Human evolution and culture in relationship to shame in the parenting role:

Implications for psychology and psychotherapy

James N. Kirby[1], Hayley Sampson[1], Paul Gilbert[1,2]

The University of Queensland[1]

The University of Derby[2]

Abstract

Objectives. There is considerable evidence that early parenting has profound effects on a range of physiological and psychological maturation processes. Furthermore, psychotherapy often addresses some of the distortions and developmental difficulties that have arisen from early childhood. While research has focused on obvious candidates such as abuse and neglect, this paper reviews some of the core themes related to a less investigated area, specifically parental shame on child development. Role shame sensitive parenting styles will be explored against an evolutionary background that contrasts early human and modern human rearing contexts. We also outline a study examining the role of shame in psychological controlling and dysfunctional parenting styles, its relationship to different dimensions of shame and fears of compassion.

Design: An online survey was conducted containing self-report measures of dysfunctional parenting styles, three dimensions of shame (external, internal, reflected), fears of compassion, mental health indices and a measure of psychological flexibility.

Methods. An online survey was accessed by 333 parents (306 being female) with a child between the ages of 3-9 years.

Results. Two hierarchical multiple regressions indicated support for our two primary hypotheses, with shame explaining significant variance in both psychological controlling and dysfunctional parenting styles over and above that explained by psychological inflexibility, parental mental health and fears of compassion. Additionally, results from standard multiple regressions indicated that fears of compassion account for significant variance in external shame, as well as internal and reflected shame.

Conclusions. Recommendations for future research include focusing on parental motivation in order to help support parents and children are provided.

Keywords: *parenting, shame, compassion, child rearing*

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Early parenting has profound effects on a range of physiological and psychological maturation processes (Atzil, Gao, Fradkin, & Barrett, 2018; Siegel, 2015). These include effects on epigenetics (Cowan, Callaghan, Kan, & Richardson, 2016; Kumsta, this volume) neurophysiology (Atzil et al., 2018; Belsky & de Haan, 2011) and a range of psychological processes such as emotion regulation (Cassidy & Shaver, 2017). It is well known that psychotherapists are often addressing emotional difficulties that have their roots in childhood (Holmes & Slade, 2018). While research has focused on obvious candidates such as abuse and neglect, '*shame*' in the parent, and shame and fear of inadequate parenting performance has not received research attention. This is important because even when parents are not overtly abusive or neglectful, and indeed may be highly motivated to be good parents, shame can introduce distortions in the child-parent relationship that have long-term impacts (Fogany & Target, 1997; Gilbert & Andrews, 2008; Holmes & Slade, 2018 Tracey, Robins & Tangney, 2007). Furthermore, because these effects are subtle, children growing up with parents who carry a lot of shame may be unaware of the degree to which their development is being influenced by parental shame, and may themselves be highly vulnerable to shame later in life (Fogany & Target, 1997; Gilbert & Andrews, 2008; Holmes & Slade, 2018; Tracey et al., 2007). This paper explores some of the core themes related to parental shame and its impact on parenting styles and openness or fear of compassion.

Evolutionary background

One reason that humans maybe particularly sensitive to shame in the parenting role is that in many ways modern culture provides grossly 'abnormal' environments for child-rearing (Narvaez et al., 2013, Narvaez 2017). This is revealed with a brief exploration of human evolution and hunter-gatherer lifestyle over the last 200,000 year (Dunbar, 2014). A highly significant anatomical evolutionary change was that humans evolved upright walking.

This had the impact of narrowing the birth canal at a time when the challenges of social living were evolving larger brained humans (Dunbar, 2014; Hrdy 2011). The consequence was that babies were born more immature and dependent on care and for longer than any other primate (Dunsworth & Eccleson, 2015; Lee, 2018). In addition birth itself could be painful and dangerous and often required help from kin (Hrdy, 2011). Post-birth learning including language, emotion regulation and social cultural rules required intense and long periods of protected learning and care (Cassidy & Shaver, 2016; Lee, 2018; Mayseless, 2016). These and other adaptations led to an infant and child-rearing system more open and collective than any other primate (Lee, 2018).

Another core aspect was typical early groups were relatively small, up to 150 individuals, which allowed for familiarity and reciprocal relationships (Dunbar, 2014). Indeed all individuals within a group (whom a child would get to know), could be responsible for protecting her/him, looking out for her/him and at times offering comfort. This is commonly referred to as allo-parenting, a phenomenon where the care of children is given by individuals other than the parents, usually but not only close relatives (Hrdy, 2011; Lee, 2018). Relatives and other group members were present 24/7 to aid child-rearing. Children were able to roam freely and could seek contact, comfort and play from whoever they so chose; and this is still the case in hunter gatherer groups today (Eibl-Eibesfeldt, 2017).

There are few vestiges of this living and child-rearing style in Western industrial society. In most Western societies only one in four grandparents are now involved in regular child care (Australian Bureau of Statistics, 2012). Non-parental care certainly exists but this is provided by strangers for brief subscribed times such as from formal child care support services, nurseries and schools (Australian Bureau of Statistics, 2012; Coall & Hertwig, 2010; Kirby, 2016). Schools provide contexts where children have to sit for quite long periods separated from their family contexts. In hunter gatherer societies co-sleeping, open

breastfeeding, ease of touch and open expression of affection by kin and non-kin alike are part of normal everyday life (Eibl-Eibesfeldt, 2017); especially important since we have known for a long time, stretching back to Harlow's monkeys of the 1950s, that physical contact and touch are amongst the most powerful and profound affect regulators creating a sense of safeness and comfort (Montague, 1971). Living in a sea of strangers, as what typically happens today for children, can be highly problematic, even to the extent that teachers are not allowed to physically touch or comfort a child in distress.

A consequence of modern social contexts have seen a serious and significant rise of loneliness among Western countries such as the United States, the United Kingdom and Australia, with prevalence estimates of loneliness in the general population of about 10.5% (Beutel et al., 2017). Loneliness is associated with a range of mental and physical health problems (Cacioppo, Capitanio, & Cacioppo, 2014) all of which are likely to impact on child-rearing. In the context of parenting, a recent survey of 2,000 mothers found that 90% feel lonely since having children and 54% felt friendless after giving birth, and single parents are at a heightened risk of loneliness and isolation compared to parent couples (Chiu et al., 2018). A recent study of 387 women who had given birth within the last 12 months found that those mothers who experienced a decrease in group membership after having a baby were associated with increases in depressive symptoms compared to those who maintained their group connections (Seymour-Smith, Cruwys, Haslam, & Brodribb, 2016). Moreover, a recent meta-analysis found that social isolation and loneliness are significant risk factors for early mortality, increasing the risk by of premature death by between 27-30% (Holt-Lundstad, Smith, Baker, Harris, & Stephenson, 2015). Yet despite this increased risk of social isolation and loneliness and its known physical effects (Cacioppo, et al., 2014) only 15% of people perceive social factors such as connectedness to others as important to mortality (Haslam, McMahon, Cruwys, Haslam, Jetten, & Steffens, 2018). Thus, we are

seeing a shift from supportive allo-parenting communities to isolated, competitive and shame vulnerable parenting.

Hrdy (2005, 2011) and Narvaez, (2017) argue that the future success of humans as a species relies on returning to cooperative breeding and allo-parenting, releasing the burden of parenting on single individuals and freeing children from entrapment with dysfunctional parents as their only source of comfort and guidance. Indeed, increasingly researchers have noted that we have drifted from being a typical species, raising our young in supportive groups, to being an atypical species, one where we isolate, disconnect from common parenting practices such as co-sleeping, and undermine the nurturing environments most supportive of growth (Biglan, Flay, Embry, & Sandler, 2012; Gopnik, 2014; Kirby, 2017; Narvaez, 2014). These are all examples of what has been called evolutionary mismatch; meaning that our brains and bodies evolved in, and to operate within, a particular ecological and social context which is now radically different (Li., van Vugt, & Colarelli, 2017).

The need to compete and the shame of failing

Part of the reason that we have created cultures that are different from the ones we evolved in can be laid at the door of our culture. The development of agriculture provided for rapidly increasing group sizes, the breakdown of small isolated hunter gatherer communities, which had benefited from caring and sharing, in favor of increasingly powerful hierarchies often regulated by dominant males (Harari, 2017). In these environments competing for social place and share of resources became more intense (Gilbert 2018). For thousands of years those individuals who were not able to compete, occupied and were trapped in low social rank (the poor) with low access to resources and often living very stressful and sometimes quite short lives (Mann, 1986).

The competitive dynamic shows itself in other ways to. For example Western culture is putting growing emphasis on socially comparative, competitive driven parenting. The advent

of '*how to do books*' increase parental concerns to do the '*right thing*' for their child, increased various fears of being incompetent in the role, and entice parents to constantly monitor themselves to the standards they are supposed to be meeting, especially but not only in comparison to others. Parents can also be sensitive to their children such their misbehavior in public or not achieving academically is seen to reflect shame on them. Some parents are in competition with their parenting peers, leading to the rise of parenting styles called '*tiger parenting*', where the parent invests heavily in the child to maximize success and achievement above all else (Chua, 2011; Fu & Markus, 2014). Indeed, correlational studies have found a strong focus on goals like status and money (compared to community feeling) are associated with being less warm and more controlling toward one's children (Kasser, Ryan, Zax, & Sameroff, 1995).

Social competition has two aspects to it. One is focused on moving up rank the other is focused on avoiding moving down rank (Gilbert et al 2007). Hence, some parents are up rank focused on wanting to excel as a parent, for the children to do well which they can take as a reflection of themselves, and hence are highly social comparatively focused. Others wish to avoid feeling inferior and being seen as inadequate in the parenting role, and for the possibility of their child to suffer as a consequence.

Parenting styles and shame vulnerabilities

Parents have many different motives that underpin their parental style including those identified as authoritarian versus authoritative (Robinson, Mandleco, Olsen, & Hart, (1995); facilitative (which is work around the child's needs) in contrast to regulating (which seeks to enable the child to fit into routines and structures of the family and parent (Raphael-Leff, 1986); and responsiveness/warmth compared to demandingness/control (Baurmeind, 1973). Importantly, the term 'parenting', as noted by Gopnik (2014) is a relatively new term, emerging in the 1960-70's. Gopnik (2014) points out that '*parenting*' indicates a desire or

goal to turn the child into '*something*', there is some kind of outcome to be achieved, which is one-directional. In contrast, the term '*being a parent*' emphasizes the process of care and what one can do to nurture the child, which is a bi-directional relationship between parent and child.

Many parents report difficulties with failure, self-criticism, shame, and guilt concerning their perceived parenting efforts and mistakes (Haslam, Patrick, & Kirby, 2015). There is an association between parental stress and higher levels of dysfunctional parenting styles, along with lower levels of overall child well-being (Abidin, 1992). Indeed, a recent report of 2,200 American parents found that 90% of mothers and 85% of fathers felt judged by strangers and other parents, with 50% reporting feeling judged almost all of the time (Zero to Three, 2016). Indeed, in evaluative social contexts where judgment occurs shame is a common experience of parents (Scarnier, Schmader, & Lickel, 2009), and can be in relation to the child's '*bad*' or problematic behavior or perceived poor handling of such behavior.

First-time mothers experience shame and judgment from the earliest moments of motherhood (Sutherland, 2010) in connection with childbirth (Beck, 2004) and infant feeding (Thomson, Ebisch- Burton, & Flacking, 2015). For example, mothers who have intended to breastfeed, but are unable to, are particularly vulnerable to shame and postnatal depression (Borra, Iacovou, & Sevilla, 2015). Thus, judgments and criticism about parenting can occur right from the moment we become a parent and can continue throughout parenting. Tang, Luyten, Casalin, and Vliegen (2016) surveyed 79 first- time parents and their children aged eight to 13 months, in a one- year longitudinal study and found that parental self- criticism and dependency (maladaptive needs to be loved and cared for and fears of abandonment, at the expense of developing feelings of autonomy and identity) were associated with increased levels of relationship stress, which in turn were negatively related to child development.

Research has found that parental concerns over child behavior does not reflect clinical

levels of child behavior (Sanders, Kirby, Tellegen, & Day, 2014). Suggesting, that parents are potentially more concerned over their reputation of being seen as a good parent, which is reflected in whether the child is misbehaving, compared to whether their child has clinical problems. More concerning, is the possibility that parents are unaware of typical child behavior, thus interpreting typical behavior as problematic. For example, a recent report in the United States of 2,200 parents found that 36% of parents reported that children under the age of two years should have enough self-control to resist something forbidden, yet this does not develop until ages 3 ½ and 4 years. Moreover, 42% of parents believe their children should be able to regulate their own emotions before age two (Zero to Three, 2015).

The complexities of shame

Shame is a complex multifaceted experience that can involve different emotions (anger anxiety, disgust) different behaviors such as anger or withdrawal, a range of physiological effects and can focus attention in different ways (Gilbert, 1998, 2007). External shame relates to experiences we attend to the minds of others and believe they are in some way looking down on us; we are diminished in the minds of others. Thus, we are likely to perform acts of reparation and prevention to change *their view* of ourselves. Internal shame is when our attention is focused on the self and we are preoccupied with our own negative self-evaluations. Here acts of reparation and prevention are to feel better *in our own* eyes. A third dimension of shame has been called reflected shame. This is when others with whom we are associated with can bring shame to us (e.g., children been convicted of crimes) and we can bring shame to others (Gilbert 2007 Gilbert, Bhundia, Mitra, McEwan, Irons & Sanghera, 2007). Indeed, in some cultures individuals are less focused on individual shame but rather on bringing shame (dishonor) to their families and communities (Gilbert et al 2007). All these forms of shame can texture our efforts of parenting. If shame becomes chronic it can impact on individuals' attention sensitivity responses to events, in that individuals are sensitive to

cues of social putdown and have primed rapidly activated defenses impacting on their interpersonal functioning and relationships (Lewis, 1971;Tangney et al., 1992; Tracey, Robins & Tangney, 2007).

In their cross-sectional survey of 198 parenting dyads Mills and colleagues (2007) found that parents' proneness to shame were associated with psychologically controlling styles of parenting. With results linking shame with negative approaches towards their child as well as overprotective styles of parenting, suggesting a potential link between vulnerability to parental shame and critical/ rejecting and controlling parenting styles. Psychological control, is a dysfunctional parenting style in which the boundary between child and parent is blurred and the parent fails to identify their child as a unique individual (Barber & Harmon, 2002). Psychological controlling parenting or tiger parenting, are prone to see the child as a reflection of themselves, thus resulting in either parental pride in what the child achieves or shame in what the child fails at doing.

As noted external shame can trigger defensive behaviors, which may have adverse effects in a parenting context (Carona et al. (2017). Scarnier, Schmader and Lockel (2009) found that the simple perception of a critical spectator, in the absence of an actual observer, was enough to heighten parental shame. Additionally, they found that parental shame predicted mothers' preference for the use of corporal punishment, reduced maternal warmth and was associated with greater efforts to distance themselves from negative child behavior.

Compassion and shame

While shame is derived from competitive motivational with a focus on self in arenas social judgement, caring motivation is evolved for completely different reasons and with very different psychological and physiological regulating process. Whereas shame stimulates the threat system and can close down frontal cortex to prioritize defenses (Dickerson, & Kemeny, 2004), caring motivation, and its derivative compassion, does the opposite. One evolutionary

path of caring was the caring protection of offspring and the creation of a secure base and safe haven for them (Cassidy & Shaver, 2018). Physiologically caring stimulates a range of systems that down regulate threat processing and facilitate the frontal cortex and vagus (for reviews see Gilbert, 2017; Seppälä, Simon-Thomas, Brown, Worline, Cameron & Doty, 2017; Singer & Bolz, 2012). In addition, compassion and the experience of compassion is one of the most powerful antidote to shame partly because of its physiological effect and also because it gives individuals an experience of being accepted and cared for and about (Gilbert, 2009). However, shame will also cut people off from seeking out compassionate others, or being compassionate to themselves in the fear that as they get close to others, they will be rejected. Gilbert et al., (2011) found that fears of compassion are strongly linked with self-criticism which is a form of inner a shaming. Hence, there is a range of fears blocks and resistances to compassion (Gilbert & Mascaro, 2007). It is possible then that shame in the parenting role will also be impacting on people's capacity for being open to compassion from others and to self. If this is the case then this will be a further dimension by which parents in competitive contacts can feel more isolated, more inhibited in turning to others for help and being compassionate to oneself. Today these potential relationships have not been explored; hence the need for this study.

Current Study

The current study seeks to expand upon the limited body of research examining the impact of shame on parenting style. Additionally, we will also examine the relationship between fears of compassion and shame (internal, external and reflected shame).

Based on the findings of Mills and colleagues (2007) and social mentality theory we predicted the following five hypotheses. We predict that shame (internal, external and reflected) will explain variation in psychological controlling parenting styles (hypothesis one) and dysfunctional parenting styles (hypothesis two) over and above that explained by

psychological inflexibility, parental mental health and fears of compassion. We also predict that fears of compassion will account for a significant amount of variance in shame (internal, external, reflected; hypothesis three).

We are also interested in how parent's concerns and worries for their children may impact on their levels of shame and levels of fears of compassion. We predict that parents who have social, emotional and behavioral concerns for their child will score significantly higher on shame measures (hypothesis four) and fears of compassion (hypothesis five) compared to parents who have no concerns.

Method

Participants and Procedure

The study employed a cross-sectional online survey design and was granted ethical clearance by ethical review board of the University of Queensland (17-PSYCH-4-85-JMC).

Predictor variables were parental mental health, psychological flexibility, fears of compassion, experience of shame, and external shame. Based on past research, the parent's age and number of children were included as control variables (Sanders et al., 2014). Outcome variables were psychological controlling and dysfunctional parenting.

Participants were recruited through convenience sampling (e.g., word of mouth, social media platforms such as Twitter and Facebook). The only eligibility requirement was the parent had a child aged between 3 and 9 years. An a priori power analysis using the software program G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that 193 participants would be required to obtain adequate power (.80) to detect a medium effect size of .15 at the standard .05 alpha error probability.

The online survey was accessed by 583 participants, of those 250 participants were excluded from the study due to their failure to complete the measures, that is, the participant did not go beyond the initial demographic data questions. Leaving a final sample of N=333.

Participants were parents of children between the ages of 3 and 9 years old ($M = 5.56$, $SD = 2.07$). Of these participants 306 were women aged 23-50 years ($M = 36.46$, $SD = 5.57$) and 27 men aged 25- 57 ($M = 37.74$, $SD = 2.07$). The majority of parents had two children (54.7%), identified as Australian (72.7%), and were in full-time work (37.5%). There were 47% of parents who reported concerns over childhood social, emotional and behavior problems. Participant demographic data presented in Table 1.

Insert Table 1 here

Measure

Family Background Questionnaire (FBQ; Zubrick et al., 1995). Demographic details collected included participant's gender, age, child's age, level of education, relationship status, socioeconomic status, employment status, number of children, ethnicity and country of residence (Zubrick et al., 1995). An additional questions asked whether parents had any social, emotional and behavioral concerns for their child.

Parenting Scale. The Parenting Scale (PS; Arnold, O'Leary, Wolff & Acker, 1993) consists of 30-items and measures three dysfunctional parenting styles, laxness, overreactivity and verbosity. This measure uses a 7- point Likert scale between 1 and 7, with higher scores on the scales indicating higher levels of that dysfunctional parenting style. The Parenting Scale has demonstrated robust internal consistency with a Cronbach's alpha score of (α= .84) for the overall total score (Arnold et al, 1993). Internal consistency for the current sample α = .74.

Parental psychological control measure. The Parental Psychological Control Measure (PPC; Olsen et al., 2002) consists of 33 item responses ranging from 1 = *never* to 5 = *always* on a 5-point Likert scale. This scale measures psychological controlling parenting style, specifically tapping into the construct of critical/rejecting parenting style. Internal consistency for the total score on the PPC in the current sample was robust with a Cronbach's

alpha of .89.

The acceptance and action questionnaire. The Acceptance and Action Questionnaire (AAQ-II; Bond et al., 2011), is a one-factor, 7-item self-report measure of psychological inflexibility. Participants rated these items on a 7-point Likert scale, from 1 = *never true* to 7 = *always true*. Higher scores are indicative of greater levels of psychological inflexibility. The AAQ-II has demonstrated robust convergent validity (Bond et al., 2011). Internal consistency for the AAQ-II in the current sample is indicative of strong reliability (α = .93).

Depression and anxiety stress scale. The Depression and Anxiety Stress scale (DASS-21; Lovibond & Lovibond, 1995) consists of 21 items that measure levels of depression, anxiety and stress. Each item asks participants to rate how much the statement applied to them over the past week. With a rating scale from 0 = *did not apply to me at all* to 3 = *applied to me very much, or most of the time*. Higher scores indicate higher levels depression, anxiety and stress. Internal consistency for DASS-21 in the current sample was α = .95 for the total score.

Other as Shamer Scale. The Other as Shamer Scale (OAS; Allan, Gilbert & Goss, 1994) is a self-report measure that provides a global measure of external shame and comprises of 18 items. The measure uses a 5-point scale, ranging from 0 = *never* to 4 = *almost always*. Higher scores on scale indicate higher levels of external shame. The OAS has also demonstrated convergent validity, being significantly associated with measures of both state and trait shame (Goss et al., 1994). Internal consistency for the OAS in the current sample is strong α = .95.

The experience of shame in parenting measure. The Experience of Shame in Parenting Measure *(*ESP) was developed for this study. We initially generated a complete item pool of 41, and then asked parenting and shame experts to review these items. This reduced the number of overall items to 17, which we used for the study. With the final

measure comprising of three subscales, 1) internal shame, 2) bringing shame to others, and 3) others bringing shame to one's self. An overall total score represents all experiences of shame specific to parenting. Items were measured on a 4-point Likert scale from 0 = *do not agree at all* to 3 = *completely agree*.

The internal shame subscale consisted of five items (e.g. "If your child shows behavior difficulties such as temper tantrums or yelling and screaming in public: *I* would see myself as inferior"). The bringing shame to others subscale consisted of seven items (e.g. "This time consider how worried or concerned you would be about the impact on your family: *My family would be seen as inferior").* The others bringing shame to one's self subscale consisted of 29 items with five items (e.g., "If my child had a temper tantrum I would worry that *others* will look down on me").

Internal consistency for the current sample was robust with α = .91 for the internal shame subscale, α =.91 for the bringing shame to others subscale, α = .96 for others bringing shame to the self, and α = .97 for the total score.

Fears of compassion scale. The Fears of Compassion Scale (FOC; Gilbert et al., 2011) uses a 5-point scale Likert scale, ranging from 0 = *don't agree at all* through to 4 = *completely agree*. It is comprised of three subscales, the fears of self-compassion subscale consisting of 15 items, fears of giving compassion to others comprising of 10 items, and fears of receiving compassion from others consisting of 13 items. Internal consistency in the current sample is α = .95 for the fears of self-compassion subscale, α = .91 for the fears of giving compassion, and, α = .94 for the fears of receiving compassion. Due to the large significant positive correlations among scales the three subscales were combined and a total fears of compassion score was computed, with α = .96 for the total composite score.

Data Analysis Plan

All data analysis was completed using IBM SPSS software Version 24. Prior to

conducting analyses, missing data, assumptions and descriptive statistics were examined.

Bivariate correlations between variables were also assessed. Threshold for statistical

significance for this study was α = .05, two-tailed. The hypotheses for this study were tested

using hierarchical multiple regressions, to determine the individual variance of the predictor

variables parental mental health and psychological flexibility, (DASS; AAQ-II) fears of

compassion (FOC), parental experiences of shame (OAS; ESP), to the dependent outcome

variables of dysfunctional parenting style (PS) and parental psychological control (PPC). The

theoretical rational for entering mental health and psychological inflexibility in Step 2 was

based on prior literature linking parental mental and parenting style (Sanders et al., 2014).

Fears of compassion were then entered in Step 3 due prior research finding fears of

compassion is significantly correlated with dysfunctional parenting styles (Kirby & Baldwin,

2017).

Results

Data Screening

Missing data in this study was analyzed using missing value analysis. All variables in

this study were found to be adequately assessed with less than 5% missing data. Little's

Missing Completely at Random (MCAR) test was conducted to determine whether data was

missing in a systematic way, with a non-significant result of $\chi2$ (4080, $N = 333) = 4107.946$,

$p = .376$. Missing data were imputed using multiple imputation.

Preliminary Analysis

Prior to conducting analysis to address the research questions, assumptions of

normality, linearity and homoscedasticity were ascertained by examining the distribution of

scores from the measures that were utilized by this study (PS; PPC; OAS; DASS-21; ESP;

AAQ-II; FOC). Using the recommended threshold of ± 2 for standardized skewness and

kurtosis, median, and visual inspection of scatterplots and histograms, total scores for the PS,

PPC, AAQ-II, OAS, ESP were all normally distributed. The means, standard deviations for all measures are in Table 2.

Insert Table 2 here

Bivariate relationships. Correlational analyses were conducted to assess the magnitude and direction of the relationships between (a) parents age, (b) number of children, (c) mental health, (d) fears of compassion, (e) shame, and (f) parenting style. A summary of all bivariate correlations is presented in Table 3.

In terms of key focus, significant medium to large correlations between higher scores for internal and reflected shame as measured by ESP and higher scores for psychological controlling parenting (PPC) and dysfunctional parenting style (PS) were found. For external shame (OAS) a significant moderate correlation was found with psychologically controlling parenting styles (PPC) and dysfunctional parenting style (PS).

The associations between parental mental health and psychological controlling parenting style (PPC), indicated a small significant correlation for both the DASS-21 and AAQ-II (psychological inflexibility) with PPC and PS. Finally, the association between fears of compassion and psychological controlling parenting style had a significant moderate positive correlation, and a small correlation with dysfunctional parenting style.

Main Analyses

Predicting Psychological Controlling Parenting Style. Prior to conducting the regression analyses, assumptions of multicollinearity, and normality of residuals, linearity, and homoscedasticity, were assessed. Visual inspections of the residual plot, and probability plot of standardized residuals, indicated that the assumptions of normality of residuals, linearity and homoscedasticity held for each distribution in the regression.

Testing for univariate and multivariate outliers was done prior to conducting analysis. Casewise diagnostics revealed three cases with standardized residuals with values over three,

with Cook's distance less than 1 for all cases indicating no problems. Mahalanobis distance (critical χ 2 for *df* =7 of 24.32) was exceeded by three cases. Regressions were conducted with and without outlier cases, and results did not change, thus all cases were retained.

Demographic variables of parent's age and number of children were included on a theoretical basis, and entered at Step One. Parent mental health and psychological inflexibility measures were entered at Step Two. Fears of compassion Step Three. Shame predictors were entered at Step Four. Results of the analyses are summarized in Table 3, showing R^2 and R^2 (adjusted) (along with associated p values) at each step.

Insert Table 3 here

After controlling for all the proposed co-variates (e.g., parent age, number of children, mental health, fears of compassion) shame explained 7.2% of the variance (significant) in psychological controlling parenting, with fears of compassion (2.9%), psychological inflexibility (1.9%) and number of children (1.9%) also explaining significant proportions of the unique variance. Overall, the final model explained 19.1% of the variance in psychological controlling parenting styles $R^2 = .191$, adjusted $R^2 = .173$, *F* change (2,325) = 14.63, *p* < .001. These results support our first hypothesis with shame being the strongest predictor of psychological controlling parenting style.

Predicting Dysfunctional Parenting Style. To test the second hypothesis of this study a hierarchical multiple regression was conducted. The second hypothesis was that shame will explain variation in dysfunctional parenting styles over and above that explained by psychological flexibility, parental mental health and fears of compassion. Results of the analyses are summarized in Table 4, showing R^2 and R^2 (adjusted) (along with associated p values) at each step.

After controlling for all the proposed co-variates (e.g., parent age, number of children, mental health, fears of compassion) shame explained 6.5% of the variance (significant) in

dysfunctional parenting style, with the only other significant predictor in the final model being parents age accounting for 1.1% (significant) of the variance. Supporting, our second hypothesis that shame would explain the variation in dysfunctional parenting styles over and above that explained by psychological flexibility, parental mental health and fears of compassion. In combination, the final model explained 14.4% of the variance in the dysfunctional parenting styles $R^2 = .144$, F change, $(2,325) = 15.01$, $p < .001$.

Fears of compassion predicting shame. The three subscales of fears of compassion to self, fears of receiving compassion and fears of giving compassion, were combined due to the sensitivity of linear regression to multicollinearity. The decision to combine these scales was based on the high significant positive correlations among these scales exceeding $r=.7$, as the literature suggests to not combine two independent variables with correlations exceeding $r= .7$, and forming a composite score by combing the variables is thus an acceptable practice (Pallant, 2016).

To examine the relationship between fears of compassion and shame, two standard multiple regressions analysis were conducted. The first regression assessed the amount of variance accounted for in the experience of shame in parenting by fears of compassion. The results for this model were, $R^2= .463$, $F (1,331) = 1.141$, $p < .001$, with fears of compassion contributing significantly to the model $\beta= .489$ $p< .001$, and accounting for 24% of the variance in parents experience of shame. A second standard regression with external shame as measured by the OAS as the dependent variable and fears of compassion as the predictor (FOC) was conducted. Results from this regression were, $R^2 = .239$, $F (1,331) = 285.145$, $p< .001$, with fears of compassion contributing significantly to the model $\beta= .680$, $p< .001$, and accounting for 46.3% of the variance.

Results from both analyses provide support for our third hypothesis with fears of compassion accounting for a significant amount of variance in external shame and

experiences of shame in parenting.

Concerns for Child and Level of Shame and Fears of Compassion

Finally in a series of an independent–samples t-tests, reported in Table 5, we found that parents with more concerns for their child's social, emotional and behavioral problems (n = 157) compared to those with less concerns (n = 175), scored significantly higher on: external shame, experiencing of shame in parenting, and fears of compassion for self, others and receiving compassion. All means and standard deviations are in Table 5, and although all findings were significant the magnitude of the effect between these differences were small. These results support our fourth and fifth hypotheses that parents who have social, emotional and behavioral concerns for their child score significantly higher on shame measures and fears of compassion compared to parents who have less concerns.

Discussion

There are many influences that influence how parents perceive their parenting roles, how well they think they are doing, and the level of support they get for the struggles they experience. We have argued that in competitive cultures the issue of social evaluation and shame becomes a prominent theme in parenting roles. This is borne out by our study. The results from this study support our hypotheses and social mentality theory for the association between parents levels of shame, fears of compassion, and psychological controlling parenting styles. As predicted shame-textured parenting styles, fears of compassion and mental health were significantly correlated, with parent's experience of shame and psychological controlling parenting having the strongest associations. Moreover, confirming past research, there was a moderate correlation with fears of compassion and parenting style (Kirby & Baldwin, 2017), indicating the different motivational approaches (shame and compassion) are significantly linked to parenting. Our predictions that shame would account for unique variance in parenting style, both psychological controlling and dysfunctional

parenting style, over and above that of parents age, number of children, parental mental health and fears of compassion, were also supported.

Results from two standard linear regressions provided further support for the link between fears of compassion and experience of shame in parenting and external shame, with models predicting 24% and 46% of the variance, respectively. These findings support past research indicating those who experience shame also find it difficult to experience compassion (Gilbert & Procter, 2006).

In accordance with social mentality theory, if one can switch parents out of a socially comparative rank focused motivation, and orient them to a compassion motivation this may help reduce level of shame parents experience and thus help them in their parenting role. Shame is a target for many psychotherapies (Darling & Tangney, 2011) but less so for helping parents. One study examined a brief online compassionate mind training program to help mothers who were 24-months post-partum (Mitchell, Whittingham, Steindl, & Kirby, 2018). Overall 262 mothers completed the program, and although the program led to increases in self-compassion and decreases in post-traumatic stress, and had trends in the right direction it did not significantly reduce external shame experienced (Mitchell, Whittingham, Steindl, & Kirby, 2018). The authors suggest that it was because of the 'light-touch' nature of the program, which only included two short videos plus a tip-sheet on shame and in fact because of its high emotional impact probably requires much more focused intervention

We also found that in the current study parents who reported elevated concerns for their children had higher scores on measures of shame and higher fears in compassion, in comparison to parents with less concerns for their child. Although the effect sizes were small, these findings suggest parents who have elevated concerns for their children are more prone to be distressed by negative evaluations.

Implications and Recommendations

There is considerable evidence that cultures guide child-rearing practices and parenting has fundamental impacts on physiological and psychological development. Children growing up in environments that are collective and supportive are cared for by those who are themselves cared for and supported. Hence the carers (parents) states of mind, what they pay attention to and reward and engage playfully with or punish will be influenced by that social milieu. Consequently children's growing minds and epigenetic patterning will be for caring sharing environments. In contrast, children who are growing up in more hostile environments and where parents are themselves relatively isolated, unsupported and under high competitive pressure, will be patterning their children to survive in that cultural context. Hence, what they pay attention to in their child, what they model for their child, what they reinforce in their child and what they punish in their child will all be patterned by the competitive context. In this way children internalise a competitive way of being in the world making them more vulnerable to shame and self-criticism and when becoming parents themselves entering this role with the burden of self-doubt, self-criticism, and the need to achieve success and prove themselves competent in their parenting roles. Their children in turn will begin to internalise these competitive pressures to survive in this competitive environment. Thus, parenting needs to be sensitive to the impact and long-term influence shame can have, which can lead to emergence of later adult difficulties, which present in psychotherapy.

In addition, because it is motives and algorithms that are actually the unit of evolutionary selection by competition, then algorithms will be emerging within social groups to close down altruistic, sharing, caring patterns of behaviour in favour of competitiveness. This is becoming more common, for example increasingly closing down the importance of touching and physical closeness, which are among the most powerful stimulators of oxytocin endorphins and other important physiological processes, and touch and physical closeness is

instead being shamed and stigmatised. For example, in a study conducted by Miller, Kahle, Lopez, and Hastings (2015) the links between compassion, autonomic nervous system activity, and parenting behaviours among 83 mothers during challenging interactions with their child were examined. Mothers and their 3.5-year-old child were provided with two tasks. During the difficult puzzle task, mothers could give as much assistance to the child as required. During an origami task, mothers were instructed to provide verbal instruction only. Miller et al. found that greater self-reported compassion for one's child was associated with greater observed warmth, reduced observed negativity, and reduced harsh parenting. The study by Miller et al. (2015) used observational and physiological measures, supporting the conclusion that compassion protected against adverse parenting practices, even among those who experienced strong physiological stress.

In addition, emerging meta-analyses of parenting techniques are questioning the usefulness of such strategies of time-out as part of universal parenting programs. For example, a recent meta-analysis of parenting strategies found for the first time that some techniques that are often assumed to be important for all parenting programs (e.g., time-out) seem important for parenting programs in indicated prevention and treatment specifically, but not for universal parenting programs (Leijten et al., 2018). Thus, if the main aim of a parenting program is to reduce children's conduct problems time-out seems an effective method, however, if the parenting program has another aim such as improving parent-child relationships and emotional intelligence, then the program should have different techniques (Leijten, Gardner, Melendez-Torres, Knerr, & Overbeek, 2018). However, we are living in cultures that are increasingly competitive and increasingly closing down the very things that have made us human, and has driven social intelligence, which is our capacity for close social affiliations and connections (Dunbar 2010).

Limitations

There is strong theoretical support for the relationships between higher levels of shame and elevated fears of compassion impacting on parenting style. The present study adds to the literature as one of the first studies to provide empirical evidence in support of the current theory. However, there are several limitations that need to be noted. First, we did not include measures of child behavior or parental self-efficacy, future research should do, as these factors have been found to be predictive of parenting style (Davis & Carter, 2008; Wittkowski, Garrett, Calam &Weisberg, 2017). Second, participants for this study were volunteers, and that a sampling bias may have transpired. Third, the sample largely consisted of mothers as opposed to fathers. Fourth, results of this study due to the design cannot infer causality and may not be generalizable to fathers, due to the paucity of male participants. Further research with a more equal ratio of male and female participants in the sample is suggested to ascertain the potential role that shame may play for fathers as are differing research designs.

Conclusion

Parents have a challenging yet rewarding role in nurturing their children. However, competitive cultures amplify the pressures parents' experience making them vulnerable to shame, and increasing the likelihood for psychological controlling and dysfunctional parenting styles. Compassion offers a potential pathway to help parents in their parental role.

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Table 1

Study 1: Participant Demographic Characteristics ($N = 333$)

Characteristics	N	%
Gender		
Male	27	8.1
Female	306	91.9
Education		
Some high school	10	3
Completed high school	27	8.1
Tertiary or Tafe Course	155	46.5
Postgraduate degree	124	37.2
Employment status		
Full-time	125	37.5
Part-time	96	28.8
Casual	24	7.2
Employed, but on maternity leave	18	5.4
Full-time student	16	4.8
Unemployed, looking for work	6	1.8
Not in paid employment	48	14.4
Ethnicity ($n = 150$)		
Australian	242	72.7
South Sea Islander	4	1.2
Asian	11	1.3
Aboriginal/Torres Strait Islander	4	1.2
Other	72	21.6
Relationship status		
Single	18	5.4
Married/defacto	288	86.5
Separated/Divorced	26	7.8
Wido/widower	1	.3
Household dynamic		
Original family (both biological or adoptive parents present)	266	79.9
Step-family (two parents, one being a step-parent)	22	6.6
Sole parent family	36	10.8
Number of children		
One	75	22.5
Two	182	54.7
Three	55	16.5
Four	17	5.1
Five	4	1.2
Age of Child		
3	71	21.3
4	61	18.3
5	48	14.4
6	35	10.5
7	43	12.9

8	38	11.4
9	37	11.2
Social, emotional, behavioral concerns with child		
Yes	157	47.1
No	175	52.7

Table 2

Bivariate Correlations Between Key Variables

Variable	1	2	3	4	5	6	7	8	9	Mean	SD
1. Parent Age	1.00						.				
2. No. of Children	-.080	1.00									
3. DASS-21	-.288**	.073	1.00							12.81	12.21
4. AAQII	-.196**	.114*	.699**	1.00						19.87	9.47
5. FOC	-.227**	.059	.630**	.720**	1.00					37.94	28.33
6. OAS	-.245**	.039	.603**	.701**	.680**	1.00				18.59	13.41
7. ESP	-.213**	.075	.415**	.356**	.489**	.723**	1.00			31.11	24.20
8. PPC	-.015**	.140*	.226**	.265**	.309**	.377**	.653**	1.00		1.86	.47
9. PS	.004**	.082	.222**	.194**	.195**	.348**	.417**	.422**	1.00	3.16	.42

Note: **$p < .01$ level *$p < .05$ two-tailed. DASS-21= Depression Anxiety Stress Scales-21. AAQII=The Acceptance and Action Questionnaire II. FOC=Fears of Compassion to Scale. OAS= Others as Shamer Scale. ESP= Experience of Shame in Parenting Measure PS=Parental Scale. PPC= Parental Psychological Control Measure.

Table 3

Summary of Hierarchical Regression Analysis for Variables Predicting Psychological

Controlling Parenting Styles (PPC Scores)

	β	95%CI		t	sr^2	R^2	$R^2(adj.)$
Step 1						0.20	0.14
Parent's Age (years)	-.01	[-.008	.008]	-0.66	.001		
Number of children	.14	[-.016	.124]	2.55**	.020		
Step 2						.089	.078
Parent's Age (years)	.06	[-.004	.013]	1.12	.336		
Number of Children	.12	[.005	.110]	2.17**	.013		
DASS-21	.10	[-.002	.008]	1.31	.001		
AAQII	.20	[-.002	.015]	2.64**	.019		
Step 3						.118	.104
Parent's Age (years)	.08	[-.002	.013]	1.37	.005		
Number of Children	.12	[.009	.113]	2.32*	.015		
DASS-21	.04	[-.004	.007]	.52	.001		
AAQII	.06	[-.005	.010]	.66	.001		
FOC	.25	[.001	.006]	3.26***	.029		
Step 4						.191	.173
Parent's Age (years)	.09	[-.001	.015]	1.78	.008		
Number of Children	.10	[.002	.102]	2.06*	.011		
DASS-21	-.01	[-.005	.005]	-.18	.001		
AAQII	.13	[-.002	.013]	1.49	.005		
FOC	.15	[.001	.005]	1.83	.008		
ESP	.33	[.004	.008]	5.39***	.072		
OAS	-.11	[-.008	.002]	-1.31	.004		

Note: $N = 333$. DASS-21= Depression Anxiety and Stress Scales. AAQ-II = Acceptance and Action Questionnaire version II. FOC= Fears of Compassion Scale. ESP= Experience of Shame in Parenting Measure. OAS= Others as Shamer Scale.
*p < .05, **p < .01, ***p< .001.

Table 4

Summary of Hierarchical Regression Analysis for Variables Predicting Dysfunctional

Parenting Styles (PS Scores)

	β	95%CI		t	Sr^2	R^2	$R^2(adj.)$
Step 1						.007	.001
Parent's Age (years)	.01	[-.008	.010]	.19	.001		
Number of children	.08	[-.014	.107]	1.51	.007		
Step 2						.062	0.50
Parent's Age (years)	.08	[-.003	.016]	1.39	.005		
Number of Children	.07	[-.022	.097]	1.24	.004		
DASS-21	.19	[.002	.013]	2.52**	.018		
AAQII	.07	[-.004	.011]	.90	.002		
Step 3						.065	051
Parent's Age (years)	.08	[-.002	.016]	1.47	.006		
Number of Children	.07	[-.021	.098]	1.28	.005		
DASS-21	.17	[.001	.013]	2.19**	.014		
AAQII	.02	[-.008	.009]	.21	.001		
FOC	.09	[-.001	.004]	1.10	.003		
Step 4						.144	1.26
Parent's Age (years)	.11	[.001	.018]	2.04*	.011		
Number of Children	.06	[-.025	.090]	1.11	.003		
DASS-21	.10	[-.002	.010]	1.36	.005		
AAQII	.03	[-.007	.010]	.35	.001		
FOC	-.06	[-.004	.002]	-.73	.001		
ESP	.31	[.004	.009]	4.95***	.065		
OAS	.05	[-.004	.008]	.63	.001		

Note: $N = 333$. DASS-21= Depression Anxiety and Stress Scales-21. AAQ-II = Acceptance and Action Questionnaire version II. FOC= Fears of Compassion Scale. ESP= Experience of Shame in Parenting Measure. OAS= Others as Shamer Scale.
*p < .05, **p < .01, ***p< .001.

Table 5

Independent–samples t-test comparing parents' concerned and not concerned for their child's social, emotional and behavioural problems for shame and fears of compassion

Dependent variable	Parents Concerned for child Social Emotional and Behavioral Problems (n = 157)		Parents Not Concerned for child Social Emotional and Behavioral Problems (n = 175)			Difference between conditions		
	M	*SD*	*M*	*SD*	95% CI	*t*(330)	*P*	η²
Experience of Shame in Parenting	35.63	25.78	27.07	22.07	[3.39, 13.72]	3.26	>.001	0.03
External Shame	21.48	14.17	15.94	12.16	[2.70, 8.41]	3.83	>.001	0.04
Fears of Compassion-Self	14.06	13.70	8.91	9.83	[2.55, 7.76]	3.90	>.001	0.04
Fears of Compassion-Other	16.12	9.15	12.70	8.67	[1.49, 5.34]	3.49	>.001	0.04
Fears of Compassion-Receiving	14.77	12.44	9.65	9.22	[2.73, 7.51]	4.22	>.001	0.05