingly given by the participant if they opt-in to the raffle (held as thanks for their participation). Email addresses will be securely stored in a password-protected file which is only accessible to the researchers and supervisors and will be anonymised as reasonably possible. Researchers will contact the winners via email to gain further personal information required to receive the voucher. It will then be destroyed once the data collection has ended, and the raffle winners chosen.	
4.4	**How will data be securely stored and backed up during the research?**	The data will be stored on my UEL's password protected OneDrive account in a folder that is not synchronised on any devices. Data will be sent to the supervisor as a backup during the	

	Please include details of how you will manage access, sharing and security	study and stored on the supervisor's OneDrive account.	
4.5	**Who will have access to the data and in what form?** (e.g., raw data, anonymised data)	The two project researchers and our supervisors will have access to the raw data (which is anonymous). Examiners may also have access to the data if requested.	
4.6	**Which data are of long-term value and will be retained?** (e.g., anonymised interview transcripts, anonymised databases)	The anonymised dataset is of long-term value.	
4.7	**What is the long-term retention plan for this data?**	Anonymised research data will be securely stored on my supervisor's UEL's password-protected OneDrive account for a maximum of 3 years, following which all data will be deleted.	
4.8	**Will anonymised data be made available for use in future research by other researchers?**	**YES** X	**NO** ☐
	If yes, have participants been informed of this?	**YES** X	**NO** ☐
4.9	**Will personal contact details be retained to contact participants in the future for other research studies?**	**YES** ☐	**NO** X
	If yes, have participants been informed of this?	☐	**N/A** X

Section 5 – Risk Assessment

<table>
<tr><td colspan="4">If you have serious concerns about the safety of a participant, or others, during the course of your research please speak with your supervisor as soon as possible. If there is any unexpected occurrence while you are collecting your data (e.g., a participant or the researcher injures themselves), please report this to your supervisor as soon as possible.</td></tr>
<tr><td rowspan="2">5.1</td><td>Are there any potential physical or psychological risks to participants related to taking part?
(e.g., potential adverse effects, pain, discomfort, emotional distress, intrusion, etc.)</td><td>YES
X</td><td>NO
☐</td></tr>
<tr><td>If yes, what are these, and how will they be minimised?</td><td colspan="2">Due to the sensitive topics discussed in the questionnaires, some participants may experience psychological distress. To minimise this risk, participants will be given a brief overview of the nature of the questionnaires in the study information sheet and consent forms prior to commencing the study. This will enable participants to make an informed choice as to whether they wish to proceed. Signposting information for supporting agencies and wellbeing services will be provided at the end of the study in the debrief form. Furthermore, contact details of the researchers and the project supervisors will be included in the debrief form in case the participants want an in-person debrief meeting.</td></tr>
<tr><td rowspan="2">5.2</td><td>Are there any potential physical or psychological risks to you as a researcher?</td><td>YES
☐</td><td>NO
X</td></tr>
<tr><td>If yes, what are these, and how will they be minimised?</td><td colspan="2">Any communication with your participants will be using UEL email accounts. For questionnaires, there are usually no potential</td></tr>
</table>

		physical or psychological risks for the researcher except for the risk to the researcher's online identity.		
5.3	**If you answered yes to either 5.1 and/or 5.2, you will need to complete and include a General Risk Assessment (GRA) form (signed by your supervisor). Please confirm that you have attached a GRA form as an appendix:**	**YES** X		
5.4	**If necessary, have appropriate support services been identified in material provided to participants?**	**YES** X	**NO** ☐	**N/A** ☐
5.5	**Does the research take place outside the UEL campus?**	**YES** X	**NO** ☐	
	If yes, where?	Online		
5.6	**Does the research take place outside the UK?**	**YES** X	**NO** X	
	If yes, where?	Online - country-specific risk assessment not required		
	If yes, in addition to the General Risk Assessment form, a Country-Specific Risk Assessment form must also be completed and included (available in the Ethics folder in the Psychology Noticeboard). Please confirm a Country-Specific Risk Assessment form has been attached as an appendix.	**N/A** X		

	Please note - A Country-Specific Risk Assessment form is not needed if the research is online only (e.g., Qualtrics survey), regardless of the location of the researcher or the participants.	
5.7	**Additional guidance:** • For assistance in completing the risk assessment, please use the AIG Travel Guard website to ascertain risk levels. Click on 'sign in' and then 'register here' using policy # 0015865161. Please also consult the Foreign Office travel advice website for further guidance. • For on campus students, once the ethics application has been approved by a reviewer, all risk assessments for research abroad must then be signed by the Director of Impact and Innovation, Professor Ian Tucker (who may escalate it up to the Vice Chancellor). • For distance learning students conducting research abroad in the country where they currently reside, a risk assessment must also be carried out. To minimise risk, it is recommended that such students only conduct data collection online. If the project is deemed low risk, then it is not necessary for the risk assessment to be signed by the Director of Impact and Innovation. However, if not deemed low risk, it must be signed by the Director of Impact and Innovation (or potentially the Vice Chancellor). • Undergraduate and M-level students are not explicitly prohibited from conducting research abroad. However, it is discouraged because of the inexperience of the students and the time constraints they have to complete their degree.	

Section 6 – Disclosure and Barring Service (DBS) Clearance			
6.1	**Does your research involve working with children (aged 16 or under) or vulnerable adults (*see below for definition)?** If yes, you will require Disclosure Barring Service (DBS) or equivalent (for those residing in countries	**YES** ☐	**NO** X

	outside of the UK) clearance to conduct the research project		
	* You are required to have DBS or equivalent clearance if your participant group involves: (1) Children and young people who are 16 years of age or under, or (2) 'Vulnerable' people aged 16 and over with particular psychiatric diagnoses, cognitive difficulties, receiving domestic care, in nursing homes, in palliative care, living in institutions or sheltered accommodation, or involved in the criminal justice system, for example. Vulnerable people are understood to be persons who are not necessarily able to freely consent to participating in your research, or who may find it difficult to withhold consent. If in doubt about the extent of the vulnerability of your intended participant group, speak with your supervisor. Methods that maximise the understanding and ability of vulnerable people to give consent should be used whenever possible.		
6.2	**Do you have DBS or equivalent (for those residing in countries outside of the UK) clearance to conduct the research project?**	☐	**N/A** X
6.3	**Is your DBS or equivalent (for those residing in countries outside of the UK) clearance valid for the duration of the research project?**	☐	**N/A** X
6.4	**If you have current DBS clearance, please provide your DBS certificate number:**	N/A	
	If residing outside of the UK, please detail the type of clearance and/or provide certificate number.	Please provide details of the type of clearance, including any identification information such as a certificate number	
6.5	**Additional guidance:** • If participants are aged 16 or under, you will need two separate information sheets, consent forms, and debrief forms (one for the participant, and one for their parent/guardian).		

	• For younger participants, their information sheets, consent form, and debrief form need to be written in age-appropriate language.

Section 7 – Other Permissions			
7.1	**Does the research involve other organisations (e.g., a school, charity, workplace, local authority, care home, etc.)?**	**YES** ☐	**NO** X
	If yes, please provide their details.	Please provide details of organisation	
	If yes, written permission is needed from such organisations (i.e., if they are helping you with recruitment and/or data collection, if you are collecting data on their premises, or if you are using any material owned by the institution/organisation). Please confirm that you have attached written permission as an appendix.	**N/A**	
7.2	**Additional guidance:** • Before the research commences, once your ethics application has been approved, please ensure that you provide the organisation with a copy of the final, approved ethics application or approval letter. Please then prepare a version of the consent form for the organisation themselves to sign. You can adapt it by replacing words such as 'my' or 'I' with 'our organisation' or with the title of the organisation. This organisational consent form must be signed before the research can commence. • If the organisation has their own ethics committee and review process, a SREC application and approval is still required. Ethics approval from SREC can be gained before approval from another research ethics committee is obtained. However, recruitment and data collection are NOT to commence until your research has been approved by the School and other ethics committee/s.		

Section 8 – Declarations

8.1	**Declaration by student. I confirm that I have discussed the ethics and feasibility of this research proposal with my supervisor:**	**YES** X
8.2	**Student's name:** (Typed name acts as a signature)	Megan Waterman Sarah Turner
8.3	**Student's number:**	u2195644 u2195639
8.4	**Date: 28 April 2023**	**28 April 2023**
Supervisor's declaration of support is given upon their electronic submission of the application		

Student checklist for appendices – *for student use only*

Documents attached to ethics application	YES	N/A
Study advertisement	X	☐
Participant Information Sheet (PIS)	X	☐
Consent Form	X	☐
Participant Debrief Sheet	X	☐
Risk Assessment Form	X	☐
Country-Specific Risk Assessment Form	☐	X
Permission(s) from an external organisation(s)	☐	X
Pre-existing questionnaires that will be administered	☐	☐
Researcher developed questionnaires/questions that will be administered	☐	X

Pre-existing tests that will be administered	☐	X
Researcher developed tests that will be administered	☐	X
Interview guide for qualitative studies	☐	X
Any other visual material(s) that will be administered	☐	X
All suggested text in RED has been removed from the appendices	☐	☐
All guidance boxes have been removed from the appendices	X	☐

Appendix C. Ethical approval letter.

School of Psychology Ethics Committee

NOTICE OF ETHICS REVIEW DECISION LETTER

For research involving human participants

BSc/MSc/MA/Professional Doctorates in Clinical, Counselling and Educational Psychology

Reviewer: Please complete sections in blue | Student: Please complete/read sections in orange

Details	
Reviewer:	Please type your full name **Deborah Lee**
Supervisor:	Please type supervisor's full name **Matthew Jones Chesters**
Student:	Please type student's full name **Megan Waterman & Sarah Turner**
Course:	Please type course name **Clinical doctorate**
Title of proposed study:	Please type title of proposed study

Checklist (Optional)			
	YES	**NO**	**N/A**
Concerns regarding study aims (e.g., ethically/morally questionable, unsuitable topic area for level of study, etc.)	☐	☐	☐
Detailed account of participants, including inclusion and exclusion criteria	☐	☐	☐

Concerns regarding participants/target sample	☐	☐	☐
Detailed account of recruitment strategy	☐	☐	☐
Concerns regarding recruitment strategy	☐	☐	☐
All relevant study materials attached (e.g., freely available questionnaires, interview schedules, tests, etc.)	☐	☐	☐
Study materials (e.g., questionnaires, tests, etc.) are appropriate for target sample	☐	☐	☐
Clear and detailed outline of data collection	☐	☐	☐
Data collection appropriate for target sample	☐	☐	☐
If deception being used, rationale provided, and appropriate steps followed to communicate study aims at a later point	☐	☐	☐
If data collection is not anonymous, appropriate steps taken at later stages to ensure participant anonymity (e.g., data analysis, dissemination, etc.) – anonymisation, pseudonymisation	☐	☐	☐
Concerns regarding data storage (e.g., location, type of data, etc.)	☐	☐	☐
Concerns regarding data sharing (e.g., who will have access and how)	☐	☐	☐
Concerns regarding data retention (e.g., unspecified length of time, unclear why data will be retained/who will have access/where stored)	☐	☐	☐
If required, General Risk Assessment form attached	☐	☐	☐
Any physical/psychological risks/burdens to participants have been sufficiently considered and appropriate attempts will be made to minimise	☐	☐	☐
Any physical/psychological risks to the researcher have been sufficiently considered and appropriate attempts will be made to minimise	☐	☐	☐
If required, Country-Specific Risk Assessment form attached	☐	☐	☐
If required, a DBS or equivalent certificate number/information provided	☐	☐	☐
If required, permissions from recruiting organisations attached (e.g., school, charity organisation, etc.)	☐	☐	☐
All relevant information included in the participant information sheet (PIS)	☐	☐	☐

Information in the PIS is study specific	☐	☐	☐
Language used in the PIS is appropriate for the target audience	☐	☐	☐
All issues specific to the study are covered in the consent form	☐	☐	☐
Language used in the consent form is appropriate for the target audience	☐	☐	☐
All necessary information included in the participant debrief sheet	☐	☐	☐
Language used in the debrief sheet is appropriate for the target audience	☐	☐	☐
Study advertisement included	☐	☐	☐
Content of study advertisement is appropriate (e.g., researcher's personal contact details are not shared, appropriate language/visual material used, etc.)	☐	☐	☐

Decision options	
APPROVED	**Ethics approval for the above-named research study has been granted from the date of approval (see end of this notice), to the date it is submitted for assessment.**
APPROVED - BUT MINOR AMENDMENTS ARE REQUIRED BEFORE THE RESEARCH COMMENCES	**In this circumstance, the student must confirm with their supervisor that all minor amendments have been made before the research commences. Students are to do this by filling in the confirmation box at the end of this form once all amendments have been attended to and emailing a copy of this decision notice to the supervisor. The supervisor will then forward the student's confirmation to the School for its records.** **Minor amendments guidance: typically involve clarifying/amending information presented to participants (e.g., in the PIS, instructions), further detailing of how data will be securely handled/stored, and/or ensuring consistency in information presented across materials.**
NOT APPROVED - MAJOR AMENDMENTS AND RE-SUBMISSION REQUIRED	**In this circumstance, a revised ethics application must be submitted and approved before any research takes place. The revised application will be reviewed by the same reviewer. If in**

	doubt, students should ask their supervisor for support in revising their ethics application. **Major amendments guidance: typically insufficient information has been provided, insufficient consideration given to several key aspects, there are serious concerns regarding any aspect of the project, and/or serious concerns in the candidate's ability to ethically, safely and sensitively execute the study.**

Decision on the above-named proposed research study	
Please indicate the decision:	APPROVED - MINOR AMENDMENTS ARE REQUIRED BEFORE THE RESEARCH COMMENCES

Minor amendments
Please clearly detail the amendments the student is required to make
1. Participant information sheet page 16. Make it clearer that withdrawing 'at any time' means during the research, not after it, as after it there is a clear time limit after which withdrawing is not available, so to say 'at any time' is both confusing and incorrect. (I appreciate this is an error in the template.) 2. 5.2 You will be reading about a series of difficult events for respondents – I would suggest that being more aware of the impact on you as researchers will be wise, rather than ticking the 'no' box for potential risks for you. I would expect to see some reflection on this ahead of the research taking place. 3. I don't follow how 'we don't expect any distress to be caused' by people recalling 'difficult thoughts and feelings', especially looking at what the respondents are being asked to recall. I think this needs more thought and some more detail added for respondents so they can be more certain if it is a study that they wish to risk undertaking. I also think that asking people to 'speak to friends and family' when some of what they recall may well be about at least their families, and offering them only Mind, Samaritans, mindfulness exercises, and a search for NHS therapy is problematic, page 16 participant information sheet. It feels like opening up some very sensitive areas and then offering some very generalised, and overstretched and limited, services. Can this be rethought to

hold more in mind the nature of what is being asked? If these are the only services that feel appropriate, I'd look for more in the participant details of what is being asked of them.

Major amendments
Please clearly detail the amendments the student is required to make

Assessment of risk to researcher		
Has an adequate risk assessment been offered in the application form?	**YES** ☐	**NO** ☐
	If no, please request resubmission with an adequate risk assessment.	
If the proposed research could expose the researcher to any kind of emotional, physical or health and safety hazard, please rate the degree of risk:		
HIGH	**Please do not approve a high-risk application. Travel to countries/provinces/areas deemed to be high risk should not be permitted and an application not be approved on this basis. If unsure, please refer to the Chair of Ethics.**	☐

MEDIUM	**Approve but include appropriate recommendations in the below box.**	☐
LOW	**Approve and if necessary, include any recommendations in the below box.**	☐
Reviewer recommendations in relation to risk (if any):	Please insert any recommendations	

Reviewer's signature	
Reviewer: **(Typed name to act as signature)**	**Deborah Lee**
Date:	**18/07/2023**
This reviewer has assessed the ethics application for the named research study on behalf of the School of Psychology Ethics Committee	

RESEARCHER PLEASE NOTE

For the researcher and participants involved in the above-named study to be covered by UEL's Insurance, prior ethics approval from the School of Psychology (acting on behalf of the UEL Ethics Committee), and confirmation from students where minor amendments were required, must be obtained before any research takes place.

For a copy of UEL's Personal Accident & Travel Insurance Policy, please see the Ethics Folder in the Psychology Noticeboard.

Confirmation of minor amendments (Student to complete)

I have noted and made all the required minor amendments, as stated above, before starting my research and collecting data	
Student name: **(Typed name to act as signature)**	**Megan Waterman** **Sarah Turner**
Student number:	**u2195644** **u2195639**
Date:	**20/07/2023**
Please submit a copy of this decision letter to your supervisor with this box completed if minor amendments to your ethics application are required	

Appendix D. Data management plan.

Administrative Data	
PI/Researcher	Sarah Turner Megan Waterman
PI/Researcher ID (e.g. ORCiD)	Sarah – 0000-0002-8080-9867 Megan – 0000-0002-1598-7026
PI/Researcher email	U2195639@uel.ac.uk (Sarah) u2195644@uel.ac.uk (Megan)
Research Title	The good, the bad or the cooperative: Morality-as-Cooperation and its relationships with attachment, early memories, compassion, wellbeing and distress.
Project ID	
Research start date and duration	Point of ethical approval – May 2023

Research Description	The conceptualisation of morality has been widely debated across the last century. Recently, theorists have come to understand it from an evolutionary perspective, highlighting how cooperation with the social group realises mutual benefit, helping to sustain and advance the group. These ideas underpin the Morality as Cooperation (MAC) theory (Curry, 2016), describing seven domains of morality, which can be measured via the Moral as Cooperation Questionnaire (MAC-Q) (Curry, Chesters & Lissa, 2018). Morality has been linked to concepts that span mental distress, such as depression, anxiety, and transdiagnostic concepts such as attachment style, shame, guilt and compassion. Yet to be examined is the relationship between MAC and such concepts. The proposed research aims to use quantitative methodology to investigate this association. Well-established measures of shame, compassion, attachment and distress alongside the MAC-Q, will be delivered via an online survey software. A regression analysis will examine the relationship between MAC domains and these measures. It is hoped that this will shed light on interpersonal relations for the general population, and those with higher levels of mental distress, with potential implications for treatment.
Funder	N/A
Grant Reference Number (Post-award)	N/A
Date of first version (of DMP)	07/03/2023
Date of last update (of DMP)	

Related Policies	Research Data Management Policy UEL's Data Backup Policy
Does this research follow on from previous research? If so, provide details	N/A
Data Collection	
What data will you collect or create?	We are aiming for 110 complete surveys via Qualtrics to be collected. This will produce quantitative data, which will held in SPSS, in XML/CVS format, <500MG. Demographic information will be recorded at the end of the survey, including age, gender, years of education, mental health diagnosis, and general mental distress. The data will be exported to SPSS and analysed as appropriate. Participant consent forms will also be created (pdf). Following the survey, email address will be collected for the purpose of raffle entry UEL in the form of an amazon voucher which will be requested via the research UEL email. Participants will not have to provide their emails if they do not want to enter the raffle. If they win the raffle, personal information (name, address, and National Insurance number) will be requested via email.

How will the data be collected or created?	Survey data will be collected by participants using the UEL software Qualtrics, licenced to the UEL School of Psychology. Qualtrics is an online survey tool available through UEL which adheres to EU Data Protection acts. An option called ‘Anonymize Responses’ will be enabled on Qualtrics so IP addresses and location data is not collected. The data will then be transferred into an Excel file and then SPSS for statistical analysis and stored on UEL OneDrive. Participant responses will not be held individually but downloaded as part of the whole dataset. A file-naming convention will be used to store survey data: [ProjectCode]-[FileType]-[DownloadDate] Consent will be gathered in the form of electronically signed consent forms (pdf) that will be password protected. Participants will not be able to proceed through the survey without providing consent.
Documentation and Metadata	
What documentation and metadata will accompany the data?	There will be a document containing the pseudonym key. For the survey there will be a participant information webpage, consent form webpage, existing questionnaires measuring shame, compassion, distress, wellbeing and attachment as well as demographic information sheet and a debrief webpage.
Ethics and Intellectual Property	

Identify any ethical issues and how these will be managed	Ethical approval will be obtained by the UEL Ethical Committee before recruitment can take place. Information sheets will explain the studies purpose and what it will entail, and the voluntary nature of participation. They will also include the data management plan, plans for analysis, write up and possible publication of the final report prior to consenting to participate in the research. They will also be informed of their right to withdraw and the limit of this (e.g. approximately 3 weeks after the survey has taken place, after which point analysis will have begun, the data will be anonymised, and it will not be possible to remove their individual data). They will be given the researcher's contact details should they wish to withdraw their consent. If a participant decides to withdraw from the study within this 3-week time period, they will be informed that their contribution (survey data and demographic details) will be removed and confidentially destroyed. They will also be informed that the anonymised data may be retained for up to three years by the supervisor should the researcher wish to publish the research. Consent will be obtained via an online form prior to the survey. Participants will be offered entry to a raffle for vouchers for their time taking part. Debrief information will be included at the end of the survey, including how to access the research once complete, and information about accessing further support should there be any emotional discomfort during the completion. Research materials will be anonymised using participant numbers and identifying details will be removed once data has been input into analytic software. To ensure anonymity of the data exported from Qualtrics to EEGLAB, we will enable `Anonymize Responses' in the survey options so that IP addresses and geo-location information is not collected.

	The data will be handled securely and so access will be restricted to the two named PI/researchers and the supervisor. Data will be handled/stored on UEL-managed services (OneDrive and Qualtrics). Non-identifiable data will be kept in an open access framework. In compliance with GDPR guidance the researcher will only use the data for the purposes it was obtained.

Identify any copyright and Intellectual Property Rights issues and how these will be managed	N/A
Storage and Backup	
How will the data be stored and backed up during the research?	During data collection, data will be stored on Qualtrics which adheres to EU Data Protection acts. The data will be backed up to the researchers UEL OneDrive. When the data is transferred to Excel and SPSS for analysis, it will be stored on the researchers UEL OneDrive The data from Qualtrics will be deleted once analysis is complete. Electronic consent forms will be exported from Qualtrics and saved in a separate UEL OneDrive for Business folder to other research data. Participant email addresses and any information needed for the reimbursement of the Amazon voucher will be stored in a separate place on OneDrive for Business away from the identifiable data, in a separate password protected file. All of the data detailed above will be stored on the UEL OneDrive for Business which is encrypted and secure.
How will you manage access and security?	Only the researcher and supervisor will have access to anonymised transcripts, which will be stored on UEL OneDrive and shared via secure links. Consent forms will be saved and stored in UEL OneDrive. The UEL OneDrive for Business is accessed via a multi-factor authentication system. The researcher will have a password-protected account on Qualtrics which they will have sole access to. The researcher will access UEL systems and Qualtrics on a personal, non-networked, password protected laptop. The researcher will share access to survey data with their supervisor and the examiners. The files will be shared by the facility of UEL

	OneDrive for Business. No-one else will have access to research data.
Data Sharing	
How will you share the data?	Analysed data will be written up into a thesis which will be deposited and shared via the UEL's Research Repository and thus will be accessible by the public. As a part of the dissemination process, the researcher may utilise social media via the accounts designated to the study to share the findings of the research to those that may be interested.
Are any restrictions on data sharing required?	Survey data will be anonymised however there is no intention or need to share the identifiable data with anyone outside the PIs/researchers and supervisors.
Selection and Preservation	
Which data are of long-term value and should be retained, shared, and/or preserved?	A thesis will be written up using the data and this thesis will be stored in the research open access repository (as outlined in the UEL Research Data Management Policy). Anonymised surveys and analysis data will be retained for up to three years, stored by the supervisor on the UEL OneDrive, as the researcher may wish to submit the research for publication. Consent forms may also be preserved for one year to ensure that participants consent can be explicitly checked at further stages of dissemination and review e.g. at stage of publication.

What is the long-term preservation plan for the data?	The anonymised survey data will be kept for three years on UEL's OneDrive for business by the research supervisor, after which point, they will be deleted. These are kept securely within UEL servers but may be needed for further publication following the thesis examination. The thesis will be stored and deposited in the research open access repository (as outlined in the UEL Research Data Management Policy). Identifiable data e.g. consent forms will be stored separately from anonymised data (e.g. surveys) and again, will be password protected and be stored in encrypted files on UEL OneDrive for up to one year. Participants will be informed that consent forms and anonymised data will be kept by the research supervisor on the secure UEL OneDrive for up to one years.
Responsibilities and Resources	
Who will be responsible for data management?	After thesis completion and marking, the research supervisor, [name] will be responsible for managing the data.
What resources will you require to deliver your plan?	A Laptop, Qualtrics Teams access, UEL email account, and UEL OneDrive for Business, research supervisor's OneDrive for Business.
Review	
	Please send your plan to researchdata@uel.ac.uk

	We will review within 5 working days and request further information or amendments as required before signing
Date: 07/03/2023	Reviewer name: Joshua Fallon Assistant Librarian RDM

Appendix E. Participant information sheet.

The good, the bad, or the cooperative: Morality-as-Cooperation and its relationships with attachment, early memories, compassion, wellbeing, and distress

Contact: Megan Waterman (u2195644@uel.ac.uk) or Sarah Turner (u2195639@uel.ac.uk)

You are being invited to participate in a research study. Before you decide whether to take part or not, please carefully read through the following information which outlines what your participation would involve. Feel free to talk with others about the study (e.g., friends, family, etc.) before making your decision. If anything is unclear or you have any questions, please do not hesitate to contact us on the above email.

Who are we?

Who are we? Our names are Megan and Sarah. We are Doctoral students in the School of Psychology at the University of East London (UEL) and are studying to become Clinical Psychologists. As part of our studies, we are conducting the research that you are being invited to participate in.

What is this research about?

We are investigating a new theory called 'Morality as Cooperation' which proposes the idea that morality does not mean whether someone is 'good' or 'bad' but rather how someone values different behaviour within social groups. It is a new theory proposing that morality is based on how we cooperate with each-other socially. We want to look into how these aspects of morality map onto different concepts within mental health (such as shame, compassion, attachment, and general wellbeing).
We hope that this will provide increased understanding of our mental health and have implications for treatment and social support.

Why have I been invited to take part?

To address the study aims, we are inviting adults aged 18+ who can read and write in English to take part in our research. We are keen to get a wide range of people from all different walks of life. It is entirely up to you whether you take part or not, participation is voluntary.

What will I be asked to do if I agree to take part?

If you agree to this, you will be taken through a series of questionnaires which should take around 20-30 minutes of your time. We will start by taking your demographic details including age, gender, years of education and mental health diagnoses. Most of these questionnaires will require checking a multiple-choice question, however a few may require some written text answers too.

The questionnaires will ask you questions about your thoughts and experiences in relation to morality, shame, compassion, attachment, and general wellbeing.

On the next page, you will be asked to confirm if you wish to proceed. Once you have completed the questionnaires, you have finished the study. However, there will be an opportunity to be entered into a raffle as thanks for your participation. We have 2 x £50 vouchers available. If you wish to enter, there is an option to leave your name and some contact details at the end of the study.

Are there any disadvantages to taking part?

Whilst we don't expect significant distress to be caused, it is possible that the questionnaires may bring up difficult thoughts, feelings and memories as we will be asking questions around your childhood experiences and current wellbeing. We have provided below a list of support services you can access if you wish to. We will also highlight these services at the end of the study.

- **MIND** - this is a charity offering information and support in relation to mental health: https://www.mind.org.uk/
- **Samaritans** - a helpline open all hours of the day to support you. Call them on 116 123 or contact them in other ways: https://www.samaritans.org/how-we-can-help/contact-samaritan/
- **SHOUT** - a 24/7 mental health crisis text service. Text them on 85258
- **Headspace** - here you can access various Mindfulness exercises to help you switch off: https://www.youtube.com/channel/UC3JhfsgFPLSLNEROQCdj-GQ

- **NHS Mental Health Services** - use this website to find your local NHS therapy and crisis support: https://www.nhs.uk/nhs-services/mental-health-services/how-to-find-local-mental-health-services
- **List of Supportive Charities** - this is a great list of some charities who support people with various difficulties: https://sandyhealthcentre.nhs.uk/practice-information/a-z-list-of-organisations-for-mental-health/

We also encourage you to speak to supportive family and friends if anything has affected you.

Can I change my mind?

Yes, you can change your mind at any point during completing this online survey and withdraw without explanation, disadvantage, or consequence. If you would like to withdraw from the survey, you can do so by closing the browser. If you withdraw, your data will not be used as part of the research. Separately, you can also request to withdraw your data from being used even after you have taken part in the study, provided that this request is made within 3 weeks of the data being collected (after which point the data analysis will begin, and withdrawal will not be possible).

How will the information I provide be kept secure and confidential?

Survey data will be collected by participants using the UEL software Qualtrics, licenced to the UEL School of Psychology. Qualtrics is an online survey tool that adheres to EU Data Protection acts. Whilst we will collect some demographic information, this will be anonymised and each participant will be assigned a unique participant ID number so they are not identifiable. Raw data will be held securely on a password-protected file only accessible to the researchers and the supervisors. Analysed data will be written up as theses and shared publicly. Once the study ends, the anonymised data will be kept in an open-access framework then deleted after 3 years. If you wish to enter the raffle, the contact details we collect for your entry will be stored in a separate place away from all other data. If you win the raffle, we will then contact you to collect further personal details (including name, address, date of birth, and National Insurance number) so that we can send you the voucher.

For the purposes of data protection, the University of East London is the Data Controller for the personal information processed as part of this research project. The University processes this information under the ‘public task’ condition contained in the General Data

Protection Regulation (GDPR). Where the University processes particularly sensitive data (known as 'special category data' in the GDPR), it does so because the processing is necessary for archiving purposes in the public interest, or scientific and historical research purposes or statistical purposes. The University will ensure that the personal data it processes is held securely and processed in accordance with the GDPR and the Data Protection Act 2018. For more information about how the University processes personal data please see www.uel.ac.uk/about/about-uel/governance/information-assurance/data-protection

What will happen to the results of the research?

The research will be written up as a thesis and submitted for assessment. The thesis will be publicly available on UEL's online Repository (Registry of Open Access Repositories, ROAR). Findings will also be disseminated to a range of audiences (e.g., academics, clinicians, public, etc.) through journal articles, conference presentations, talks, magazine articles, blogs (as appropriate). In all material produced, your identity will remain anonymous, in that, it will not be possible to identify you personally. You will be given the option to receive a summary of the research findings once the study has been completed for which relevant contact details will need to be provided. We will ask for this at the end of the survey.

Who has reviewed the research?

My research has been approved by the School of Psychology Ethics Committee. This means that the Committee's evaluation of this ethics application has been guided by the standards of research ethics set by the British Psychological Society.

Who can I contact if I have any questions/concerns?

If you would like further information about my research or have any questions or concerns, please do not hesitate to contact us. Megan Waterman (researcher): u2195644@uel.ac.uk | Sarah Turner (researcher): u2195639@uel.ac.uk

If you have any questions or concerns about how the research has been conducted, please contact our research supervisors:

Matthew Jones Chesters or Dr Trishna Patel

School of Psychology

University of East London

Water Lane
London E15 4LZ
Emails: m.h.jones-chesters@uel.ac.uk or t.patel@uel.ac.uk

Thank you for taking the time to read this information sheet.

Appendix F. Participant consent form.

I confirm that I have read the participant information sheet for this study.

I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation in the study is voluntary and that I may withdraw at any time, without explanation or disadvantage.

I understand that if I withdraw during the study, my data will not be used.

I understand that I have 3 weeks from submitting my survey answers to withdraw my data from the study.

I understand that my personal information and data from the research will be securely stored and remain confidential. Only the research team will have access to this information, to which I give my permission.

It has been explained to me what will happen to the data once the research has been completed.

I understand that anonymised data may be used in material such as conference presentations, reports, articles in academic journals resulting from the study and that these will not personally identify me.

Appendix G. Risk assessment form.

UEL Risk Assessment Form			
Name of Assessor:	Megan Waterman and Sarah Turner	**Date of Assessment**	04/03/2023
Event title:	Online research: **Morality-as-Cooperation and its relationships with psychological wellbeing.**	**Date, time and location of activity:**	Online study, research duration: April 2023 – April 2024
Signed off by Manager (Print Name)	Dr Matthew Jones Chesters		
Please describe the activity in as much detail as possible (include nature of activity, estimated number of participants, etc) If the activity to be assessed is part of a fieldtrip or event please add an overview of this below:			
Online research study as part of thesis for DClinPsy. Participants will be recruited online and will be asked to complete a series of online questionnaires, lasting approximately 20-30 minutes. Estimated number of participants: >104.			
Overview of FIELD TRIP or EVENT:			
Participants will be asked to complete questionnaires relating to morality, attachment, shame, compassion, distress, and wellbeing. It is not expected that these questionnaires will elicit significant distress, however we are mindful that these topics can be distressing for some – and, in particular, one questionnaire (Shame Experience Index) will ask participants to reflect on early experiences of shame memories relating to attachment/community figures.			

Guide to risk ratings:

a) Likelihood of Risk	b) Hazard Severity	c) Risk Rating (a x b = c)
1 = Low (Unlikely)	1 = Slight (Minor / less than 3 days off work)	1-2 = Minor (No further action required)
2 = Moderate (Quite likely)	2= Serious (Over 3 days off work)	3-5 = Medium (May require further control measures)
3 = High (Very likely or certain)	3 = Major (Over 7 days off work, specified injury or death)	6-9 = High (Further control measures essential)

Which Activities Carry Risk?								
Activity / Task Involved	**Describe the potential hazard?**	**Who is at risk?**	**Likelihood of risk**	**Severity of risk**	**Risk Rating (Likelihood x Severity)**	**What precautions have been taken to reduce the risk?**	**State what further action is needed to reduce risk (if any) and state final risk level**	**Review Date**
Sensitive topics discussed in the questionnaires	Potential psychological distress	Participants	2	1	3	Participants will be given a brief overview of the nature of the questionnaires in the study information sheet and consent forms prior to commencing the study. This will enable participants to make an informed choice as to whether they wish to proceed. Signposting information for supporting agencies and wellbeing services will be provided at the end of the study in the debrief form.	Contact details of the researchers and the project supervisors will be included in the debrief form in case the participants want an in-person debrief meeting. Final risk level: 2	04/02/24

Appendix H. Participant debrief sheet.

PARTICIPANT DEBRIEF SHEET

The good, the bad, or the cooperative: Morality-as-Cooperation and its relationships with attachment, early memories, compassion, wellbeing, and distress

Thank you for participating in our research study investigating the relationships between Morality-as-Cooperation and common aspects of mental health (early memories, attachment, compassion, and general wellbeing). This document offers information that may be relevant in light of you having now taken part.

How will my data be managed?

The University of East London is the Data Controller for the personal information processed as part of this research project. The University will ensure that the personal data it processes is held securely and processed in accordance with the GDPR and the Data Protection Act 2018. More detailed information is available in the Participant Information Sheet, which you received when you agreed to take part in the research.

What will happen to the results of the research?

The research will be written up as a thesis and submitted for assessment. The thesis will be publicly available on UEL's online Repository (Registry of Open Access Repositories, ROAR). Findings will also be disseminated to a range of audiences (e.g., academics, clinicians, public, etc.) through journal articles, conference presentations, talks, magazine articles, blogs (as appropriate). In all material produced, your identity will remain anonymous, in that, it will not be possible to identify you personally.

You will be given the option to receive a summary of the research findings once the study has been completed for which relevant contact details will need to be provided. We will ask for this at the end of the survey.

What if I have been adversely affected by taking part?

It is not anticipated that you will have been adversely affected by taking part in the research, and all reasonable steps have been taken to minimise distress or harm of any kind. Nevertheless, it is possible that your participation – or its after-effects – may have been challenging, distressing or uncomfortable in some way. If you have been affected in any of those ways, you may find the following resources/services helpful in relation to obtaining information and support:

- **MIND** - this is a charity offering information and support in relation to mental health: https://www.mind.org.uk/
- **Samaritans** - a helpline open all hours of the day to support you. Call them on 116 123 or contact them in other ways: https://www.samaritans.org/how-we-can-help/contact-samaritan/
- **SHOUT** - a 24/7 mental health crisis text service. Text them on 85258
- **Headspace** - here you can access various Mindfulness exercises to help you switch off: https://www.youtube.com/channel/UC3JhfsgFPLSLNEROQCdj-GQ
- **NHS Mental Health Services** - use this website to find your local NHS therapy and crisis support: https://www.nhs.uk/nhs-services/mental-health-services/how-to-find-local-mental-health-services
- **List of Supportive Charities** - this is a great list of some charities who support people with various difficulties: https://sandyhealthcentre.nhs.uk/practice-information/a-z-list-of-organisations-for-mental-health/

We also encourage you to speak to supportive family and friends if anything has affected you.

Who can I contact if I have any questions/concerns?

If you would like further information about our research or have any questions or concerns, please do not hesitate to contact us: Megan Waterman (researcher): u2195644@uel.ac.uk | Sarah Turner (researcher): u2195639@uel.ac.uk

If you have any questions or concerns about how the research has been conducted, please contact my research supervisor Matthew Jones Chesters, School of Psychology, University of East London, Water Lane, London E15 4LZ,
Email: m.h.jones-chesters@uel.ac.uk

or

Chair of School Ethics Committee: Dr Trishna Patel, School of Psychology, University of East London, Water Lane, London E15 4LZ.

(Email: t.patel@uel.ac.uk)

Thank you for taking part in our study

For SurveyCircle users (www.surveycircle.com): The Survey Code is: N4M3-UYT3-A2FJ-42DX

For SurveySwap.io users - Go to: https://surveyswap.io/sr/D7PK-GA82-QSY1 Or, alternatively, enter the code manually: D7PK-GA82-QSY1

Appendix I. Study Advert.

The good, the bad, or the cooperative?

CAN YOU HELP INCREASE UNDERSTANDING OF MENTAL HEALTH AND MORALITY?

MEGAN WATERMAN
U2195644@UEL.AC.UK
SARAH TURNER
U2195639@UEL.AC.UK

WE ARE TWO TRAINEE CLINICAL PSYCHOLOGISTS COMPLETING OUR DOCTORATE
CONDUCTING A SURVEY-BASED STUDY EXPLORING:

- A NEW THEORY THAT MORALITY IS BASED ON HOW WE COOPERATE WITH SOCIETY
- THIS THEORY STATES THERE ARE 7 ASPECTS OF MORALITY THAT HUMANS USE TO DRIVE BEHAVIOUR

WE WANT TO EXPLORE THE RELATIONSHIPS BETWEEN MORALITY AND...

- COMPASSION, SHAME, ATTACHMENT AND WELLBEING
- TO INCREASE UNDERSTANDING OF MENTAL HEALTH ISSUES AND THERAPY

IF YOU ARE 18+ YOU CAN TAKE PART USING THE LINK BELOW.
THANK YOU!
HTTPS://UELPSYCH.EU.QUALTRICS.COM/JFE/FORM/SV_DMUDXZJPAA4OPQ6

Appendix J. Morality as Cooperation Questionnaire.

Morality as Cooperation Questionnaire: Relevance Items

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? (0-100; not at all relevant, not very relevant, slightly relevant, somewhat relevant, very relevant, extremely relevant)

Family

Whether or not someone acted to protect their family.
Whether or not someone helped a member of their family.
Whether or not someone's action showed love for their family.

Group

Whether or not someone acted in a way that helped their community.
Whether or not someone helped a member of their community.
Whether or not someone worked to unite a community.

Reciprocity

Whether or not someone did what they had agreed to do.
Whether or not someone kept their promise.
Whether or not someone proved that they could be trusted.

Heroism

Whether or not someone acted heroically.
Whether or not someone showed courage in the face of adversity.
Whether or not someone was brave.

Deference

Whether or not someone deferred to those in authority.
Whether or not someone disobeyed orders.
Whether or not someone showed respect for authority.

Fairness

Whether or not someone kept the best part for themselves.
Whether or not someone showed favouritism.
Whether or not someone took more than others.

Property
Whether or not someone vandalised another person's property.
Whether or not someone kept something that didn't belong to them.
Whether or not someone's property was damaged.

Note: (R) = reverse coded

Morality as Cooperation Questionnaire: Judgment Items
To what extent do you agree with the following statements?
(0-100; strongly disagree, disagree, neither agree or disagree, agree, strongly agree)

Family
People should be willing to do anything to help a member of their family.
You should always be loyal to your family.
You should always put the interests of your family first.

Group
People have an obligation to help members of their community.
It's important for individuals to play an active role in their communities.
You should try to be a useful member of society.

Reciprocity
You have an obligation to help those who have helped you.
You should always make amends for the things you have done wrong.
You should always return a favour if you can.

Heroism
Courage in the face of adversity is the most admirable trait.
Society should do more to honour its heroes.
To be willing to lay down your life for your country is the height of bravery.

Deference

People should always defer to their superiors.

Society would be better if people were more obedient to authority.

You should respect people who are older than you.

Fairness

Everyone should be treated the same.

Everyone's rights are equally important.

The current levels of inequality in society are unfair.

Property

It’s acceptable to steal food if you are starving. (R)

It’s ok to keep valuable items that you find, rather than try to locate the rightful owner. (R)

Sometimes you are entitled to take things you need from other people. (R)

Note: (R) = reverse coded

Appendix K. Shame Experiences Interview (sections used highlighted grey).

Shame Experiences Interview:

SHAME EXPERIENCES INTERVIEW (Marcela Matos & José Pinto Gouveia, 2006)

Handout

The experience of shame is common among all human beings and everyone, throughout life, has shame experiences. We know now that these are important experiences that might be related to several problems in people's lives. In this section we are interested in getting to know your shame experiences, that is, situations where you felt shame.

Shame is a negative self-conscious emotion associated with feelings of inferiority and personal devaluation. Shame may involve different feelings and thoughts:

External shame is what we feel when we experience or think someone/others are being critical, hostile, looking down on us, or seeing us as inferior, inadequate, different, bad or weak; is what we feel when others criticise, reject, exclude or abuse us. Our feelings rise from how we feel others feel about us.

Internal shame is what we feel when we feel or judge ourselves negatively, as inferior, inadequate, different, bad or weak. Our feelings rise from how we feel and think about ourselves.
In a certain situation we might feel external shame, internal shame or both.

Sometimes, we can also feel **humiliation**, when we believe others are being bad or unfair to us, we feel anger and want revenge/to get back on them.

Shame feelings may blend with other feelings, such as anxiety, fear, anger, disgust or contempt. Furthermore, a great urge to hide, disappear or run away from the situation is part of the experience of shame. Here are some examples of shame experiences from childhood and adolescence.

For example, Maggie, who is 7 years old and has freckles, feels shame when at school some kids call her names (e.g., "dot face"), because she believes she is different from the other kids and that they saw her as flawed and inferior in some way. So, she thinks she is

not, and cannot, be accepted by them and that they do not want to be her friends. Whenever she has to play with them, she wants to run away from the playground or hide.

Another example is John, 9 years old, who is well behaved at school, has good marks, tries to be concentrated in classes and does his homework everyday. However, every time he makes a mistake, or he gets a worse mark on a test, his father is very critical and tells him he will never be someone in life and he is a disappointment. Whenever this happens, John feels extremely sad, ashamed and thinks he is unable to meet others' expectations.

Another example is Philip, 15 years of age, who has never liked to play football, because he believed he was too clumsy to play sports. During a match between classes, he stumbled on the ball and the other team scored. Then, Philip felt very ashamed, and saw himself as inadequate and incompetent, different from his peers. Even though his classmates didn't make any negative remarks, he couldn't help thinking they had seen him as inadequate and inferior, and so they could reject him in some way. At that moment, Philip felt himself blushing, he felt nervous and tense, and wished he could become invisible and disappear from the face of the earth. At the end of the game, he ran home and swore not to play football ever again.

PART I - SHAME EXPERIENCES WITH OTHERS

Now, please try to remember a situation(s) or experience(s) during your childhood and/or adolescence that you find significant and where you felt shame, involving other people in your life rather than your attachment figures. That is, involving peers, friends, teachers, strangers, other relatives.

<u>1. DESCRIPTION OF THE SITUATION</u>

1. Please, describe the situation. What was the behaviour that was specifically shaming*(Open question)*

SITUATION 1

Possible scoring categories for Situation type:

1. Criticism by a attachment figure (includes putting down, making fun, belittle, rejection)
2. Criticism by a significant other (includes putting down, making fun, belittle, rejection)

3. Exposure of devaluing behaviour/negative personal attributes or characteristics in front of others
4. Negative comments about the body, weight, bodily shape, or physical appearance (includes embarrassing physical features)
5. Comparisons with significant others (e.g., brothers, cousins, friends)
6. Physical abuse
7. Shame of personal habits (e.g., clothes, hygiene, social interaction)
8. Sexual abuse
9. Emotional/psychological abuse
10. Reflectedshame(e.g.,shameofanattachmentfigureembarrassingbehaviour)
11. Shame of family status

1.1. Who shamed you? SITUATION 1

Relatives___

Peers ___

Friend ___

Stranger ___

Self ___

Other ___ Specify: __________

1.2. What was the context where the situation occurred? SITUATION 1

Describe the context: ________________________

____ In group ____

In private ____

Other ___ Specify: ___________________

1.3. Characteristics of the Audience (A) and of the person who Shamed you (S) SITUATION 1

INTIMACY	RELATIVE AGE	RELATIVE POWER	GENDER
Loved one A____S____ Someone you liked A___ S___ Someone you disliked	Older A____ S____ Younger A____ S____	Authority figure A____ S____ Subordinate A____ S____ Equal	Feminine A____ S____ Masculine A____ S____

A___ S___ Acquaintance A___ S____ Stranger A___ S___	Same age A____ S____	A____ S____	Both A____ S____

2. IN THE SITUATION (THOUGHTS, EMOTIONS, BEHAVIOUR, SENSATIONS)

2. Describe me what you felt:

Please, close your eyes and try to imagine yourself in the situation as if it was happening right now. Then describe what you were thinking and feeling at that moment, according to the following aspects:

2.1. Try to remember the other person facial expression. How did you feel the other person was seeing you? How do you think you were seen by the other? As inferior, inadequate, defective, bad or weak? Can you remember the other person's facial expression? The look in his/her eyes, his/her voice tone? And what about his posture, was it relaxed, aggressive, of disdain? Were you frightened or threatened by what you saw in the eyes of the other?

When you saw that, what did you feel? What did you think the others were thinking and feeling about you? How do you think the others were seeing you? *(Open question)*

Possible scoring categories for External shame

1. Defective, flawed
2. Idiot, stupid
3. Different
4. Inferior
5. Disgusting, repulsive
6. Unworthy, worthless
7. Inadequate
8. Ordinary, vulgar
9. Ridiculous

2.2. What did you feel about that? *(Open question)*

2.3. Independently of what you felt others were thinking or feeling about you, what did you think and feel about yourself? *(Open question)*

Possible scoring categories for Internal shame

1. Defective, flawed
2. Idiot, stupid
3. Different
4. Inferior
5. Disgusting, repulsive
6. Unworthy, worthless
7. Inadequate
8. Ordinary, vulgar
9. Ridiculous

2.4. In a scale from 0 to 10, how much External Shame did you feel in this situation?
(Show scale)
2.5. In a scale from 0 to 10, how much Internal Shame did you feel in this situation?
(Show scale)

2.6. Do you remember feeling humiliated in some way in the situation? Feeling that the others were being unjust or bad to you? Feeling anger for what the others were doing to you and feeling you wanted to get revenge?

Categories

1. No humiliation
2. Humiliation

2.7. Here you have a set of emotions *(show the list).* **Which were the emotions you felt mainly? Rate the intensity in which you felt each of the emotions?**

Scale: 0 = not at all 1 2 3 4 = very much

1. Shame
2. Anxiety
3. Anger
4. Humiliation
5. Disgust
6. Loss of dignity
7. Sadness
8. Frustration

9. Guilt
10. Envy
11. Other______

3. AFTER THE SITUATION

3.1. What did you do after the situation? How did you cope with the situation? Did you think or do something to reassure/soothe yourself or to reduce your negative emotional state? *(Open question)*

Possible scoring categories for general coping strategy to deal with shame

1. Submission
2. Isolation
3. Compensation
4. Reassurance seeking 4. Fight/Retaliation
5. Cry
6. Rumination
7. Suppression
8. Flight
9. Self-criticism
10. Self-harm
11. Freezing
12. Acceptance

3.2. Amongst the following coping strategies, please indicate those that best describe the way you dealt with the situation. Please rate the intensity in which you used each strategy using the scale below:

Scale: 0 = not at all 1 2 3 4 = very much

DEFENSIVE BEHAVIOURAL STRATEGIES

Defensive fight

Escape/withdrawal

Seek reassurance on others

Submission

Avoidance of self-exposure (hide the self) Desire not to be seen

Avoidance of emotional expression Visual contact cut off

Behavioural inhibition

Freezing

Retaliate/attack others

EMOTIONAL STRATEGIES

Attempt not to think about it and do something that one does well ___

Attempt to look/be tough and don't give in ___

To do mastery activities ___

Use drugs (e.g., alcohol, sedatives) ___

Dissociation ___

Denial/Deny the emotion ___

SOCIAL STRATEGIES

Seek support and reassurance from others ___

Isolation/Not to seek support from others ___

COGNITIVE STRATEGIES

Blame others ___

Verbal self-correction ___

Angry at oneself (self-criticism) ___

Self-blame/self-responsabilization ___

Feelings of control over the situation ___

Thoughts of having violated the moral standards ___

OTHERS ___

3.3. How do you evaluate the way you cope with the situation ("I was satisfied...", "I felt even more ashamed...")?

Categories for satisfaction with/effectiveness of coping with the situation

1. Not satisfied with coping
2. Satisfied with coping

3.4. The way you cope made you feel more or less ashamed?

More shame ___

Less shame ___

4. OTHERS REACTION

Scale: 0 = not at all   1   2   3   4 = very much

4.1. How do you think the others reacted to the action/behaviour that ashamed you?

No reaction ___

Ignored ___

Amused ___

Annoyed ___

Angry ___

Made fun ___

Reassured/Supported ___

4.2. What do you think the others felt while you were being ashamed?

Empathy ___

Fear ___

Sadness ___

Pity ___

Embarrassment ___

Anger ___

Fun ___

Indifference ___

4.3. Do you think the others noticed your shame?

Yes ___

No___

4.3.1 – If they noticed, how did they react to your shame?

No reaction ___

Ignored ___

Amused ___

Tried to reassure/soothe ___

Shamed for feeling shame

(Ridicule, criticize, humiliate, made fun) ___

4.3.2. If they noticed your shame, do you believe they changed their behaviour towards you because of that?

Yes ___ No ___

Positively ___

Negatively ___

Other ____

<u>5. MEMORY (TRAUMATIC AND AUTOBIOGRAPHICAL PROPERTIES) MEMORY FREQUENCY</u>

5.1. In the four weeks that followed the event, how often did you remember this situation?

Scale: 0 = never 1 = 1-3 times a week 2 = 4-6 times a week 3 = every day 4 = more than once a day

5.2. One month after the event, how often did you keep remembering this situation?

Scale: 0 = never 1 = 1-3 times a week 2 = 4-6 times a week 3 = every day 4 = more than once a day

MEMORY HYPERACTIVATION

5.3. Whenever you recalled the situation, what did you feel? What emotions did you feel? Did you re- experienced shame and the sensations in your body all over again?

Yes ___ No ___

MEMORY INTRUSION

5.4. Throughout your life, after this experience, were there times when suddenly images, feelings or thoughts about the event came to your mind?

Scale: 0 = never 1 = rarely 2 = sometimes 3 = often 4 = very often

MEMORY VIVIDNESS

5.5. Nowadays *(For instance, during this interview)*, **how vivid is this situation in your mind? Do you have a vague, diffuse image of it or, on the contrary, can you clearly visualize it in your mind?**

Scale: 0 = very vague/diffuse 1 2 3 4 = very vivid/clear

5.6. To the best of your knowledge, is the memory of an event that occurred *once* at one particular time and place, a *summary or merging* of many similar or related events, or for events that occurred over a fairly *continuous* extended period of time lasting more than a day (1 = once; 2 = merging; 3 = extended).

6. FREQUENCY

6.1. Recently, was there any situation that reminded you of your early shame experiences? *(If yes, ask to describe)*

1. Presence of recent triggering situation
2. Absence of recent triggering situation

***Or* was there any shame situation that you've seen in movies/tv that reminded you of your early shame experiences and elicited the same emotions?** *(If yes, ask to describe)*

1. Different from the original shame experience
2. Similar to the original shame experience

6.2. Throughout your life, how often (in average) have you had shame experiences with others?

Scale: 0 = never 1 = rarely (once year) 2 = sometimes (once a month) 3 = often (once a week) 4 = very often (almost every day)

1. Childhood
2. Adolescence
3. Adult life

6.3. Who shamed (S) you more frequently and who was the audience (A) in those situations?

Father ___

Mother ___

Relatives ___

Peers ___

Friends ___

Strangers ___

Self ___

Other ___

Specify:_______________________

6.4. Were there other experiences in your life involving other social agents that you feel ashamed about but that would be too difficult, or impossible, to disclose, talk about or discuss?

1. Presence of abuse/difficult shame experiences
2. Absence of abuse/difficult shame experiences

7. INTERFERENCE

Try to explore the safety/defensive behaviours used to cope with shame since the situation.

7. Since this shame experience, have you changed the way you deal with or have begun to avoid similar situations because you fear feeling ashamed again?

No ___

Yes ___

7.1. If YES, explain in which way you have modified the way you cope with similar situations. *(Open- ended question; After the respondent gives a general description, select the corresponding coping strategy(ies) from the following)*

Avoidance ___

Submission ___

Compensation/perfectionism ___

Externalize/Retaliate/Attack ___

Scale: 0 = not at all 1 2 3 4 = very much

8. IMPACT IN LIFE

8.1. Looking back on your life, how do you think this experience has affected you or influenced your path through life (positively/negatively)? (*Rate the degree of both positive and negative impact*)

Positive impact ____

Negative impact ____

Scale: 0 = not at all 1 2 3 4 = very much

8.2. How do you evaluate the effect of this experience in the present?

Easy/difficult to talk about the experience ___

Hurts/Can laugh about it ___

Easy/difficult to describe the situation ___

Other, Specify: ______________________________

Appendix L. Other as Shamer Scale II.

Other as Shamer

Below is a list of statements describing feelings or experiences about how you may feel other people see you. Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement.

	Never	Seldom	Sometimes	Frequently	Almost always
I feel other people see me as not good enough	○	○	○	○	○
Other people see me as small and insignificant	○	○	○	○	○
People see me as unimportant compared to others	○	○	○	○	○
Other people see me as not measuring up to them	○	○	○	○	○
I think that other people look down on me	○	○	○	○	○
I feel insecure about others opinions	○	○	○	○	○
Others think there is something missing in me	○	○	○	○	○
Other people see me as somehow defective as a person	○	○	○	○	○

Appendix M. Social Comparison Scale.

SOCIAL COMPARISON SCALE

Please circle a number at a point which best describes the way in which you see yourself in **comparison to others**.

For example:

Short	1	2	3	4	5	6	7	8	9	10	Tall

If you put a mark at 3 this means you see yourself as shorter than others; if you put a mark at 5 (middle) about average; and a mark at 7 somewhat taller.

If you understand the above instructions, please proceed. Circle one number on each line according to how you see yourself in relationship to others.

In relationship to others I feel:

Inferior	1	2	3	4	5	6	7	8	9	10	Superior
Incompetent	1	2	3	4	5	6	7	8	9	10	More competent
Unlikeable	1	2	3	4	5	6	7	8	9	10	More likeable
Left out	1	2	3	4	5	6	7	8	9	10	Accepted
Different	1	2	3	4	5	6	7	8	9	10	Same
Untalented	1	2	3	4	5	6	7	8	9	10	More talented
Weaker	1	2	3	4	5	6	7	8	9	10	Stronger
Unconfident	1	2	3	4	5	6	7	8	9	10	More confident
Undesirable	1	2	3	4	5	6	7	8	9	10	More desirable
Unattractive	1	2	3	4	5	6	7	8	9	10	More attractive
An outsider	1	2	3	4	5	6	7	8	9	10	An insider

SCORING

Scoring, add up all items.

Sometimes it is useful to look at the 3 items of feeling left out, different and an outsider as a measure of group fit or belongingness.

DESCRIPTION

Social Comparison Scale

This scale was developed by Allan and Gilbert (1995) to measure self-perceptions of social rank and relative social standing. This scale uses a semantic differential methodology and consists of 11 bipolar constructs. Participants are required to make a global comparison of themselves in relation to other people and to rate themselves along a ten-point scale. For example, the scale asks:

In relationship to others I feel:

Incompetent 1 2 3 4 5 6 7 8 9 10 More competent

The 11-items cover judgements concerned with rank, attractiveness and how well the person thinks they 'fit in' with others in society. Low scores point to feelings of inferiority and general low rank self-perceptions.

The scale has been found to have good reliability, with Cronbach alphas of .88 and .96 with clinical populations and .91 and .90 with student populations (Allan and Gilbert, 1995, 1997).

Appendix N. Attachment Style Questionnaire.

Attachment Style Questionnaire

Show how much you agree with each of the following items by rating them on this scale:

1 = totally disagree; 2 = strongly disagree; 3 = slightly disagree

4 = slightly agree; 5 = strongly agree; 6 = totally agree

Confidence	3. I feel confident that people will be there for me when I need them.
Discomfort	4. I prefer to depend on myself rather than other people.
Discomfort	5. I prefer to keep to myself.
R as S	8. Achieving things is more important than building relationships.
R as S	9. Doing your best is more important than getting on with others.
R as S	10. If you've got a job to do, you should do it no matter who gets hurt.
N for A	11. It's important to me that others like me.
N for A	13. I find it hard to make a decision unless I know what other people think.
R as S	14. My relationships with others are generally superficial.
N for A	15. Sometimes I think I am no good at all.
Discomfort	16. I find it hard to trust other people.
Discomfort	17. I find it difficult to depend on others.
Preoccupation	18. I find that others are reluctant to get as close as I would like.
Confidence	19. I find it relatively easy to get close to other people.
Discomfort (R)	20. I find it easy to trust others.
Discomfort (R)	21. I feel comfortable depending on other people.
Preoccupation	22. I worry that others won't care about me as much as I care about them.
Discomfort	23. I worry about people getting too close.
N for A	24. I worry that I won't measure up to other people.
Discomfort	25. I have mixed feelings about being close to others.
N for A	27. I wonder why people would want to be involved with me.
Preoccupation	29. I worry a lot about my relationships.
Preoccupation	30. I wonder how I would cope without someone to love me.
Confidence	31. I feel confident about relating to others.
Preoccupation	32. I often feel left out or alone.
Confidence (R)	33. I often worry that I do not really fit in with other people.

Discomfort	34. Other people have their own problems, so I don't bother them with mine.
Confidence	37. If something is bothering me, others are generally aware and concerned.
Confidence	38. I am confident that other people will like and respect me.

Note:

R as S = Relationships as Secondary

N for A = Need for Approval

Items marked (R) need to be reverse-scored.

Appendix O. Compassion Engagements and Actions Scale.

THE COMPASSIONATE ENGAGEMENT AND ACTION SCALES

Self-compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can **be compassionate with themselves**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore, read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never……………………………………………………………………………………… Always

1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I'm distressed or upset by things…

1. I am *motivated* to engage and work with my distress when it arises.

   Never **Always**

   1 2 3 4 5 6 7 8 9 10

2. I *notice,* and am *sensitive* to my distressed feelings when they arise in me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by my distressed feelings or situations.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of my distress.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

6. I *reflect on* and *make sense* of my feelings of distress.

Never

1. 2 3 4 5 6 7 8 10

(r)7 I do not tolerate being distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:
When I'm distressed or upset by things…

1. I direct my *attention* to what is likely to be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think* about and come up with helpful ways to cope with my distress.

Never									**Always**
1	2	3	4	5	6	7	8	9	10

(r)3. I don't know how to help myself.

Never									**Always**
1	2	3	4	5	6	7	8	9	10

4. I take the *actions* and do the things that will be helpful to me.

Never									**Always**
1	2	3	4	5	6	7	8	9	10

5. I create inner feelings of *support, helpfulness and encouragement*.

Never									**Always**
1	2	3	4	5	6	7	8	9	10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Compassion to others

When things go wrong for other people and they become distressed by setbacks, failures, disappointments or losses, we may cope with their distress in different ways. We are interested in the degree to which people can be **compassionate to others**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore, read each statement carefully and think about how it applies to you when **people in your life** become distressed. Please rate the items using the following rating scale:

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with other people's distress when they are experiencing it. So:

When others are distressed or upset by things…

1. I am *motivated* to engage and work with other peoples' distress when it arises.

   Never **Always**

   1. 2 3 4 5 6 7 8 9 10

2. I *notice* and *am sensitive* to distress in others when it arises.

   Never **Always**

   1. 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about other peoples' distress, try to distract myself and put it out of my mind.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by expressions of distress in others.

   Never **Always**

   1. 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of other people's distress.

   Never **Always**

   1. 2 3 4 5 6 7 8 9 10

6. I *reflect on* and *make sense* of other people's distress.

Never **Always**

1. 2 3 4 5 6 7 8 10

(r)7 I do not tolerate other peoples' distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of other people's distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively respond in compassionate ways when other people are distressed. So:

When others are distressed or upset by things…

1. I direct *attention* to what is likely to be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think about and come up* with helpful ways for them to cope with their distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I don't know how to help other people when they are distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I take the *actions* and *do the things* that will be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. I express feelings of *support, helpfulness and encouragement* to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Compassion from others

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, others may cope with our distress in different ways. We are interested in the degree to which you feel that **important people in your life can be compassionate to your distress**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us or others.

Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to the **important people in your life** when you become distressed. Please rate the items using the following rating scale:

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you think others are, and how much they engage with your distress when you experience it. So:

When I'm distressed or upset by things…

1. Other people are actively *motivated* to engage and work with my distress when it arises.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

2. Others *notice* and *are sensitive* to my distressed feelings when they arise in me.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

(r)3 Others avoid thinking about my distress, try to distract themselves and put it out of their mind.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. Others are *emotionally moved* by my distressed feelings.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

5. Others *tolerate* my various feelings that are part of my distress.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

6. Others *reflect on* and *make sense* of my feelings of distress.

Never

1. 2 3 4 5 6 7 8 10

(r)7. Others do not tolerate my distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. Others are *accepting, non-critical and non-judgemental* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how others actively cope in compassionate ways with emotions and situations that distress you. So:

When I'm distressed or upset by things…

1. Others direct their *attention* to what is likely to be helpful to me.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

2. Others *think about* and come up with helpful ways for me to cope with my distress.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

(r)3. Others don't know how to help me when I am distressed

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. Others take the *actions* and do the things that will be helpful to me.

Never **Always**

1. 2 3 4 5 6 7 8 9 10

5. Others treat me with feelings of *support, helpfulness and encouragement.*

Never **Always**

1. 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING SCORING

The three scales – *Compassion for others*, *compassion from others*, *compassion for self* are scored separately.

For each scale two subscales can be calculated: Engagement (items 1, 2, 4, 5, 6, 8) and Actions (1, 2, 4, 5).

For the *Compassion for self* scale, two dimensions may be analysed in the Engagement subscale (sum of items 2 and 4, and sum of items 1, 5, 6, and 8).

A total score can be calculated (sum of items of the Engagement and Actions subscales) for each scale – *Compassion for others*, *compassion from others*, *compassion for self*. Please note that reverse items (r) are not included in the scoring.

Appendix P. Table 7. Correlation matrix.

		MAC- R Family	MAC- R Group	MAC- R Reciprocity	MAC- R Heroism	MACR Deference	MAC-R Fairness	MAC-R Property	Internal shame (SCS)	External shame (OAS)
Attachment Anxiety (ASQ)	Pearson	.246**	.155*	.178**	.192**	.168*	.194**	.180**	-.399**	.565**
	Sig.	<.001	.020	.008	.004	.012	.004	.007	<.001	<.001
	N	223	223	223	223	223	223	223	202	203
Attachment Avoidance (ASQ)	Pearson	.064	-.008	.230**	.101	.110	.100	.008	-.235**	.351**
	Sig.	.343	.908	<.001	.134	.101	.137	.900	<.001	<.001
	N	223	223	223	223	223	223	223	202	203
Compassion to Self (CEAS)	Pearson	-.041	.064	.015	.087	.041	.040	.018	.273**	-.187**
	Sig.	.570	.370	.833	.225	.568	.573	.797	<.001	.008
	N	198	198	198	198	198	198	198	198	198
Compassion from others (CEAS)	Pearson	.156*	.061	-.094	.016	-.058	.165*	.088	.394**	-.359**
	Sig.	.030	.399	.195	.822	.422	.022	.225	<.001	<.001
	N	193	193	193	193	193	193	193	193	193
Internal Shame (SCS)	Pearson	-.112	-.083	-.058	-.081	-.061	-.079	-.071	1	-.536**
	Sig.	.113	.239	.409	.250	.389	.265	.318		<.001
	N	202	202	202	202	202	202	202	202	202
External Shame (OAS)	Pearson	.140*	.103	.112	.121	.176*	.113	.090	-.536**	1
	Sig.	.046	.143	.112	.086	.012	.108	.199	<.001	
	N	203	203	203	203	203	203	203	202	203

Appendix Q. Table 8. General Linear Model output for compassion variables and MAC domains.

Source *Dependent Variable*	Type III Sum of Squares	DF	Mean Square	F	Sig.	Partial Eta Squared
Compassion to Self (CEAS)						
MAC-R Family	32.713	1	32.713	4.299	.039	.022
MAC-R Group	.211	1	.211	.024	.876	.000
MAC-R Reciprocity	3.912	1	3.912	.326	.569	.002
MAC-R Heroism	17.090	1	17.090	1.631	.203	.009
MAC-R Deference	4.755	1	4.755	.420	.518	.002
MAC-R Fairness	1.686	1	1.686	.137	.712	.001
MAC-R Property	2.021	1	2.021	.145	.704	.001
Compassion to Others (CEAS)						
MAC-R Family	186.556	1	186.556	24.515	<.001	.115
MAC-R Group	97.557	1	97.557	11.287	<.001	.056
MAC-R Reciprocity	5.368	1	5.368	.447	.504	.002
MAC-R Heroism	.263	1	.263	.025	.874	.000
MAC-R Deference	4.294	1	4.294	.380	.539	.002
MAC-R Fairness	35.471	1	35.471	2.874	.092	.015
MAC-R Property	33.682	1	33.682	2.419	.122	.013
Compassion from Others (CEAS)						
MAC-R Family	11.017	1	11.017	1.448	.230	.008
MAC-R Group	.523	1	.523	.061	.806	.000
MAC-R Reciprocity	29.076	1	29.076	2.423	.121	.013
MAC-R Heroism	.056	1	.056	.005	.942	.000
MAC-R Deference	13.719	1	13.719	1.213	.272	.006
MAC-R Fairness	37.651	1	37.651	3.050	.082	.016

Appendix R. Table 9. General Linear Model output with age.

Source	*Dependent Variable*	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
External shame-proneness (OAS)	MACRfamily	6.405	1	6.405	.768	.382	.004
	MACRgroup	3.812	1	3.812	.422	.517	.002
	MACRreciprocity	15.971	1	15.971	1.377	.242	.007
	MACRheroism	11.454	1	11.454	1.095	.297	.006
	MACRdeference	70.386	1	70.386	6.888	.009	.036
	MACRfairness	13.972	1	13.972	1.103	.295	.006
	MACRproperty	13.568	1	13.568	.992	.321	.005
Internal shame-proneness (SCS)	MACRfamily	10.609	1	10.609	1.272	.261	.007
	MACRgroup	3.958	1	3.958	.438	.509	.002
	MACRreciprocity	.262	1	.262	.023	.881	.000
	MACRheroism	3.633	1	3.633	.347	.556	.002
	MACRdeference	2.101	1	2.101	.206	.651	.001
	MACRfairness	3.372	1	3.372	.266	.607	.001
	MACRproperty	2.872	1	2.872	.210	.647	.001
Age	MACRfamily	97.053	5	19.411	2.328	.044	.059
	MACRgroup	61.426	5	12.285	1.361	.241	.036
	MACRreciprocity	131.289	5	26.258	2.263	.050	.058
	MACRheroism	35.587	5	7.117	.680	.639	.018
	MACRdeference	174.026	5	34.805	3.406	.006	.085
	MACRfairness	60.082	5	12.016	.949	.451	.025
	MACRproperty	132.110	5	26.422	1.931	.091	.050

Appendix S. Table 10. General Linear Model output with ethnicity.

Source	*Dependent Variable*	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
External shame-proneness (OAS)	MACRfamily	16.997	1	16.997	2.046	.154	.011
	MACRgroup	10.559	1	10.559	1.142	.287	.006
	MACRreciprocity	31.269	1	31.269	2.567	.111	.014
	MACRheroism	16.629	1	16.629	1.602	.207	.009
	MACRdeference	80.872	1	80.872	7.839	.006	.043
	MACRfairness	30.143	1	30.143	2.405	.123	.013
	MACRproperty	9.646	1	9.646	.694	.406	.004
Internal shame-proneness (SCS)	MACRfamily	4.041	1	4.041	.486	.486	.003
	MACRgroup	.315	1	.315	.034	.854	.000
	MACRreciprocity	3.741	1	3.741	.307	.580	.002
	MACRheroism	.292	1	.292	.028	.867	.000
	MACRdeference	1.667	1	1.667	.162	.688	.001
	MACRfairness	.152	1	.152	.012	.912	.000
	MACRproperty	3.566	1	3.566	.257	.613	.001
Ethnicity	MACRfamily	169.145	13	13.011	1.566	.099	.104
	MACRgroup	95.332	13	7.333	.793	.667	.055
	MACRreciprocity	122.356	13	9.412	.773	.688	.054
	MACRheroism	133.609	13	10.278	.990	.463	.068
	MACRdeference	238.475	13	18.344	1.778	.050	.116
	MACRfairness	184.858	13	14.220	1.135	.333	.077
	MACRproperty	203.619	13	15.663	1.127	.339	.077

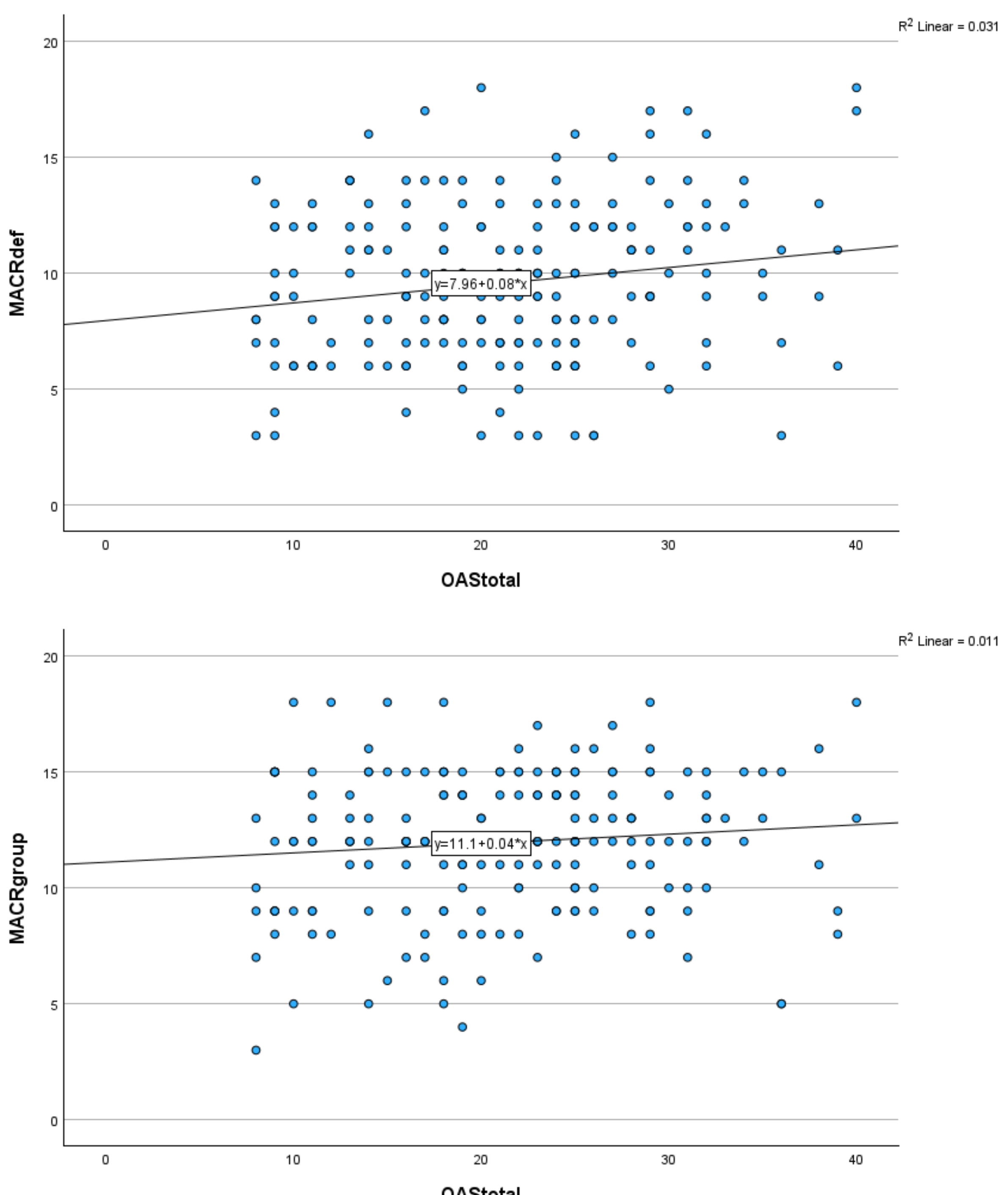
Appendix T. Table 11. General Linear Model output with gender.

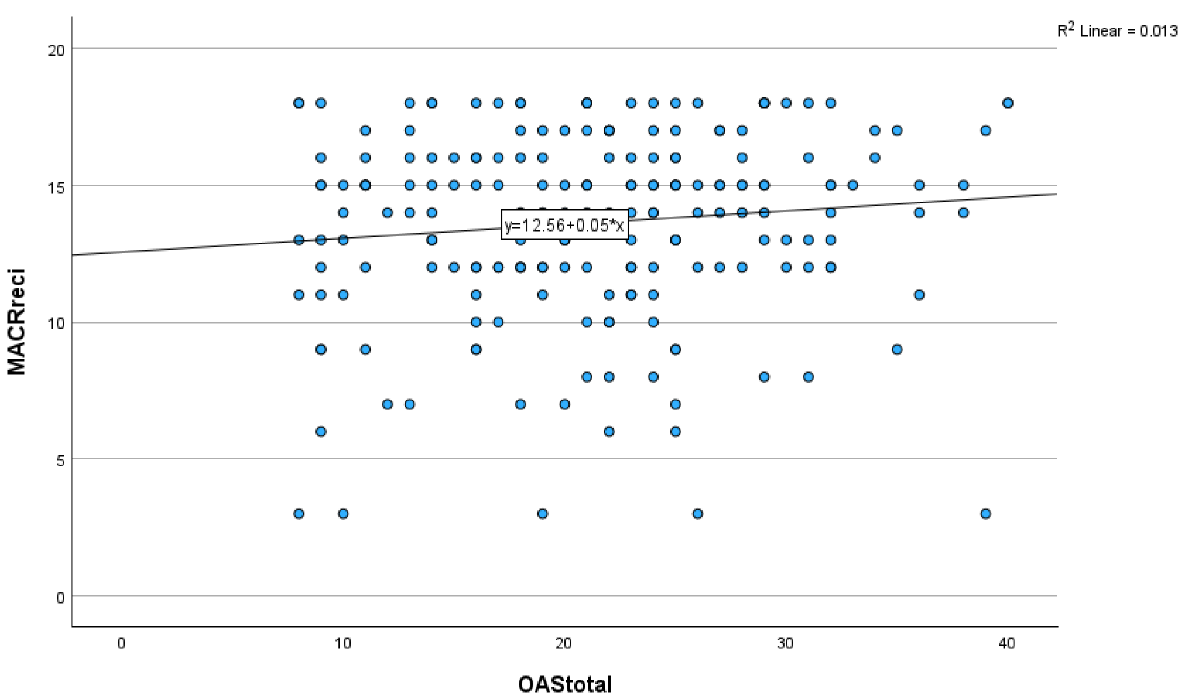
Source	*Dependent Variable*	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
External shame-proneness (OAS)	MACRfamily	16.805	1	16.805	1.939	.165	.010
	MACRgroup	6.964	1	6.964	.761	.384	.004
	MACRreciprocity	20.699	1	20.699	1.719	.191	.009
	MACRheroism	16.393	1	16.393	1.590	.209	.008
	MACRdeference	77.397	1	77.397	7.084	.008	.036
	MACRfairness	21.984	1	21.984	1.735	.189	.009
	MACRproperty	10.030	1	10.030	.713	.399	.004
Internal shame-proneness (SCS)	MACRfamily	2.979	1	2.979	.344	.558	.002
	MACRgroup	1.857	1	1.857	.203	.653	.001
	MACRreciprocity	.002	1	.002	.000	.991	.000
	MACRheroism	.605	1	.605	.059	.809	.000
	MACRdeference	2.409	1	2.409	.220	.639	.001
	MACRfairness	.926	1	.926	.073	.787	.000
	MACRproperty	2.768	1	2.768	.197	.658	.001
Gender	MACRfamily	1.887	1	1.887	.218	.641	.001
	MACRgroup	1.494	1	1.494	.163	.687	.001
	MACRreciprocity	2.978	1	2.978	.247	.619	.001
	MACRheroism	21.678	1	21.678	2.102	.149	.011
	MACRdeference	.016	1	.016	.001	.969	.000
	MACRfairness	7.943	1	7.943	.627	.430	.003
	MACRproperty	6.374	1	6.374	.453	.502	.002

Appendix U. Table 12. General Linear Model output with mental health diagnosis.

Source	*Dependent variable*	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
External shame-proneness (OAS)	MACRfamily	7.384	1	7.384	.823	.366	.006
	MACRgroup	1.326	1	1.326	.141	.708	.001
	MACRreciprocity	1.631	1	1.631	.137	.712	.001
	MACRheroism	13.914	1	13.914	1.282	.259	.009
	MACRdeference	60.073	1	60.073	5.353	.022	.037
	MACRfairness	19.947	1	19.947	1.448	.231	.010
	MACRproperty	10.147	1	10.147	.635	.427	.005
Internal shame-proneness (SCS)	MACRfamily	8.794	1	8.794	.980	.324	.007
	MACRgroup	4.479	1	4.479	.477	.491	.003
	MACRreciprocity	5.826	1	5.826	.490	.485	.003
	MACRheroism	3.750	1	3.750	.346	.558	.002
	MACRdeference	1.821	1	1.821	.162	.688	.001
	MACRfairness	.002	1	.002	.000	.990	.000
	MACRproperty	1.351	1	1.351	.085	.772	.001
Mental Health Diagnosis (Y/N)	MACRfamily	7.119	1	7.119	.794	.375	.006
	MACRgroup	2.380	1	2.380	.254	.615	.002
	MACRreciprocity	1.793	1	1.793	.151	.698	.001
	MACRheroism	.200	1	.200	.018	.892	.000
	MACRdeference	.143	1	.143	.013	.910	.000
	MACRfairness	14.128	1	14.128	1.025	.313	.007
	MACRproperty	.279	1	.279	.017	.895	.000

Appendix V. Scatterplots for current external shame-proneness and MAC domains.




R2 Linear = 0.013
y=12.56+0.05*x
MACRreci
OAStotal
0
5
10
15
20
0
10
20
30
40