

**EMOTIONAL PROCESSES IN ONLINE PARENT LEARNING:
EXAMINING THE IMPACT OF SHAME AND
COUNTERING SELF-RELATED APPRAISALS
ON PARENT LEARNING OUTCOMES**

by

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Abstract

Online parenting workshops are important contexts of learning for today's parents. Responses to such workshops are varied, the same information can leave some parents feeling empowered and others distressed, affecting their capacity for learning. Existing research suggests that parents may be especially prone to feeling the self-conscious emotions of shame and guilt, which are associated with certain cognitive appraisals and response tendencies that may impact learning processes. Applying shame theories to the context of parent education, this study tested the efficacy of an intervention designed to counter shame and examined the effects of shame and self-related appraisals on learning outcomes in an online parenting workshop. Two groups of parents completed a self-paced workshop that included an activity and a video expected to evoke shame or guilt. The experimental group ($n = 116$) was provided with messages designed to counter shame appraisals during the workshop, while the comparison group ($n = 124$) did not receive such messages. Results showed that parents who received the shame-countering messages scored higher in a post-workshop knowledge test than those who did not. Furthermore, regression analyses revealed that shame negatively impacted learning outcomes whereas guilt contributed positively to them. Guilt seemed especially adaptive for parents reporting high levels of shame, buffering the impact of shame on their learning outcomes. Parents' appraisals of the workshop as exposing their flaws and failings (appraisals of inadequacy) and as a reminder to be a better parent (appraisals of self-improvement) were both found to predict feelings of guilt, but only appraisals of inadequacy as a parent predicted shame. These self-appraisals had distinct effects on learning outcomes. Parents who felt that the workshop exposed their inadequacies reported lower receptivity, engagement, motivation to repair and knowledge test scores.

Thinking that one should be a better parent predicted higher ratings across all learning outcomes and seemed to buffer the negative impact of making self-appraisals of inadequacy on learning outcomes. Overall, the findings suggest that shame, guilt and self-related appraisals play important roles in parents' learning processes and specific implications of these emotions in the context of parent education are discussed.

Lay Summary

Research suggests that shame is associated with thinking about oneself as flawed, and with tendencies to hide, disconnect or be defensive, which is likely unhelpful for learning. Guilt is felt when one thinks one has done something wrong, and usually motivates actions to repair. Parents may be particularly prone to feeling shame and guilt, especially in contexts of learning. This study tests whether providing messages that counter shame-evoking thoughts during an online parenting workshop can help improve learning outcomes. Results showed that receiving brief, shame-counteracting messages helped parents score higher on a knowledge test. Further, parents who reported feeling less shame and more guilt, were more receptive, confident that they would do better, and motivated to take action to repair. Thinking that the workshop exposed one's flaws led to worse learning outcomes, and thinking that one should be a better parent was helpful for learning.

Preface

Angela Sokyee Low is the sole author of this dissertation.

Approval for participant recruitment and the administration of this study was received from the University of British Columbia Behavioral Research Ethics Board (BREB; certificate number H20-03392).

Collaborators included Drs. Shelley Hymel, Sheila Marshall and Toni Schmader, who provided guidance throughout the dissertation project. Angela Low is otherwise solely responsible for the study design, participant recruitment, data collection, data analysis, and writing the final dissertation document.

No publications arising from this work yet exist.

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For Derek, Sianna and Rhysa

You make the world a brighter place

And me a better person.

Chapter 1: Introduction

Once, during a break in a parenting workshop I was facilitating, a young pregnant woman came up to me. I had noticed her cry quietly while I was speaking about secure attachment relationships and how responsive caregiving especially during a baby's early days shapes internal circuitry for positive development. She told me that her first child was almost two, and she had struggled with post-natal depression when he was born. She said there were days she did not want to be with him at all, and others had to help look after her own child. "Now he always screams when I leave, and he is so mad he won't come to me when I get back" she said, welling up again. "That's insecure attachment, right? I really screwed up. Poor Isaac. I'm a terrible mother. He deserves a better mom." She left before the workshop was over, and I felt that something had gone dreadfully awry. As an educator who cares deeply about the well-being of children and parents, my intentions were kind- I wanted to provide parents with evidence-based strategies for parenting practices that promote healthy child development. As a parent who has struggled often with two strong-willed kids, I wanted to offer workshops to help make parents' lives easier. Yet my words seemed to have evoked thoughts and emotions that led to suffering and withdrawal.

In the many parenting workshops that I have facilitated or attended, I have met parents who seemed distressed and annoyed alongside parents who are interested and engaged. I have heard heart-wrenching statements such as "this makes me think there is something wrong with me as a parent" or "I'm letting everyone down", yet also "this is so helpful" or "I am inspired" from parents at the same workshops. Such markedly different love and hate responses to the same parenting advice are also frequently observed in the comments section of online parenting articles or videos, or in online reviews of parenting applications (apps) or books. It would seem

that the same parenting resources can empower some parents, yet leave others feeling judged, diminished or simply worse about themselves, which likely impacts their confidence in parenting and their capacity to learn.

I became curious about the emotional processes that underlie learning for parents- what are parents thinking and feeling during a parenting workshop, and how do these thoughts and feelings affect their capacity to learn? It became clear to me that the content provided may not be the most important factor in a learning context. More importantly, as an educator, I wanted to know, *is there something educators can do to ensure that the information offered in parenting workshops are step-stools that raise parental efficacy and well-being, and not another stick parents may beat themselves up with?*

Shame theory provides a novel and fitting framework for understanding and addressing this problem. Shame is an aversive moral emotion that is elicited when a person appraises an event to have revealed something flawed and undeserving in themselves which commonly leads to discomfort, disconnect and disengagement (e.g., Brown, 2006, Lewis 1971; Tangney & Dearing, 2011). Being in a parenting workshop can be shame-evoking, as the nature of these parent learning resources is to focus on a problem, warn of negative outcomes, and offer strategies on how parents can do better, communicating standards that they are expected (and at the moment failing) to reach. Indeed, adult learning has been associated with shame, as showing up to learning contexts requires acknowledging that one is lacking in knowledge or competency that one should have (Walker, 2017). This may be especially true for people who are prone to feeling shamed and conditioned to appraising events as reflecting a critical flaw in themselves.

There is a body of literature on parenthood and shame which suggests that parents as a population may be especially vulnerable to feeling shamed. Dominant narratives of parenthood

and increased pressures in contemporary parenting practices place unrealistically high cultural expectations on parents that, when internalized, can cause shame (Sutherland, 2010). Some have even argued that shame and guilt are part and parcel of parenthood, serving an evolutionary function (Rotkirch & Janhunen, 2010). When shame experiences become chronic, a cognitive-affective pattern of dispositional self-blame may develop that makes shame a highly probable response to ambiguous events (Koerner, Tsai, & Simpson, 2011). This may explain why many parents may be prone to interpreting information provided in a workshop as revealing how they have failed.

Researchers have found that shame is often accompanied by negative affect such as anxiety, anger, hostility and depression (Lutwak & Ferrari, 1997; Tangney, Burggraf, & Wagner, 1995) and with links to response tendencies such as withdrawal and avoidance, or being defensive and rejecting (Lewis, 1971, 1992; Tangney & Dearing, 2002) that may be maladaptive for learning. Thus, shame and self-related appraisals may be under-explored but potentially useful factors to consider for enhancing parent learning outcomes.

There are potential gains to be reaped from applying shame theory in the context of parent learning. Very little empirical research currently exists on shame and self-related appraisals in adult learning, and no studies to date have examined these emotional processes in parent learning. Integrating shame research into the domain of parent learning opens up new avenues for scientific inquiry and new opportunities for making parent training kinder and more effective, helping to advance the field of parent education.

Becoming a parent comes with a steep learning curve, there is much to learn as individuals take on the novel task of being responsible for the care and development of little but powerful human beings. Parents commonly seek and consume considerable amounts of

information with regard to the health and development of themselves, their children, and their relationships (Plantin & Danebeck, 2009). Online parenting resources are an important educational source for parents (Dworkin, Connell, & Doty, 2013), especially during the recent pandemic, when families need more support as they are spending more time together and apart from others. Many family support organizations and parent education service providers have had to turn to online programming in the past year, making online parenting workshops and seminars important spaces where parents learn. My research study, which examines appraisals and emotions that underlie parent learning processes within the context of an online parenting workshop, is thus a valuable and timely undertaking.

The goals of my research project are three-fold. The primary goal is to test the efficacy of a brief intervention designed to counter shame-related appraisals during an online parenting workshop. A second goal is to examine the effects of shame on parent learning outcomes. The final goal of the current study is to explore self-related appraisals parents make in a context of learning and examine the effect they may have on learning outcomes. Below I review theory and research on shame and self-related appraisals and draw connections to the literature on parenthood and adult learning, to illustrate the context of my study.

Chapter 2: Review of the literature

In this section, the research on shame is reviewed first. As shame-related appraisals are central to this study, the review focuses on this cognitive aspect of shame. Secondly, the response tendencies of shame and its implications for learning, are described. Finally, the review extends to the literature on shame in parenthood, highlighting how parents as a population may be uniquely vulnerable to shame experiences.

Shame and self-related appraisals

“It is part of the collective human experience to at times feel damaged, inadequate, and lacking.”

— Walker, 2017, p.366

Shame can be an elusive emotion to identify and describe. Shame is seldom spoken about, as the nature of shame is to hide, which works against its ability to be known (Brown, 2006).

Shame is best understood situated within its relations in the family of moral emotions, which include guilt, regret and embarrassment. These uncomfortable emotions play important social roles, functioning to inhibit morally objectionable, antisocial behavior, and promote behaviors that fit with group values and rules (Tangney & Tracy, 2012). Moral emotions can be evoked by intentional violations (e.g., withholding affection), unintentional transgressions (e.g., losing temper and yelling) and for not taking a desirable action (e.g., spending more time with kids, doing kind acts).

Cognitive appraisals underlying shame

Early theorists examined shame in response to external triggers, positing that shame is experienced in reaction to a public revelation or disapproval of a flaw (Ausubel, 1955). In contemporary emotion research, a robust body of research involving narrative accounts of moral

emotions like shame and guilt found very few ‘classic’ situations specific to inducing shame as separate from other moral emotions such as guilt or embarrassment (Tangney, 1992; Tangney et al., 1994). For example, in a study involving autobiographical accounts of shame and guilt experiences, Tangney and colleagues (1994) found that shame did not require a disapproving audience to occur, and is often experienced in solitude. Additionally, many morally ambiguous events (e.g., cheating, breaking rules, anti-social behavior, stealing, disobeying authority, knowing yet failing to do the right thing, etc.) were found to just as likely be associated with shame as with guilt. It would thus seem that a big piece of the puzzle on shame experiences lies beneath the surface. Emotional reactions are intimately related to one’s cognitive appraisal of the circumstances (Scherer, 1982; Smith & Ellsworth, 1985). Thus, looking beyond external events to examine *internal appraisals* made by individuals is key to understanding why the same event can be motivating for some and disheartening for others.

This is particularly salient for self-conscious emotions like shame and guilt, which are known to be secondary emotions that involve self-evaluative processes (Tangney et al., 1996; Tracy & Robins, 2006). Individuals experience a self-conscious emotion like shame, guilt, embarrassment, or pride when they relate an event to their self-representations, and make appraisals about the implications the event has on their identity. In reaction to hearing information that is completely new to them, the parent who thinks “this shows how little I know about parenting” will likely feel a self-conscious emotion like shame or guilt than the parent who simply thinks, “this is new to me”. Described below are three types of self-related appraisals associated with shame in the literature.

Attributions to a stable, flawed self. Possibly the most widely discussed distinction between shame and guilt involves underlying causal attributions. Shame is linked to attributions

to an *internal, uncontrollable cause*, and guilt to attributions to an *internal, unstable, and controllable* cause (Tangney & Dearing, 2002; Tracy & Robins, 2006). In other words, shame is precipitated by appraisals focusing on what the perceived failing or transgression implies about deficiencies or flaws in the self, “I did this because I *am* a terrible person”, and in contrast, guilt comes from a focus on behavior, “I did something bad”, and a belief that they had control and could have acted differently (Baumeister, Heatherton & Stillwell, 1994; Lewis, 1971; Lutwak, Panish, & Farrari, 2003; Smith et al, 2002; Tangney & Fischer, 1995; Tangney, 1991; Tangney et al., 1996; Tangney & Dearing, 2002; Tracy & Robins, 2006; Wicker, et al., 1983). A dispositional focus on a stable flawed self, which if exposed, may “render one unworthy of love and connection” (Brown, 2006) is probably why shame is considered the more painful of the two emotions (Tangney et al, 1994; Tangney & Dearing, 2002).

Failing to meet expectations. Shame triggers are not restricted to morally relevant situations, or transgressions. As a fundamentally social species, we are wired to detect the risk of demotion or rejection from important groups, and when we perceive that we have violated or failed to meet social standards that are important for our role and place in the group, shame arises (Gilbert, 2004). Functionally, shame is “... the aversive emotional response to loss of rank and rejection by others” (Koerner et al, 2011, p.93). Thus, feeling that one has failed to meet aesthetic, competence, or performance standards deemed important by other members of our society can likewise bring about shame (Orth et al., 2006). As members of a culture, one may internalize the values and standards held even if they are not agreeable or attainable. Appraisals that one is failing or struggling when others seem perfect can bring about shame (Orth et al., 2006).

Perceived negative judgment of others. Along this vein, it is then unsurprising that shame has been found to be evoked when one thinks others know about a failing or transgression, or thinks that others are judging them negatively, regardless of whether there is an actual audience (Tangney et al., 1994, 1996; Scarnier et al., 2009). Simply being reminded of a disapproving other can make a private transgression feel public, and evoke shame (Smith, Webster, & Parrott, 2002). Scarnier and colleagues (2009) found thinking that others knew about a transgression their child did is predictive of (vicarious) shame in parents. The authors also found that mothers who thought a neighbor was critical of them felt more shame in response to their child's misdeed than those who thought the neighbor was neutral (Scarnier et al., 2009).

The types of self-related appraisals described above may have unique implications for learning, because of response tendencies that have been found to be associated with them. These are reviewed in the section below.

Shame and associated response tendencies

The *functional theory of emotions* (Campos, Campos, & Barrett, 1989) posits that emotional experiences serve to provide us with information about our needs in relation to salient changes in the environment, and trigger action tendencies to behave in ways that serve our goals. Within this framework, emotions are a rapid, whole-body response, calling our attention to something important that is happening in our environment and activating physiological, cognitive, and behavioral processes that help us adapt to these changes (Greenberg, 2002).

As a physiological experience, the call of shame is impossible to ignore. Shame is often described as intense, painful, and involving a greater degree of physiological changes than guilt (Tangney et al., 1995). When shamed, people report feeling small, rejected, diminished, exposed, judged, confused, powerless and vulnerable (Brown, 2006; Koerner et al., 2011).

Two strategies for regulating shame

Unsurprisingly, most people have well-developed strategies to regulate shame that spring into action as soon as it is evoked, which includes secondary emotions as well as thoughts and actions. Studies have identified two groups of emotion-regulatory responses to shame. First are self-directed, internalizing strategies of *avoidance* that are linked to anxiety, worry and fear. These emotions often lead to denial and rumination, to ignore or disassociate from the shameful event, or hide from the evaluation of others (Tangney et al., 1996; Tangney, 1999). Also commonly observed are externalizing strategies of shifting the blame outwards in an attempt to protect the self or regain some control or superiority in the situation (Tangney & Tracy, 2012). This often appears as anger or hostility. Indeed, individuals who are prone to shame have a greater propensity to blame others and feel anger than non-prone peers and also tend to express their anger in destructive ways (e.g., Tangney et al., 1994). Such shame-fueled emotional responses leading to avoidance, withdrawal and aggression are likely not conducive to receiving advice and learning from it.

In contrast, guilt has been found to generally motivate an *approach*-orientation towards repairing harm done, such as apologizing, taking actions to improve or undo (Baumeister et al., 1994; Schmader & Lickel, 2006; Tangney et al., 1996; Wicker et al., 1983). Thus, in comparison to guilt, shame is often thought of as the maladaptive response.

However, more recent research shows that the motivational distinctions of shame and guilt are not so clear. Shame has been shown to promote approach behaviors as well as avoidance behaviors, especially when the approach-oriented actions play a functional role, such as improving on or re-doing a failed task that can help to restore a positive self-image (de Hooze, Breugelmans, & Zeelenberg, 2008; de Hooze, Zeelenberg, & Breugelmans, 2011; Welten, 2012).

Findings are also mixed in terms of longer-term behavior changes. In two studies examining the links between a motivation to change the self and four self-conscious emotions, path analyses showed shame emerging as the strongest predictor of motivation to change the self over guilt, embarrassment, and regret (Lickel, Kushlev, Savalei, Matta, & Schmader, 2014). Yet results also show shame to predict motivations to distance oneself from the shame-inducing event, replicating findings more typical in studies of shame. The authors suggest that there are adaptive functions of shame that may lead to motivating long-term transformative changes, which may unfortunately be sabotaged by short-term tendencies of avoidance. Beyond this study, there is currently little that examines the contributions of shame to change and growth.

Such response tendencies have important implications in a learning context. It has been well-established that learning is an emotional process (e.g., Dirx, 2008; Hascher, 2010; Rowe & Fitness, 2018). Learning requires the audience to pay attention, engage with the content, and is best served with an open, curious attitude, which are at odds with an avoidance orientation commonly associated with shame. Unfortunately, there is relatively little empirical research on shame in learning. Some theories and existing research are reviewed below.

Shame in the context of adult learning

“Education for adult learners often involves courageously confronting one’s inadequacies and admitting and revealing a lack of knowledge or competency; it is about facing shame head-on.”

-Walker, 2017, p.368

A paper focusing on shame in adult education by Jude Walker (2017) posits that shame is part and parcel of learning as an adult. The quest to learn starts with realizing or acknowledging that one possesses inadequate knowledge or skill, which may become more apparent in the process of learning. Drawing from the previous discussion of appraisals, the attributions one makes with regard to the lack of knowledge may evoke shame if dispositional (e.g., “I am

ignorant”) or guilt, if focused on action (e.g., “I need to learn more about this”). Walker further suggests that adult learners carry existing shame and shame triggers to every learning interaction that can be deliberately or inadvertently provoked within the encounter. It may be “learner-related shame” derived from previous negative learning experiences such as being ridiculed for making mistakes or deemed a failure, or “domain-related shame” such as parenthood-specific shame (to be discussed later) that render these learners more prone to feeling shamed in a learning context.

How might shame impact learning? There is very little research that addresses this directly. In an ethnographic study of 40 literacy students in Brazil, Bartlett (2007) posited that shame played a role in the self-denigration he observed in his students, manifesting in telling others they were ‘bad’, in ‘faking it’, in ‘swallowing words’ or avoiding talking to others. Walker (2017) suggests other behaviors she observed in her research and practice as a long-time adult learning educator that fits with shame-fueled tendencies, namely defensiveness, denial, deflection and distancing, dehumanization, denigration (of the teacher), doubt, and deference. These accounts fit with theorized shame-related tendencies such as withdrawal, denial and disengagement designed to distance the self from the shame-inducing event or, if the blame is externalized, in defensive or hostile behaviours towards the offending person or situation (Lickel et al., 2005; Tangney et al., 1996). It thus seems likely that shame hinders learning and growth.

However, Walker (2017) also posits that shame experienced in learning can lead to reflection and restraint, and even transformative change. This is aligned with the previously mentioned findings of Lickel and colleagues (2014) suggesting that shame that may be adaptive for motivating longer term transformative changes. These theories and research suggest that shame may have an adaptive role in adult education.

The present study puts these theories to the test, by examining the effects of an intervention in which parent learners are provided with *messages designed to counter shame-related appraisals*. Accordingly, it was expected that receiving such messaging would have a positive effect on learner receptivity, engagement, understanding and agency. The study also explored how receiving these messages may impact the three distinct motivations (to change the self, to distance oneself, and to take reparative action) examined in Lickel and colleagues' 2014 paper, using the same measures adapted for a sample of parents. Of additional interest was the relationship of shame and these learning outcomes.

It is important to explore shame in parent learning, if for no other reason than that parents may as a population be more vulnerable to shame experiences.

Parenthood as a context for shame experiences

In this section, I consider the ways in which parenthood may be associated with increased vulnerability to shame, and the shame-related appraisals that parents may be prone to make.

Shame's evolutionary role in regulating parental investment

It has been suggested that moral emotions, with the ability to inhibit aggression, neglect, and abandonment and thus promote offspring survival, may have an evolutionary role that is specific to the context of parenthood (Rotkirch & Janhunen, 2010). Moral emotions may function to regulate parental behavior - although parenthood is construed as a child-centric endeavor, in practice parental investment is conditional. Parents vary in the time and effort they invest in parenthood, which is often negotiated with caregiving partners (e.g., spouses, grandparents), the broader community (e.g., workplaces) and with their children (Hrdy, 2009). Rotkirch and Janhunen (2010) theorized that children, partners, and entire cultures have developed strategies to negotiate conditional maternal investment; inducing shame and guilt is a

common one. In their study of 63 texts written by Finnish mothers addressing forbidden feelings in motherhood, Rotkirch and Janhunen (2010) found maternal shame and guilt to be induced by mothers' actual or imagined everyday acts of aggression, thoughts of abandoning their child(ren), and their own perceptions of physical and mental absence (i.e., not being fully present when with children). Thus, shame and guilt, as moral and regulatory emotions, may be particularly common experiences during parenthood not simply as evolutionary mechanisms regulating the parent's role and protecting the offspring, but also as active components of the cultural structures that surround parenting. In parenthood contexts when shame or guilt is normalized (Sutherland, 2010), ambiguous everyday events like leaving kids in care of others to go to work or a social event, or wanting to have a break from the children may evoke self-related appraisals such as "others must think I am not a good parent", "I am letting everybody down", or simply, "I am a terrible parent".

A balance act between selves

The necessary shift from an individualistic mentality to a collective one during the transition to parenthood may be another context that brings shame. Where, prior to parenthood, the self may have been primary, becoming a parent brings a need to focus on the well-being of children, and the family unit as a whole (Bruno, 2015). Such a systematic and unavoidably active involvement with a collective mentality requires having to choose and negotiate many times over between the needs of the self (that still very much exists), the children, and the family, making this transition a balancing act as one's self identity is re-calibrated (Mainiero & Sullivan, 2005). These negotiations can be played out on many levels, from the broader decisions around where and on whom to invest resources, to in-the-moment decisions like giving in to anger and lashing out, rather than holding back and exercising patience. As the new parent redistributes

their limited attention and resources between existing roles (e.g., partner, child, sibling, worker, etc.) and parenthood, this period is littered with possible shame experiences if they feel they have fallen short of the expectations of others and attribute such failures to a flawed self (e.g., “I am a terrible parent”, “I am a bad wife”, “I am useless at my job”). It may be part of the collective parenthood experience to feel inadequate and lacking, especially against a backdrop of high cultural expectations.

High cultural expectations of parenting

In contemporary society with its smaller, nuclear families, there are expectations of high levels of parental investment, an ideology described by Arendell (2000) as *intensive parenting*. Key tenets of intensive parenting include the belief that parenting should be child-centered, that children are delightful, fulfilling and sacred, that parenting is necessarily difficult, and that parents are responsible not just for the nurturance of children’s bodies but also for providing constant stimulation for children’s minds (Arendell, 2000; Hays, 1996). Accordingly, a good parent will happily set aside one’s own needs for those of their children and invest in cultivating a wide range of skills and knowledge that supports their children’s optimal emotional, social, mental and physical development. A plethora of positive parenting books, programs, experts and websites exist that reinforce these standards, making high-quality parenting a cultural norm in many modern societies. Such modern parenting norms postulate more time for parent-child interactions, and greater use of thoughtful pedagogical activities in these interactions, with a parent that is ideally well-regulated, responsive, and firm but kind (Rotkirch & Janhunen, 2010). Such an impossibly high bar can set many parents up to fail, especially if they have multiple roles to fulfill. Unsurprisingly, parent reports of feeling overwhelmed, judged, inadequate,

guilty, ashamed, anxious and stressed is commonplace in contemporary parenting research (Cacioppo, 2011; Rotkirch & Janhunen, 2010; Pruett, 2015).

It would be remiss not to mention, in a review of shame in parenthood, that mothers may be more vulnerable to shame experiences than fathers. Mothers are often viewed as the more ‘essential’ parent, a view reinforced by the ‘motherhood myth’- dominant and well-endorsed representations of mothers as unconditionally nurturing and kind, and fully devoted to and completely fulfilled by their children (Douglas & Michaels, 2004). Such representations, commonly depicted in mainstream media, are surprisingly stable despite its ill-fit with the modern world, where women make up half the workforce, and single-mother and dual income families are commonplace (Hays, 1996). Also pervasive is an impression of motherhood as a period of immense pleasure, happiness and fulfilment (Hays, 1996). In the climate of such unrealistic standards and expectations, motherhood is primed for shame appraisals. When a mother gets angry at her kids, or feels dissatisfied with her life, or leaves her children even if to go to work, she may think that she is failing at mothering. Indeed, Liss, Schiffrin, and Rizzo (2013) found that a perception of not living up to the idealized standards of the good mother (maternal self-discrepancy) was associated with shame in mothers. It is unsurprising that mothers consistently report higher levels of shame, guilt and distress than fathers (Barr, 2015).

Against this backdrop, daily parenting struggles, such as getting children dressed and to school on time, dealing with a child’s meltdown at the grocery store, not being able to spend more time with them, or buy them something, or even feeling frustrated with the kids, could lead to appraisals of failing, being judged, and being a bad parent. While feelings of shame or guilt may have a critical role to play in regulating parental behaviour, it is worth considering that these feelings may not simply arise from a functional parental instinct or an objective unmet need of

the child, but from appraisals formed as a result of socially constructed, historical and cultural ideologies that are not always possible to attain.

Parenthood in the digital age

For today's parents, expectations of what it means to be a good parent are arguably getting higher and more pervasive in the modern age of digital connectivity. The access to information on parenthood and parenting is immense. This section reviews the influence of online parenting resources on contemporary parenthood, showing why this an important context for scrutiny for parent education today.

Parents (and parents-to-be) seek and consume considerable amounts of information with regard to the health and development of themselves, their children, and their relationships (Plantin & Danebeck, 2009). While seeking information to navigate the transition to parenthood is by no means a new phenomenon, there are some differences between modern-day parents and previous generations that may have resulted in greater demand for information from outside experts to inform parenting. O'Connor and Madge (2004) suggest that globalization and in particular the increased mobility of women have led to wider spread of family members, leaving many new parents without regular and close support from their own families. Even if they stay connected to their own parents, the fast pace of change in modern society may render information from them obsolete, especially if they are living within a different culture (O'Connor & Madge, 2004).

Furthermore, there are high expectations of the modern parent. As previously reviewed, a model of 'intensive parenting' (Arendell, 2000) has become increasingly normalized in contemporary parenthood. The work of contemporary parenting requires parents to be equipped with greater knowledge and wider strategies beyond what might be intuitive or immediately

accessible within the family, thus driving parents to look to outside ‘experts’ to inform and guide their parenting.

The internet has become a popular medium for parents to access information, find resources and garner social support (Dworkin, Connell, & Doty, 2013; Plantin & Daneback, 2009, Walker, Dworkin, & Connell, 2011). For many parents, websites are their *primary* source of information about children and parenting (Bernhardt & Felter, 2004; Sarkadi & Bremberg, 2005). Researchers have highlighted a multitude of attractive, ‘pull’ factors associated with online resources (Ebata & Dennis, 2011). Online access allows parents to find information and support *when* they need it or have time for it. The 2017 report by Verto Analytics indicated that parents of very young children are active online (on mobile apps and websites) as early as 5am, with online activity peaking in the late evening, presumably after the kids have gone to bed. As Plantin and Daneback (2009) point out, multimedia features (videos, pictures, hyperlinks) enhance learning experiences by making the information more engaging, attractive and relevant.

However, round the clock accessibility and connectivity come with costs. There is no end of resources showing one how to do better. Subscriptions, apps and well-meaning friends and family can push advice to parents without them seeking it. Social media posts of ‘perfect’ family photos and events are commonplace, as are posts shaming parents and children who veer from mainstream expectations. With the internet, cultural expectations about ‘good parenting’ are amplified, and harder to ignore.

Online parenting resources may have become more critical parenting supports in the last year, as families coped with a global pandemic. Many parents had to navigate a new reality of working from home, supporting children’s learning from home, and spending more time together and apart from others. While no empirical studies yet exist on parenting trends during COVID-

19, high viewership of online parenting workshops, videos and articles offering ideas and strategies for parenting in a pandemic indicates that a substantial population of parents are turning to online resources for help with challenges of parenting in a pandemic, making the present study's focus on addressing shame in the context of an online parenting workshop an important and timely piece of research.

Overview of the present research

Parenthood presents a unique set of challenges that renders greater vulnerability to experiencing shame. It is thus reasonable to assume that among parents there is a significant number of individuals that carry a proneness to parenting-related shame.

Parenting workshops or classes can become part of the web of shame for parents, as these resources necessarily focus on what parent should be doing better. Furthermore, participants may already be primed for feeling shame or guilt. With optional workshops (like the one used in this study), parents usually sign up because they are struggling with an aspect of parenting and know that they should do or be better. There are also parent training workshops that are mandated for families associated with child welfare, fostering and adoption agencies (that are worthy of deeper examination in relation to shame and learning, but beyond the scope of this study). If parents are indeed a “high risk” population for feeling shame and guilt, then it is important to understand what self-related appraisals parents are making in a context of parent learning, and how these thoughts and feelings potentially influence learning outcomes. To date, there is no research that directly addresses this context.

In the context of a parenting workshop, when presented with information on potential negative child outcomes of certain parenting behaviours and how they could do better, parents may be making appraisals that cause them to feel shame, or guilt, or both. Some parents may

appraise the information to imply something about who they are as a parent, perhaps thinking, “I feel like a terrible parent” or “learning about this shows me what a flawed parent I am”. Some parents may be concerned with judgment from others, thinking “others probably think I’m a bad parent” or, “If people saw how I sometimes act towards my kid, they would probably think I’m a bad parent”. Some may focus on the high expectations conveyed by the workshop, “Other parents are probably better with their kid than I am with mine”, or maybe “I may never be good enough as a parent”. Such appraisals are theoretically linked to shame and response tendencies of avoidance, withdrawal and defensiveness (e.g., Tangney & Dearing, 2002), which can get in the way of learning and growth.

Importantly, emotional behavior is conceptualized as an ongoing, dynamic process involving cognition, affect and behavior (e.g., Scherer, 1982; Smith & Ellsworth, 1985). Thoughts, feelings and actions experienced within a context are not static, and shifts are possible. Thus, targeting cognitive appraisals can offer a powerful way to shift the evaluation of the event, possibly leading to more productive behavior.

One goal of the present study was to test the efficacy of an “add-on” intervention developed to counter shame-related appraisals on learning outcomes in an online parenting workshop in an experimental study. Designed to be brief and simple for educators to easily add on to existing curricula, this intervention employs shame-counteracting messages developed specially to shift attributions of perceived parental shortcomings to external (the context of parenting instead of personal inadequacies), unstable (“what you do” rather than “who you are”), and controllable (“malleable” instead of “fixed”) factors. These messages also challenged unrealistic expectations of parenting, and perceived negative judgments of others. It was expected that parents who received these messages during a potentially shame-evoking

workshop would report more receptivity, engagement, and agency at the end of the workshop, and perform better on a post-workshop test, compared to parents who did not receive this intervention.

Since the intervention was designed to counter appraisals associated with feeling shame, it was also expected that the group receiving the intervention would report less shame than the group who did not receive any shame-countering messages. Furthermore, it was hypothesized that any effect the manipulation had on learning outcomes would be mediated by shame.

Another goal was to examine the effects of shame on parent learning outcomes. Prior research has shown that parents likely carry parenthood-related shame or guilt, and that shame has been associated with learning contexts. It was predicted that parent participants would report experiencing shame during the workshop. On account of the avoidance orientation widely associated with shame, it was expected that shame will negatively impact learning, reflected in lower levels of receptivity, engagement, agency and poorer performance in the post workshop test.

A final goal of the current study was to explore appraisals parents make in a context of learning, as factors that may be predictive of shame and learning outcomes. As there are no existing measures tapping appraisals specific to parent learning processes, a suite of appraisal items was specially created for this study, based on shame, guilt and parenting literature previously discussed. Some of these self-related items were described above. Behavior-focused items were also included, such as, “as a parent, I need to change how I act”, or “I should have better self-control as a parent”. This suite of items was used to explore the extent to which parents made self-related appraisals during a parenting workshop, and the impact these appraisals may have on learning outcomes. Specifically, parents who relate to the workshop as a

reminder of their deficiencies as a parent, the high expectations they are failing to meet, or the negative judgment of others, were expected to be more likely to feel shame. Such appraisals were also expected to evoke an avoidance orientation (Tangney et al., 1996; Tracy & Robins, 2006). To regulate the discomfort, parents may disengage or divert their attention, leading to lower ratings of the usefulness and relevance of the workshop, and engagement with the material or the presenter. On the other hand, appraisals that focused on actions and behaviour instead of a global self-evaluation, may be predictive of an approach orientation (e.g., Lutwak et al., 2003; Sheikh & Janoff-Bulman, 2010). Relating to the workshop as an opportunity to do better was hypothesized to be more adaptive for learning, leading to higher ratings of receptivity and engagement, better test performance, and greater sense of agency and motivation to repair any harm done.

A further learning outcome of interest, the Motivation for Self-change, was included for exploratory analyses. As reviewed earlier, there have been some intriguing studies suggesting that shame may be adaptive for transformative long-term change (e.g., Lickel, et al., 2014). While not directly related to shame, other research has found that a dispositional focus on the self (such as those associated with shame) can be a motivator of positive and lasting behavioral change (Bryan, Adams, & Monin, 2012; Bryan, Walton, Rogers, & Dweck, 2011). Given the long-term and persistent nature of parenting, parents may not just be motivated by short term ‘fixes’ but possibly also longer-term changes, to avoid further uncomfortable emotions in the future. Thus the present study also explored if shame and related appraisals experienced by parents during a workshop contributes to a desire for longer-term changes to their parent selves.

While this study’s central focus was on shame and shame-related appraisals, guilt was included as a factor of interest to explore in relation to shame. Guilt is also commonly

experienced by parents (e.g., Sutherland, 2010). Theorized to be most strongly and frequently experienced in *close communal relationships* defined by a concern for the other's welfare (Baumeister, Stillwell, & Heatherton, 1994), guilt is thus a salient emotion to consider in the context of parent education, where the focus is usually on doing better for one's children. Studies have shown that guilt and shame are closely related to each other, and often co-occur (Schmader & Lickel, 2006; Tangney, 1999; Tangney, Miller, Flicker, & Barlow 1996; Tracy & Robins, 2006). It can be hard to distinguish if it is one's actions or something at the core of one's self, that is the cause of a problem (Schmader & Lickel, 2006). The workshop, which focused on the parent as the active agent for enacting behaviours that promote positive child and relationship outcomes, can lead parents to feel guilty for what they did or did not do, *and* also to feel ashamed for the parent they are.

In this study guilt was included as a covariate, but also examined for interactions with shame. As guilt and shame are commonly reported in parenthood (e.g., Sutherland, 2010), often co-occur and are differentiated in terms of appraisals and motivational tendencies (e.g., Niedenthal, Tangney, & Gavanski, 1994; Smith, Webster, Parrott, & Eyre, 2002; Tangney et al., 1996; Tracy & Robins, 2006; Wicker, Payne, & Morgan, 1983), examining how they interact in relation to learning outcomes may have valuable implications for the field of parent education.

Summary of Hypotheses

Hypothesis 1: Parents who received shame-counteracting messages would report more positive learning outcomes than parents who did not receive these messages.

Specifically, parents in the experimental (shame-counteracting) condition were expected to report higher levels of a) receptivity, b) engagement, and c) agency, and d) perform better in a post-workshop knowledge test.

Exploratory question: Would parents in the group who received a shame countering message feel more motivated to e) change themselves or f) take action to make amends, compared to the group who did not receive any messaging?

Hypothesis 2: Parents who received shame-countering messages would report less shame than parents who did not receive these messages.

Hypothesis 3: Effects of the manipulation on learning outcomes would be mediated by shame.

Hypothesis 4: Shame is predictive of learning outcomes.

Parents' reported shame should predict lower levels of a) receptivity, b) engagement, c) agency and d) knowledge test scores.

Hypothesis 5: Self-related appraisals parents make during the workshop are predictive of shame.

Specifically, parents who endorse self-related appraisals that focused on their deficiencies as a parent, the high expectations they are failing to meet, or the negative judgment of others, are likely to feel higher levels of shame.

Hypothesis 6: Self-related appraisals parents make during the workshop are predictive of learning outcomes.

Appraisals focused on global flaws, failure to meet high expectations, or the negative judgment of others should predict lower levels of a) receptivity, b) engagement, c) agency and d) poorer performance in a post-workshop knowledge test.

Exploratory question: Will making negative, dispositional appraisals be linked to higher or lower levels of motivation to e) change themselves or f) take action to make amends?

Chapter 3: Method

Recruitment and sample

Participants were recruited through Vancouver-based community groups which support families (e.g., childcare centers, childcare resources and referral centers, local community centers etc.). Emails (see Appendix A) with a brief description of the study were sent to administrators of these organizations with an electronic flyer (see Appendix B), asking for their support in promoting the study by posting the flyer on their (online and physical) bulletin boards and social media platforms as well as through email and newsletters to their parent networks. The flyer invited parents of children 3 to 18 years old to participate in a study of “Online Parent Learning” by completing a free online workshop on emotionally intelligent parenting and taking part in a survey by answering questions before, during and after the workshop.

Participants were also recruited on social media. Posts inviting parents to participate in a study of “Online Parent Learning” were posted on Twitter, LinkedIn and in multiple parenting-related groups on Facebook, with the same flyer attached.

Flyers included a link and a Quick Response (QR) code which participants can click on or scan to take them directly to the initial page of the online survey, where they were asked to provide consent before beginning the study.

A sample of 1001 parents began the study, but most did not complete the survey sufficiently to be included in analyses. As the three videos comprising the workshop lasted a total of 21 minutes, any participant who completed the study with a duration of less than 25 minutes were omitted from the sample. In addition, participants who completed less than 70% of the survey were also removed. This initial level of filtering left a sample of 364 participants.

With the remaining sample, cases with more than five missing values for the 59 items central to this study were removed, leaving 290 participant responses. There were still a substantial number of missing values, particularly for two items tapping the experience of *disgraced* and *humiliated*, which together with *ashamed* and *embarrassed* comprised a measure of shame, a critical construct in this study. Participant responses to these four items were examined, and any cases with more than 1 missing value among the 4 items were removed. Finally, three participants did not provide a response to the question on gender and had to be excluded from any analyses with sex as a variable. This left a final sample of 240 (200 women, 40 men).

The sample was ethnically diverse: European (45.3%), East Asian (9.9%), Latin American (8.6%), Middle Eastern (4.5%), South Asian (3.7%), Aboriginal (2.9%), Caribbean (0.8%) and African (0.4%). An additional 9.5% reported that they belonged to more than one ethnic group, and another 9.9% identified as an ethnicity other than the response options. 4.5% did not indicate a response. Participants ranged in age from 26 to 70 years, with parents in their 30s (44.9%) and 40s (39.1%) making up the largest portion of the sample. Participants' highest level of education also varied; 2.5% had high school diplomas, 18.9% went to college or trade school, 40.3% had undergraduate degrees, 31.7% had graduate degrees, 4.5% had professional degrees, and 2.1% indicated other educational experiences.

Most of the participants in this study were married (75.3%), 7% were divorced, 6.6% were single, 6.2% were living with a partner, 4.5% were separated from their partner/spouse, and 0.4% were widowed. Participants' years of being a parent was broken down into the following categories: 30% had been parents for 1 to 5 years, 34.2% for 6 to 10 years, 21% for 11 to 15 years, 8.2% for 16 to 20 years, and 6.6% at more than 20 years. Participants also varied in terms

of the number of children in their care - 30.5% of participants had one child, 51% had two children, 13.2% had three children, 4.1% had four children, 0.8% had five children, and 0.4% had more than five children. For the present survey, participants were asked to focus on only one child in their responses to the questions in the study. Most participants (96.7%) were biological parents to the child they chose to focus on, 1.2% were stepparents, 0.8% were adoptive parents, and 1.2% indicated otherwise.

Procedure

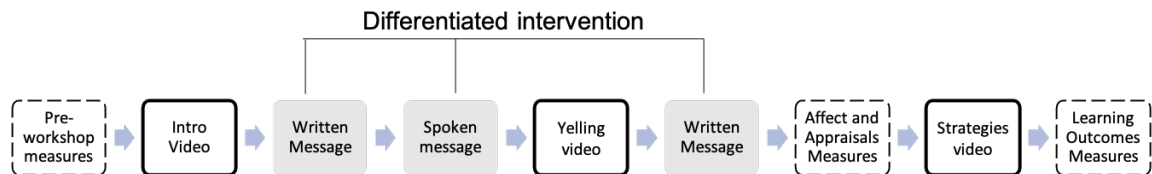
The survey was administered through Qualtrics, a widely-used and reliable web environment for psychological research, and the preferred online survey tool at the University of British Columbia. Upon landing on the study page, participants were asked for their consent to participate, and informed that they may withdraw their consent at any time.

Participants who confirmed their consent to participate were asked to complete a pre-workshop survey, providing their responses to demographic questions and other measures related to their parenting experiences (e.g., age, number of children, education, etc.). Participants then watched the first of three videos (the ‘Welcome video’) before completing a written reflection activity. Next, participants were randomly assigned to one of two conditions using the randomizer function in Qualtrics. Both groups then read a short message on the survey page, watched a second video (the ‘Yelling video’) and read a further short message; these messages were differentiated by condition, described below. All participants then answered the same questions about how they were feeling and what they were thinking. Lastly, participants watched a third video (the ‘Strategies video’) and completed a final set of survey questions (see Figure 1). At the end of the survey, participants were provided with a link to download a free parenting toolkit that extends the information provided during the workshop. Interested participants were

invited to provide their email addresses to enter a draw for a gift card, and to receive a report of findings from this study at a later date.

Figure 1.

Flow chart of the study, workshop and intervention



The Workshop

The workshop component of the study included three videos and a reflection activity. The sequence of these videos was typical of workshops, including an introduction (‘Welcome video’), an activity to contextualize the learning (‘Reflection activity’), exposition of a problem (‘Yelling video’), and provision of solutions and strategies (‘Strategies video’).

The ‘welcome video’. The first video was a recording (3.48 minutes) of the co-investigator 1) welcoming participants to the workshop, 2) presenting workshop learning objectives and agenda, and 3) reminding participants that this is part of a broader study on parent learning processes, encouraging them to answer all questions. This video can be accessed via this link: <https://youtu.be/YkQo0MNKmJI>. This first video concluded with an invitation to complete a written reflection activity.

Reflection activity. As a reflection activity, participants were asked to “describe a recent interaction with your child, where you felt strong emotions and reacted in a way you felt bad about later”. They were provided with a box in which to type their response on the survey page, where the question was further accompanied by the following prompts: “What happened? How

did you feel? How did you think you could have reacted better (e.g., been kinder, more patient, a better parent?) Were there others present? If so, what do you think they were thinking?”. To encourage reflection, participants were told that this activity was an important part of the workshop and may help them better relate to the concepts and strategies to be presented. The purpose of this reflection activity was to bring more closely to mind an experience when the participant may have felt some moral emotions as a parent, and potentially prime the participants for feelings of shame or guilt which may be made more salient in the next video.

The ‘yelling video’. In the second video, the presenter introduces an animated video about yelling at children, with messaging that is differentiated by condition. The animated video was selected for its potential to evoke shame or guilt in parents. Produced by Fatherly.com, this three-minute video explains why yelling at children can be damaging to the child, resulting in negative long-term emotional and behavioral outcomes. While supported by science, the candid “we shouldn’t mince words about this” approach of this video, which describes parental yelling to be “terrifying” to a child and “about as bad as hitting your kids when it comes to long-term outcomes” was deemed likely to evoke in viewers the moral emotions central to this study.

This video, titled “Is screaming at your kids a form of abuse?” (<https://www.youtube.com/watch?v=dnjBaOyJWU0>) is publicly available, and among the top 10 results since January 2020 for searches on “parent and yelling” on *youtube.com*, a popular video resource site on the internet. Currently (March 2021) it has almost 105,000 views and over 2200 likes.

The topic of yelling at children was chosen with the assumption that this is a parenting experience to which most participants could relate. A national survey conducted in the US in 1995 (Straus & Field, 2003) found that 90% of the 991 parents surveyed reported shouting,

yelling, or screaming at their children (from age 2 to 17) in the previous year; 50% of parents of children aged 0-1 reported yelling, a statistic that jumped to 100% for parents with children aged 7 and above. In another US telephone survey of 2068 parents of young children (ages of 4 to 35 months) conducted by the National Center for Health Statistics in 2004 (Regalado, Sareen, Inkelas, Wissow, & Halfon, 2004), 67% of parents reported yelling at their children as a discipline practice. Relatedly, there is a plethora of recent parenting articles on yelling, with over 3 million results from a search on “Parenting and Yelling at Children” conducted on March 13th 2021, with seven of the top ten articles published in the last five years. Given these findings, it is safe to assume that yelling remains a common parenting practice, and one that many parents will find relatable.

The final video. The final video in the workshop, with a duration of 14 minutes, introduced six strategies that parents can use during emotionally challenging moments with their children - “Pause”, “Sense”, “See your best self”, “Label feelings”, “Empathize” and “Connect”. Presented by the author using a slideshow, each strategy was informed by research on emotional intelligence. This third video was heavily informational, and its content was used in the knowledge test that participants completed after the video, as one measure of their learning. This final video can be accessed via this link: <https://youtu.be/I5LwHJoEpAE>.

The Manipulation

After the welcome video, participants were randomly assigned to one of two conditions, *shame-prime* and *shame-counter*, by the randomizer function in Qualtrics. The *shame-prime* group is so named as group members were provided with the reflection activity, the ‘yelling video’ and some prompts before and after the video that are expected to evoke moral emotions. However, this group functions as a control group for the experimental condition, in which

participants were provided with shame-countering messages in addition to the same potentially shame-evoking activity, video and prompts. Of the 116 participants in the *shame-counter* group (48.3% of the sample), 98 were mothers and 18 were fathers. Of the 124 participants in the *shame-prime* group (51.7% of the sample), 102 were mothers and 22 were fathers.

Shame-counter condition. Participants in this experimental condition were provided with shame-countering messages before and after the video. These messages comprise the intervention, which was designed to be brief and simple enough for educators to add on to existing curricula. The messages were developed to address cognitive appraisals that past research has identified to be associated with feeling shamed: attribution to a deficient/flawed self (e.g., Tangney & Dearing, 2011; Tracy & Robins, 2006), perceived failure to meet standards/expectations (e.g., Brown, 2006; Gilbert, 2004; Liss et al., 2013), and image threat/perceived negative judgment by others (Lewis, 1971; Scarnier et.al, 2009). Messages focused on normalizing imperfections and struggles with difficult emotions in parenting, shifting the locus from *internal* deficits in the self to the *external* contexts of parenting as being challenging, and challenging unrealistic expectations and worries about the judgment of others.

Specifically, participants could *read* the following message on the screen above the link to the ‘yelling video’: “*How you respond in these difficult moments can have a serious impact on your child, and on your relationship with them. However, having strong, difficult feelings, and struggling to manage them is a very common experience amongst parents. It doesn't mean you are failing at parenting, or that you are a bad person. No one can be calm and nurturing all the time.*” Within the video, participants *saw* and *heard* the presenter saying the same message with the following extension: “*It doesn't mean ... that there is something wrong with you as a person. If anything, it just means you are normal. Most of the people in your life know how hard*

parenting can be. We often think others are judging us for how we react to our kids when they behave badly. It is more likely that they are feeling bad for us. In any case, for both ourselves and our children, it is important to find ways to keep calm. Now let's watch a video about what happens when we fail to manage our emotions and react emotionally towards our kids". This video for the shame-counter condition can be accessed with this link:

https://youtu.be/Koncz_aDxxk.

The video was followed by a page where participants read the following shame-counteracting message: *"Remember, every parent struggle with difficult emotions at one point or another. Reacting emotionally does not mean you are a bad parent, or that you are failing. Nobody expects a parent to be calm all the time. Most people know how hard parenting can be! It is important to find ways to manage your emotions. You will learn six practical strategies to activate emotional intelligence and de-escalate these tough moments with your child after answering the next few questions."*

Shame-prime condition. In contrast, participants in the *shame-prime* condition were simply provided with this message prior to the yelling video, *"How you respond in these difficult moments can have a serious impact on your child, and on your relationship with them."*

presented above the video link. Within the video, the presenter says, *"Every parent has these moments, but it is how you handle them that makes a difference. It is certainly more challenging if there are other people there, judging us for how we react when our kids behave badly. In any case, for both ourselves and our children, it is important to find ways to keep calm. Now let's watch a video about what happens when we fail to manage our emotions and react emotionally towards our kids". This video for the shame-prime condition can be accessed with this link:*

<https://youtu.be/23mcgw7CEdE>.

After the video, participants in the *shame-prime* condition could read the following message: *“As you can see, how you react in challenging situations can have a serious impact on your child. It is important to find ways to manage your emotions. You will learn six practical strategies to activate emotional intelligence and de-escalate these tough moments with your child after answering the next few questions.”*

Subsequently, participants in both groups were asked to complete the same measures and watch the same final ‘strategy video’.

Measures

The measures included in the survey assessed basic demographic information, parenting experiences, and learning outcomes. All measures are described in detail below.

Demographic information

Demographic information requested in the survey included age, sex, ethnic and educational backgrounds, and marital status. Parent-specific demographics included years of being a parent, number of children, and relationship to the child they were focusing on for the study.

To rule out possible effects of pre-existing differences, participants also responded to several parenting-related questions on a slider scale from 0 to 100, regarding their parenting load (“What share of the parenting load do you carry?”; 0 = none to 100 = all, $M = 75.78$, $SD = 17.72$), how often they accessed online parenting resources such as videos and websites (0 = never to 100 = everyday; $M = 57.53$, $SD = 23.37$), their own self-impression as a parent (“As my child’s parent, I think I am...”; 0 = a bad parent to 100 = a good parent; $M = 69.65$, $SD = 18.45$), and difficulty of care for the child in question (“Overall, how difficult would you say it is to care for your child?”; 0 = extremely easy to 100 = extremely difficult; $M = 57.23$, $SD = 21.72$).

Shame and guilt

In order to assess parents' emotional reactions after the yelling video, participants were asked to indicate their experience of 19 emotions on a 100-point slider scale (0 = not at all through 50 = moderately to 100 = extremely) following this prompt: "To what extent do you experience the following emotions right now?". Of primary interest in the present study were participant ratings of emotions that comprise shame (ashamed, humiliated, embarrassed and disgraced) and guilt (guilt, sorry, remorse and regret), as described below. These emotion items were embedded among 11 other emotions, including some positive emotions (interested, inspired, determined, confident and excited) and other negative emotions (sad, defensive, irritable, worried, angry and upset).

Past research had assessed shame as the average of four emotions: ashamed, humiliated, embarrassed, and disgraced (e.g., Schmader & Lickel, 2006). For the current study, a composite of shame was created using the mean ratings of at least three out of the four emotions (ashamed, humiliated, embarrassed and disgraced), with higher values representing stronger shame ($\alpha = .84$).

A guilt composite score was also created based on the average ratings of four emotions - guilt, sorry, remorse, and regret (Schmader & Lickel, 2006). The guilt composite measure was found to be internally consistent ($\alpha = .86$) for the current study, with higher scores reflecting stronger guilt.

Parent self-appraisals

Self-conscious emotions like shame or guilt are understood to be secondary emotional experiences that follow appraisals of how a situation relates to the self (Tangney et al., 1996; Tracy & Robins, 2006). To explore shame-related appraisals that parents may make about

themselves in a context of learning about parenting, a 22-item self-report questionnaire was developed for the present study. Items in this measure were informed by appraisals identified in past research to be related to shame: attributions to a flawed self, perceived failure to meet standards, high internalized expectations, and image threat (e.g., Brown, 2006; Lewis, 1971; Liss et al., 2013; Scarnier et.al, 2009; Tangney & Dearing, 2011; Tracy & Robins, 2006). With the exception of image threat, which used items adapted from Scarnier and colleagues' study (2009), all other items were specially created for this study.

The following prompt was provided ahead of appraisal items: "It is common to be thinking or saying things to ourselves when we are taking in information. The following are thoughts that parents may have during parenting workshops. To what extent do you have the following thoughts?" For each item, participants responded on a slider scale from 0 (not at all) to 100 (a lot). *Attribution to a flawed self* was explored with four items: 'There may be something wrong with me as a parent', 'I feel like a terrible parent', and 'This information shows me yet another way I am flawed as a parent'. *Perceived failure to meet standards* was explored with five items: 'Other parents are probably better with their kid than I am with mine', 'Other parents probably do not get mad at their child as much as I do', 'I may never be good enough as a parent', 'As a parent, I may be letting everyone down' and 'Other parents probably control themselves better around their child than I do around mine'. *High internalized expectations* were explored with four items: 'As a parent, I should have better self-control', 'I should be more patient with my kid', 'I should be a better parent than I am' and 'I am probably not doing enough for my kid'. *Image threat* was explored with three items: 'Others probably think I'm not a good parent', 'If people saw how I sometimes act towards my kid, they would probably think I'm a bad parent', 'Others probably judge me for how I react to my kid sometimes'.

Behavior-focused appraisals were also included, assessed with three items: ‘As a parent, I need to change how I act’, ‘I need to do things better as a parent’, and ‘I should work harder to be a good parent’. Finally, some positive appraisals were included to lighten up the participant experience of responding to these appraisal measures: ‘I do the best I can as a parent’, ‘I work hard at parenting’, ‘As a parent, I am doing quite well’ and ‘I am glad I don’t often yell at my child’. Descriptive statistics for these items are provided in Table 1.

Table 1.

Summary of Descriptive Statistics for Appraisal Items (N =240)

Appraisal Items	<i>M</i>	<i>Md</i>	<i>Mo</i>	<i>SD</i>
Others probably think I’m not a good parent	36.3	33	0	26.1
If people saw how I sometimes act towards my kid, they would probably think I’m a bad parent.	45.3	41	100	31.1
Other parents are probably better with their kid than I am with mine.	47.6	48	50	29.2
I feel like a terrible parent.	35.3	30	0	29.3
There may be something wrong with me as a parent.	31.6	21	0	29.2
Others probably judge me for how I react to my kid sometimes.	44.8	41	100	30.7
This information shows me yet another way I am flawed as a parent.	35.6	24	0	32.0
Other parents probably do not get mad at their child as much as I do.	36.2	28	0	30.6
I may never be good enough as a parent.	35.0	25	0	31.9
As a parent, I may be letting everyone down.	32.7	21	0	30.2
I am probably not doing enough for my kid.	45.4	46	100	30.6
Other parents probably control themselves better around their child than I do around mine.	41.2	36	0	30.1
As a parent, I need to change how I act.	59.2	64	100	29.9
As a parent, I should have better self-control.	65.9	69	100	27.6
I should work harder to be a good parent.	63.6	69	100	28.2
I should be more patient with my kid.	72.1	78	100	26.7
I should be a better parent than I am.	60.5	65	100	30.9
I need to do things better as a parent.	63.1	69	100	29.6
I work hard at parenting.	73.0	77	100	24.5
As a parent, I am doing quite well.	58.5	60	50	23.8
I do the best I can as a parent.	66.6	71	100	23.1
I am glad I don’t often yell at my child.	53.2	59	100	32.0

Note. M = mean, Md = median, Mo = mode, and SD = standard deviation

The response range was 100 for every appraisal item and participants used the full range of the response scale, with some indicating 0 (not at all) and others 100 (a lot) in response to every item. The means (lowest value at 32) indicate that most parents could relate to the appraisals provided. Standard deviations were high, indicating wide variability between participant responses to all the items.

Pearson Product Moment correlations (two-tailed) were computed to examine the interrelations among the items, as displayed in Table 2.

Table 2.

Summary of Intercorrelations between Appraisal Items (N=240)

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 Others probably think I'm not a good parent If people saw how I sometimes act towards my kid, they would probably think I'm a bad parent.	--																				
2 Other parents are probably better with their kid than I am with mine.	.47**	--																			
3 I feel like a terrible parent. There may be something wrong with me as a parent.	.52**	.65**	--																		
4 Others probably judge me for how I react to my kid sometimes. This information shows me yet another way I am flawed as a parent.	.48**	.59**	.62**	--																	
5 Other parents probably do not get mad at their child as much as I do.	.45**	.60**	.60**	.66**	--																
6 I may never be good enough as a parent.	.52**	.57**	.57**	.52**	.51**	--															
7 As a parent, I may be letting everyone down.	.47**	.60**	.48**	.61**	.70**	.50**	--														
8 I am probably not doing enough for my kid. Other parents probably control themselves better around their child than I do around mine.	.53**	.49**	.55**	.53**	.65**	.51**	.53**	--													
9 As a parent, I need to change how I act.	.42**	.47**	.52**	.56**	.61**	.48**	.58**	.45**	--												
10 As a parent, I should have better self-control.	.42**	.55**	.54**	.62**	.68**	.53**	.63**	.58**	.69**	--											
11 I should work harder to be a good parent.	.34**	.43**	.51**	.49**	.48**	.41**	.43**	.44**	.55**	.58**	--										
12 I should be more patient with my kid.	.46**	.61**	.61**	.62**	.63**	.48**	.55**	.58**	.48**	.56**	.50**	--									
13 I should be a better parent than I am.	.30**	.56**	.51**	.57**	.52**	.48**	.53**	.49**	.42**	.43**	.36**	.52**	--								
14 I need to do things better as a parent.	.27**	.56**	.45**	.42**	.39**	.39**	.38**	.35**	.38**	.34**	.40**	.51**	.61**	--							
15 I work hard at parenting.	.21**	.40**	.44**	.36**	.34**	.35**	.33**	.29**	.38**	.33**	.41**	.40**	.52**	.57**	--						
16 As a parent, I am doing quite well.	.20**	.42**	.34**	.25**	.30**	.30**	.32**	.31**	.36**	.28**	.37**	.46**	.54**	.65**	.59**	--					
17 I do the best I can as a parent.	.29**	.48**	.49**	.43**	.44**	.35**	.39**	.35**	.42**	.43**	.47**	.52**	.46**	.51**	.60**	.55**	--				
18 I am glad I don't often yell at my child.	.27**	.45**	.53**	.48**	.47**	.38**	.33**	.48**	.42**	.44**	.49**	.55**	.59**	.58**	.59**	.56**	.74**	--			
19 As a parent, I am doing quite well.	.00	-.01	.11	.02	.05	.07	-.04	.11	.07	.08	.05	.10	.10	.23**	.20**	.21**	0.04	.22**	--		
20 I do the best I can as a parent.	-.26**	-.43**	-.38**	-.42**	-.41**	-.27**	-.33**	-.30**	-.37**	-.42**	-.32**	-.35**	-.28**	-.24**	-.16*	-.12	-.31**	-.29**	.29**	--	
21 I am glad I don't often yell at my child.	-.15*	-.21**	-.17**	-.13	-.07	-.08	-.06	-0.07	-.09	-.09	-.19**	-.18**	-.02	-.03	-.07	-.02	-.11	-.02	.34**	.43**	--
22 I am glad I don't often yell at my child.	-.07	-.30**	-.26**	-.23**	-.21**	-.16*	-.11	-.23**	-0.1	-.15*	-0.1	-.16*	-.32**	-.14*	.00	-.11	-.12	-.12	.10	.39**	.08

** $p < .01$, * $p < .05$ (one-tailed)

Prior to conducting a factor analysis, intercorrelations were examined as items that were purportedly assessing the same underlying dimension were expected to be correlated with each other. Four items stood out that were least correlated (average of $r = 0.3$ or less) with most (16 or more) of the other items, and were removed (Field, 2009). Interestingly, these were the four positive filler items, which showed little relationship to each other as well as to the rest of the items. Given that most of these subscales have not been used in previous research, an exploratory factor analysis was conducted on the remaining 18 items. As the latent factors were expected to correlate with each other, a principal component analysis (PCA) with oblique (Oblimin) rotation was conducted, which yielded a two-factor solution. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, $KMO = .933$ ('superb' according to Field, 2009), and all KMO values for individual items were greater than .88, which was well above the acceptable limit of .5 (Field, 2009). Bartlett's test of sphericity $X^2(153) = 2172, p < .001$, indicated that correlations between items were sufficiently large for a PCA.

The two components with eigenvalues over Kaiser's criterion of 1 were extracted and in combination explained 60.65% of the variance. The inflexion on the scree plot justified retaining these two components in the final analysis. Factor loadings are presented in Table 3. As seen in the table, items that loaded most heavily on the first component reflect a global negative evaluation of the self as a parent, followed by items indicating a sense that one is not as good as other parents, and being judged by others. Thus, in the present sample, appraisals of *attributions to a flawed self*, *failing to meet expectations*, and *image threat* did not seem to be distinct constructs. This component reflected an underlying dimension that focused on the self as deficient, inadequate, failing, and negatively judged by others, or more broadly focused on the

parent self as not being good enough. This component, labelled *Appraisals of Inadequacy*, accounted for just over half of the total variance.

Items that loaded on the second component reflected an underlying factor focused on a desire or motivation to improve oneself and be better parents, labelled *Appraisals of Self-Improvement*. One system theorized by Janoff-Bulman and colleagues (Janoff-Bulman et al., 2008) for moral self-regulation may be helpful as a framework for this second factor. The authors describe a *prescriptive regulation system* focusing on what we *should* do (as opposed to a *proscriptive regulation focusing* on what we *should not* do). When activated, the prescriptive system promotes positive moral behaviors by evoking a desire to engage in ‘right’ conduct or do better. Prescriptive moral regulation has been associated with guilt and an approach orientation (Sheikh & Janoff-Bulman, 2010).

Table 3.

Factor Loadings for Exploratory Factor Analysis with Direct Oblimin Rotation of Appraisals Subscales (N=240)

Items	Factor 1	Factor 2
There may be something wrong with me as a parent.	.85	-.02
As a parent, I may be letting everyone down.	.84	-.03
I feel like a terrible parent.	.80	.01
This information shows me yet another way I am flawed as a parent.	.80	-.06
Others probably think I'm not a good parent	.77	-.19
Other parents probably do not get mad at their child as much as I do.	.76	.02
I may never be good enough as a parent.	.73	.01
Others probably judge me for how I react to my kid sometimes.	.67	.08
Other parents are probably better with their kid than I am with mine.	.67	.22
Other parents probably control themselves better around their child than I do around mine.	.62	.27
If people saw how I sometimes act towards my kid, they would probably think I'm a bad parent.	.59	.29
I am probably not doing enough for my kid.	.48	.29
I should be more patient with my kid.	-.16	.92
I should work harder to be a good parent.	-.02	.81
As a parent, I should have better self-control.	.04	.79
I need to do things better as a parent.	.16	.72
I should be a better parent than I am.	.15	.67
As a parent, I need to change how I act.	.38	.48
<i>Eigenvalues</i>	<i>9.06</i>	<i>1.86</i>
<i>% of Variance</i>	<i>50.32</i>	<i>10.33</i>
<i>Cronbach's alpha</i>	<i>.94</i>	<i>.89</i>

Note: Factor loadings above .40 appear in bold.

Based on the results of the factor analysis, composites for two types of appraisals were computed. *Appraisals of Inadequacy* were computed as the average of the 12 items that loaded on component one, with higher scores reflecting greater perceptions of inadequacy as a parent. This scale assesses the extent to which parents appraised the workshop as revealing that, as a parent, they are not good enough, in their own and others' eyes. *Appraisals of Self-Improvement*

were assessed by the average of responses to six items that loaded on component two, with higher scores reflecting a desire for self-improvement. This scale explores the extent to which parents related to this workshop as a reminder to do better as parents. Each of the two measures was found to demonstrate high internal consistency, $\alpha = .94$ for the *Inadequacy* subscale, and $\alpha = .89$ for the *self-improvement* subscale. The correlation between the two subscales was significant and moderate ($r(189) = .523, p < .001$), suggesting that the use of oblique rotation was meaningful.

Learning outcomes

Of interest in the present study was whether the intervention had an effect on parent learning outcomes. To this end, three different aspects of learning were considered. Cognitive aspects of learning were assessed directly through a knowledge test, tapping participants' attention and comprehension of information provided in the workshop. Positive learning attitudes were assessed in terms of receptivity (the degree to which participants found the information provided relevant, useful and interesting) and engagement (the degree to which participants felt engaged and connected with the presenter). Psychological aspects of learning were assessed in terms of agency, tapping participants' confidence to manage future challenging parenting moments, and two measures of motivations, tapping participants' post workshop inclination to change themselves, and to take action to repair harm done. Each aspect is described in greater detail below.

Knowledge test. To assess cognitive aspects of participant learning, an objective knowledge test was constructed with eight questions specific to the content of the workshop (in video three). To answer these questions correctly, participants had to pay attention to the workshop, and have a reasonable level of comprehension of the concepts discussed. There were

four options provided for each question, with one correct answer. Correlations among these eight items varied (ranging from $r = .16$ to $.62$), one question in particular had consistently low correlations with the others (range = $.16$ to $.22$) and was dropped, resulting in an increased alpha of $\alpha = .83$. Accordingly, a test score composite was created by summing the correct answers across the seven items. Participants were provided with the correct answers in the toolkit they could download at the end of the survey.

Receptivity. *Receptivity*, reflecting participant attitudes towards the workshop content, was assessed using four items specially developed for this study: ‘How useful was this workshop for you?’, ‘How interesting did you find this information?’, ‘How relevant did you find the advice provided?’, and ‘How much do you think the strategies will work for you?’. Participants responded to each item on a 100-point slider scale (0 = not at all to 100 = extremely). Intercorrelations among these items were quite high (ranging from $r(242) = .62$ to $.75$), and internal reliability of the scale was also high, $\alpha = .89$. A composite measure of receptivity was created by averaging responses across the four items, with higher values representing greater receptivity towards the content provided in the workshop.

Engagement. Finally, *Engagement* was assessed with three items created for this study to explore how much participants connected with other aspects of the workshop. Participants indicated on a 100-point slider (0 = not at all to 100 = extremely) their responses to the questions: ‘How much did you relate to the presenter?’, ‘How interested would you be to attend more workshops by this presenter?’, ‘How engaging did you find this workshop?’. Correlations among these items were high (ranging from $r(242) = .65$ to $.70$), and internal reliability of the scale was high, $\alpha = .86$. A composite engagement score was created by averaging responses

across the three items, with higher values representing greater engagement and connection with the workshop.

Motivations to change the self, repair, and hide. Of interest to this study were motivational orientations that have been linked to shame and guilt. Lickel and colleagues (2014) had developed measures to assess the motivation to change the self (4-items, e.g., “I feel there are things about myself I need to change”) as distinct from motivations to repair harm that was done (3 items, e.g., “I feel like I should do something to make things better”) and motivation to distance oneself, (3 items. e.g., “I feel like I want to disappear”), with good consistency (distance, $\alpha = .89$, repair, $\alpha = .72$, and change self, $\alpha = .91$) in their sample. Using these scales in their study of 174 US college students, they found that shame predicted both an avoidance-oriented motivation to distance oneself yet also an approach-oriented motivation to change the self, which they propose to be an essential step towards transformational change. These measures were used in the current study, with minor adaptations for the items to be more resonant with parents in a context of learning.

Motivation to change the self was assessed with three items (‘I feel the need to change myself’, ‘I feel the urge to be a better parent’, and ‘I feel I should change certain aspects of myself so that I can do better’). Participants responded to each item on a 100-point slider (0 = not at all to 100 = extremely). Given adequate internal reliability ($\alpha = .76$), a composite for Motivation to Change the Self was created as the average response across these three items, with higher values representing greater motivation.

Motivation to repair was assessed with three items tapping participants’ desire to take action to repair harm done (‘I feel like I should do something to make things better in my parenting’, ‘I feel like I should apologize for some of my parenting behavior’, and ‘I will try to

do something differently in my parenting after this'). Participants indicated their agreement with each sentence on a 100-point slider (0 = not at all to 100 = extremely). In the current sample, the item 'I feel like I should apologize for some of my parenting behavior' had 17 missing values, and a low correlation ($r(226) = .31$) with the other two items, and dropping it increased Cronbach's alpha from $\alpha = .69$ to $\alpha = .81$ for this subscale. Accordingly, a composite measure for Motivation to Repair was created as the average response to the remaining two items, with higher values representing greater motivation to repair harm done.

Motivation to hide was assessed with three items assessing participants' desire to distance oneself ('Attending this workshop makes me want to disappear', 'This workshop makes me want to escape from being a parent, even just for a little while', 'I feel like hiding and being alone after hearing all this'), each item responded to on a 100-point slider scale (0 = not at all to 100 = extremely). This scale seemed to be problematic for participants of this study. These three items were randomly embedded within the other six questions assessing motivations, yet they consistently had the most missing values amongst all the items, in the original overall participant group as well as the current reduced sample (49 missing values or 20.2% of the total sample). It would seem that there was something about these questions that participants found irrelevant, or even repulsive. This would be worthy of further exploration, beyond this dissertation. Due to the high number of missing values, a decision was made to drop this scale from subsequent analyses.

Agency. Participants' sense of agency to address challenging parenting moments (the theme specific to this workshop) was assessed using three items developed for the study. In response to the following prompt, "After learning these strategies, how confident are you that you...", participants indicated on a 100-point slider their confidence (0 = not at all confident to 100 = extremely confident) that they 'can keep calm when things get frustrating with your

child?’, ‘can do better at not reacting emotionally towards your kid, even when you are really upset?’ and ‘can respond in ways you will not regret later, even when strong emotions arise?’.

Correlations among these items were high (ranging from $r(241) = .72$ to $.78$), as was the internal reliability of the scale, $\alpha = .90$. Accordingly, a composite was created for agency as the average of responses to the three items, with higher values representing greater agency.

Chapter 4: Results

Overview

The next four sections describe the analyses conducted to address the five hypotheses detailed above. First, the data were screened for skew and kurtosis. Second, preliminary analyses were conducted to (a) verify the comparability of the condition groups on relevant characteristics, and (b) explore the simple relationships among measures. Third, multiple two-way Analyses of Variance (ANOVAs) were conducted to determine if there were significant differences between condition groups on six learning outcomes, and on shame. Fourth, a series of multiple linear regression analyses were conducted to determine whether shame was predictive of learning outcome variables. Finally, relationships between appraisals, learning outcomes and shame were explored with further regression analyses. All analyses were conducted using SPSS Version 26.0.

Data screening

The data were screened, and cases that did not meet basic requirements (e.g., completion in under 25 minutes and more than 70% missing values, as previously described) were removed from the sample. Variables of interest with missing data were examined. While some of the variables have a high number of missing values, a non-significant MCAR test ($X^2(13558) = 13499.368, p = .638$) indicated the data was missing completely at random. As discussed above, cases with more than five missing values for the 59 items central to this study were removed. Cases with more than 1 missing value among the 4 items that comprise shame were also removed.

The data were examined for anomalies. All data fell within the expected range. Outliers were examined using box plots. There were two cases with outlying data points, that were over

1.5 times the interquartile range (IQR) on one variable (Receptivity) but they were not extreme (within 3 times the IQR) and were within range for all other variables, and thus were retained.

Comparability of conditions

There were 116 participants in the *shame-counter* group (98 mothers and 18 fathers) and 124 participants in the *shame-prime* group (102 mothers and 22 fathers). To assess whether the condition groups were significantly different on any demographic or dependent variables at pre-test (which preceded randomized assignment to condition), chi-square tests were run for categorical variables (e.g., age, education, marital status, ethnicity/race) and one-way analyses of variance (ANOVAs) were run for continuous variables (e.g., care difficulty, parenting load, access to online parenting resources, emotional reactivity). No significant differences were found between the groups for any of these variables, confirming group equivalence and random assignment.

Descriptive statistics on key variables

Learning outcomes

As described in the Methods section above, six composite scores were developed to assess learning outcomes (receptivity, engagement, agency, motivation to change self, motivation to repair, and knowledge test). Means and standard deviations for these outcome variables are presented in the final rows of Table 4. Skewness was examined by dividing the SPSS-generated skewness value for each variable by the standard error for skewness. The Knowledge test scores had a high negative skew coefficient (skew = - 9.15), with a majority of participants answering most questions correctly. This is unsurprising as the workshop was well-designed and brief, presenting six simple strategies that formed the basis for the seven questions included on the test. The Receptivity composite (skew = -6.03) also had a high negative skew,

with the majority of participants rating the information provided as informative, useful and relevant. As the workshop was focused on a salient parenting topic, this negative skew was likely an accurate representation of the frequency of such responses on a population level. The remaining subscales had moderate skew values ranging from -2.50 to -3.61. However, Kolmogorov-Smirnov tests of normality on all six composites returned p values below .05 for both condition groups, indicating that assumptions of normality were violated. New variables were created with log transformations of the data, and analyses were conducted with both original and log-transformed variables. Results were compared, and found to be consistent, regardless of whether the variables were transformed. Therefore, for ease of interpretation, analyses reported below were conducted using the original (untransformed) scale of the outcome variables.

Shame and guilt

As described previously, shame ($M=32.4$, $SD = 23.7$) was measured with a composite of four items (ashamed, embarrassed, disgraced and humiliated). A composite was also created for guilt ($M=50.8$, $SD = 26.7$) with four items (guilty, regret, sorry and remorseful). Interestingly, the full range of the response scale (minimum value = 0, maximum value = 100) was used to respond to the items in these scales, suggesting that while some parents felt no shame or guilt, others felt extremely ashamed or guilty. Such higher ratings for guilt compared to shame replicates findings in previous research (e.g., Schmader & Lickel, 2006; Tangney et al., 1996). While skew values were moderate (shame skewness= .575, guilt skewness = -.135), it is worth noting that the mode for shame is 0, and the mode for guilt is 62.5. Shame and guilt were highly correlated for this sample, $r(240)= .74$, $p<.001$.

Appraisals

Like many of the above scales, the range of responses for appraisals of inadequacy and self-improvement was very broad, with values from 0 to 100 reported in response to all the items in these scales. In general, ratings were higher for the self-improvement scale ($M = 63.9$, $SD = 23.4$), where the mode is 100, and lower for appraisals of inadequacy ($M = 38.5$, $SD = 22.6$), with a mode of 66. There was moderate skewness (inadequacy skewness = .390, self-improvement skewness = -.450) for both scales.

Similar to the learning outcome variables, Kolmogorov-Smirnov tests of normality on shame, guilt and both appraisal variables also returned p values below .05, indicating that assumptions of normality were violated. However, when normal probability plots for *all* the above variables were visually inspected, a majority of the data points fell on the line with for all except the knowledge test score variable. Overall, the sample size ($N = 240$) seemed adequate to handle the minor concerns with non-normality within these outcome variables (Field, 2013), and findings are likely to be generalizable to other populations. Where the knowledge test score variable was involved, multiple analyses (using transformed variables, non-parametric tests and bootstrapping) were run and compared, with similar results found.

Correlations between variables of interest

Two-tailed, Pearson product correlations were conducted to explore the relationships among the outcome variables. Table 4 below shows the correlations among the learning outcome variables, which were found to be significantly and positively related to each other. Receptivity and Engagement scores were strongly correlated, $r(240) = .74$, $p < .001$, with similar means, indicating that the workshop was generally well received. The two motivation subscales were

also highly positively correlated, $r(240) = .81, p < .001$, replicating findings by Lickel and colleagues (2005).

Table 4.

Summary of Intercorrelations, Means, and Standard Deviations for outcome variables in the current study (N=240)

Variable	1	2	3	4	5	6
1 Receptivity	--					
2 Engagement	.74**	--				
3 Agency	.60**	.53**	--			
4 Motivation to change self	.49**	.48**	.32**	--		
5 Motivation to repair	.57**	.53**	.40**	.81**	--	
6 Knowledge test score	.53**	.37**	.30**	.20**	.29**	--
7 Mean	78.8	73.3	66.8	69.3	75.7	5.67
8 SD	17.6	20.1	18.0	23.1	21.5	1.97

* $p < .05$, ** $p < .01$ (two-tailed)

The correlations among indices of shame, guilt, and appraisals of inadequacy and self-improvement are presented in Table 5. Consistent with past research (e.g., Tangney et al., 1992) shame was highly correlated with guilt, $r(240) = .76, p < .001$. Unsurprisingly, appraising the workshop as having revealed something flawed in oneself was highly related to shame, $r(240) = .68, p < .001$. Both appraisals were correlated with each other, $r(240) = .66, p < .001$.

Table 5.

Summary of Intercorrelations between Shame, Guilt and Appraisals (N = 240)

Variables	M	SD	1	2	3	4
1 Shame	32.4	23.7	--			
2 Guilt	50.8	26.7	.76**	--		
3 Appraisal of Inadequacy	38.5	22.6	.68**	.59**	--	
4 Appraisal of Self-Improvement	68.9	23.4	.48**	.58**	.66**	--

* $p < .05$, ** $p < .01$ (two-tailed)

Pearson product moment correlations were also computed to investigate the zero-order relationships between predictor variables (shame, guilt and appraisals) and learning outcomes (receptivity, engagement, agency, test scores, motivation to change the self and to repair). Given the high number of correlations conducted, a Bonferroni correction was used, with the significance value adjusted to .001. Results are shown on Table 6.

Table 6.

Summary of Zero-Order Correlations between Predictor and Outcome Variables (N=240)

	Receptivity	Engagement	Agency	Motivation to change self	Motivation to repair	Knowledge Test scores
Shame	-.08	-.05	-.16	.28*	.15	-.25*
Guilt	.15	.13	-.06	.44*	.37*	.01
Inadequacy	-.02	.03	-.22*	.38*	.27*	-.16
Self-improvement	.31*	.22*	.06	.60*	.56*	.17*

* $p < 0.001$ (two-tailed)

As hypothesized, reported shame was negatively correlated with knowledge test scores. Shame was also positively correlated with motivation to change the self, as was expected from past research. Reported guilt was positively related to both the motivation variables, which is also consistent with findings in the literature. Interestingly, appraising the workshop as a reminder for self-improvement was positively related to most of the learning outcomes.

Sex differences

A series of 10 one-way analyses of variance (ANOVA) were conducted to explore variations in critical variables as a function of participant sex. Results are shown in Table 7. Significant but small main effects of sex were found for all the learning outcome measures except agency, with mothers reporting higher scores. Although mothers and fathers did not differ

significantly in reported shame, mothers reported feeling significantly higher guilt than fathers. There was a significant sex difference in appraisals of self-improvement, with mothers thinking that they should do better as parents during the workshop more than fathers.

Table 7.

Sex Differences on Key Variables (N=240)

Measure	Male (<i>n</i> = 40)		Female (<i>n</i> = 200)		<i>F</i> (1,238)	<i>p</i>	<i>ηp</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Knowledge test scores	4.5	2.4	6.0	1.7	21.62***	<.001	.09
Receptivity	72.4	16.7	80.2	17.4	6.76*	.01	.03
Engagement	65.8	20.8	75.0	19.7	7.14**	.01	.03
Motivation to change self	58.3	24.5	71.6	22.2	11.61***	<.001	.05
Motivation to repair	64.1	22.7	77.9	20.5	14.7***	<.001	.06
Agency	65.6	18.3	67.0	18.0	0.20	.65	.00
Shame	29.8	20.0	32.3	24.0	0.39	.54	.00
Guilt	40.5	24.0	52.5	26.8	6.97**	.01	.03
Inadequacy Appraisal	34.5	23.3	39.1	22.4	1.35	.25	.01
Self-Improvement Appraisal	55.7	25.2	65.3	23.4	5.80*	.02	.02

p* < .05. *p* < .01. ****p* < .001

The ANOVA conducted on knowledge test scores failed Levene's test for equal variances $F(1, 234) = 15.776, p < .001$. In consideration of the skew of the knowledge test variable (-1.392) and the violation of equal variance, a Mann Whitney test was administered as well to examine sex differences. Results confirmed that knowledge test scores were higher for females (*Mdn* = 7.0) than for males (*Mdn* = 4.5), $U = 2517.5, p < .001, r = .257$.

Given that the effect sizes for the sex differences are very small, these results should be interpreted with caution. Moreover, since the cell sizes for mother and father participants were unequal, and the sample of fathers (*n* = 40) too small for meaningful interpretation, further

analysis of sex differences were not pursued, and sex of participants was included as a covariate in subsequent analyses.

Primary analyses

Hypothesis 1: Parents who received a shame-counteracting message will report more positive learning outcomes

A series of separate 2 (sex) by 2 (conditions) ANOVAs were conducted to test the first hypothesis - that parents who received a shame-counteracting message (shame-counteracting condition) would demonstrate more positive learning outcomes compared to their counterparts who did not receive a message (shame-prime condition), during a workshop in which they were provided with potentially shame-evoking information. ANOVAs were also conducted to explore whether the experimental group felt more motivated to change themselves or repair harm done, compared to the group who did not receive any shame-counteracting messaging. Table 8 shows results of the ANOVAs conducted on a) receptivity, b) engagement, c) agency, d) knowledge test scores and the motivation to e) change self and f) repair.

Significant condition group effects were found only on knowledge test scores, $F(1, 233) = 6.28, p = .01, \eta^2 = .03$, with members of the shame-counter condition ($M = 6.06, SD = 1.43$) scoring higher than members of the shame-prime condition ($M = 5.44, SD = 2.23$)¹. There were no significant differences across the two conditions for any of the remaining five learning outcomes. Significant sex differences were observed for several variables, that were consistent with those documented earlier. Sex by condition interactions were also examined for all

¹ This effect was further confirmed using log transformed scores for knowledge test, $F(1, 240) = 5.04, p = .026, \eta^2 = .022$

variables. A significant interaction effect was found only for receptivity, $F(1, 236) = 4.85$, $p=.029$, $\eta^2=.020$. Given the small effect size and the highly unequal sample sizes, further analyses of this interaction is not reported.

Table 8.

2x2 Factorial Analyses of Variance of Condition on Learning Outcomes (N= 237- 240)

Measure	Shame Prime		Shame Counter		<i>df</i>	<i>Condition effects</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>F</i>	<i>p</i>	η^2
Knowledge test scores	5.44	2.23	6.06	1.43	(1,233)			
Condition						6.28*	.01	.03
Sex						69.1***	<.001	.08
Receptivity	78.2	19.0	79.7	15.9	(1,237)			
Condition						0.39	.53	.00
Sex						6.64*	.01	.03
Engagement	73.0	19.4	73.9	20.9	(1,237)			
Condition						0.07	.79	.00
Sex						7.06**	.01	.03
Agency	64.9	18.4	68.8	17.4	(1,236)			
Condition						2.7	.10	.01
Sex						0.16	.69	.00
Motivation to repair	75.8	20.2	75.4	22.8	(1,237)			
Condition						0.07	.79	.00
Sex						14.7***	<.001	.06
Motivation to change self	69.2	22.2	69.5	24.1	(1,237)			
Condition						0.0	.98	.00
Sex						11.5***	<.001	.05

* $p < .05$. ** $p < .01$. *** $p < .001$

Hypothesis 2: Parents who received shame-counteracting messages will report less shame than parents who did not receive these messages

A 2 (sex) by 2 (conditions) ANOVA was conducted to test if parents in the shame-counteracting condition would report less shame than their counterparts in the shame-prime condition. Surprisingly, no significant differences across the two conditions were found for shame (see Table 9). It would seem that the manipulation did not work as expected for affecting levels of shame.

Table 9.

2x2 Factorial Analyses of Variance of Condition on Shame (N=240)

Measure	Shame Prime		Shame Counter		<i>df</i>	<i>Condition effects</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>F</i>	<i>p</i>	ηp^2
Shame	32.5	23.7	31.2	23.0	(1,237)			
Condition						.20	.67	.00
Sex						.40	.53	.00

* $p < .05$. ** $p < .01$. *** $p < .001$

To examine further conditional effects, separate 2 (sex) by 2 (conditions) ANOVAs were also conducted to explore whether the groups differed in reported guilt or self-appraisals made. As reported in Table 10 below, results indicated that the two groups did not differ significantly in levels of guilt reported, nor in their endorsements of appraisals of inadequacy, and in their appraisals of self-improvement. A significant sex difference was observed for guilt, as was documented earlier. Sex by condition interactions were examined and no significant effects found.

Table 10.

2x2 Factorial Analyses of Variance of Condition on Guilt and Appraisals (N=240)

Measure	Shame Prime		Shame Counter		<i>df</i>	<i>Condition effects</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>F</i>	<i>p</i>	η^2
Guilt	50.9	27.5	50.1	25.9	(1,237)			
Condition						0.09	.77	.00
Sex						6.98**	.01	.03
Inadequacy Appraisals	36.9	20.9	39.8	24.2	(1,237)			
Condition						0.97	.33	.00
Sex						1.29	.26	.01
Self-improve Appraisals	62.8	22.4	64.7	24.4	(1,237)			
Condition						0.31	.58	.00
Sex						5.70*	.02	.02

* $p < .05$. ** $p < .01$. *** $p < .001$

Hypothesis 3: Shame plays a role between condition groups and learning outcomes

Shame was predicted to mediate any significant relationships between the manipulation (shame-prime versus shame-counter conditions) and learning outcomes. For shame to play a mediational role, there must be demonstrated direct effects of the manipulation on shame, and shame on knowledge test scores (Wu & Zumbo, 2008). As there were no significant effects of the manipulation on shame, accordingly, tests for mediation were not pursued.

Hypothesis 4: Shame is predictive of learning outcomes

A series of regression analyses were conducted for each of the learning outcome variables to test the hypothesis that parents' feelings of shame would predict lower levels of a) receptivity, b) engagement, c) agency and d) knowledge test scores.

As the workshop was designed to potentially evoke moral emotions, it is likely many participants may be feeling a combination of shame and guilt, two moral emotions that

commonly co-occur. In this sample, shame and guilt were highly and positively correlated, $r(242) = .76, p < .001$. When examining the differences between shame and guilt, past researchers have statistically controlled for the high correlation between the two emotions (e.g., Tangney et al., 1992). Similarly, to examine the unique contribution of shame, guilt was entered as a covariate in the following analyses. Furthermore, as it was of interest to this study to examine how shame and guilt may interact in relation to learning outcomes, an interaction term was also entered. Although previous analyses showed that most of the learning outcome variables did not significantly differ across the condition groups, because shame, guilt and learning outcomes were measured *after* the manipulation, condition (0 = shame-prime, 1 = shame counter) was entered in step one in the model to account for any possible influences. Sex (0 = Female, 1 = Male) was also entered as a co-variate.

For each regression equation, variables were entered in the same order. Sex of participant and condition group were entered in Step 1. Mean-centered shame and guilt variables were computed to reduce the collinearity that can emerge from forming interaction terms with continuous variables (Aiken & West, 1991), and added in Step 2². Interaction terms for mean-centered shame and guilt were added in Step 3.

Table 11 shows the parameters for the following regressions. There were no maximum values for Cook's Distance above one, suggesting there is no undue influence of a single case on the models. Durbin-Watson statistics were all close to 2 except for knowledge test scores (for which additional analyses were run, see below). Unless otherwise noted, the square roots of the

² 2-way interactions were explored for sex and condition with shame and guilt, as well as between sex and condition, and found to be insignificant (above $p = .01$), and subsequently dropped from analyses for the sake of parsimony.

variance-inflation factors (VIFs) for the following models were observed to fall well below 10 and tolerance values were above the cutoff of 0.1, showing little collinearity within the data (Field, 2009).

Table 11.

Summary of Parameters for Regression Analyses with Learning Outcome Variables (N=243)

Outcome Variables	Durbin-Watson	Max Cook's distance	Percentage of shrinkage for each significant regression equation	Percentage of cases with residuals outside 2 SD
Receptivity	1.64	0.08	1.7	4.5
Engagement	1.78	0.06	2	2.9
Agency	2.14	0.05	2	3.3
Knowledge Test Scores	0.62	0.06	1.5	4.9
Motivation to change self	1.82	0.05	1.7	3.7
Motivation to repair	1.89	0.08	1.7	4.9

Shame predicting receptivity. Results of the regression model predicting participant receptivity of the workshop is presented in Table 12. There were significant main effects for shame and guilt in Step 2, $F(4, 235) = 8.45, p < .001$ and Step 3, $F(5, 234) = 11.4, p < .001$, which also shows an interaction effect of shame and guilt, altogether explaining 19.6% of the variation in receptivity. The part correlation of shame, guilt and the interaction term were $r(230) = -0.37, r(230) = .038$ and $r(230) = .027$, respectively, indicating medium effect sizes.

Table 12.

Results of Hierarchical Regression Analysis Predicting Receptivity from Sex, Condition, Shame and Guilt (N=240)

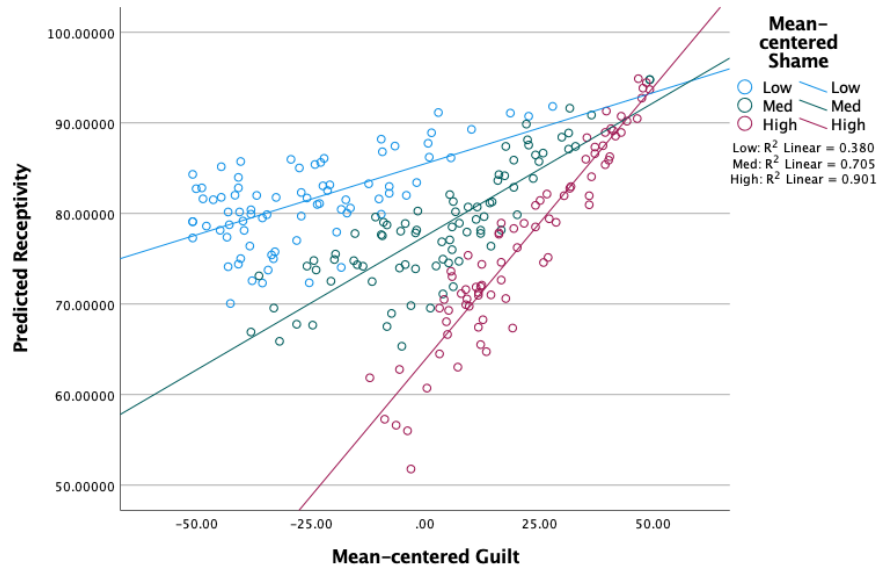
	b	SE B	Beta	R ²	ΔR ²
Step 1				.029	
Constant	79.54	1.65			
Sex	-7.75	3.01	-0.17*		
Condition	1.40	2.24	0.04		
Step 2				.125	.096
Constant	79.06	1.57			
Sex	-4.94	2.93	-0.11		
Condition	1.26	2.14	0.04		
Shame	-0.33	0.07	-0.44***		
Guilt	0.30	0.06	0.46***		
Step 3				.196	.071
Constant	74.56	1.81			
Sex	-3.54	2.84	-0.08		
Condition	1.69	2.06	0.05		
Shame	-0.46	0.07	-0.61***		
Guilt	0.42	0.07	0.63***		
Shame x Guilt	0.01	0.00	0.29***		

* $p < .05$. ** $p < .01$. *** $p < .001$

The interaction was graphed using a categorical variable, with shame recoded into tertile groups (see Figure 2). There were 79 participants in the low shame group, and 82 participants in both the medium and high shame groups. Results of simple slopes analysis indicated that the effect of guilt on receptivity was greater for people who reported high levels of shame than for those reporting little shame. In other words, it would seem that the difference in receptivity between those feeling more shame and those feeling little shame depended on how much guilt they were feeling. The more guilt they felt, the more receptive they were, and the less shame levels mattered.

Figure 2.

Simple Slopes of Shame by Guilt Interaction on Predicted Receptivity Scores



Shame predicting engagement. Results of the regression model predicting participant engagement with the workshop are presented in Table 13. Significant main effects of shame and guilt were observed in Step 2, $F(4, 235) = 5.31, p < 0.001$ and Step 3, $F(5, 234) = 4.9, p < 0.001$, explaining 9.4% of the variation in engagement. The part correlations of shame and guilt were $r(230) = -.23$ and $r(230) = .25$, respectively, approaching medium effect sizes.

Table 13.

Results of Hierarchical Regression Analysis Predicting Engagement from Sex, Condition, Shame and Guilt (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.029	
Constant	74.63	1.89			
Sex	-9.16	3.45	-0.17**		
Condition	0.69	2.57	0.02		
Step 2				.082	.053
Constant	74.21	1.85			
Sex	-6.70	3.45	-0.12		
Condition	0.58	2.51	0.01		
Shame	-0.27	0.08	-0.32***		
Guilt	0.26	0.07	0.35***		
Step 3				.094	.012
Constant	72.09	2.20			
Sex	-6.05	3.45	-0.11		
Condition	0.78	2.50	0.02		
Shame	-0.34	0.09	-0.39***		
Guilt	0.32	0.08	0.42***		
Shame x Guilt	0.00	0.00	0.12		

* $p < .05$. ** $p < .01$. *** $p < .001$

Shame was negatively predictive of engagement. Results indicated that as shame increased by 1 unit, engagement decreased by .34 units, after accounting for condition group, sex and guilt. At the same time, guilt was positively predictive of engagement. Results suggest that those who reported lower levels of shame and higher levels of guilt were more likely to find the workshop and presenter engaging.

Shame predicting agency. Results of the regression model predicting participant reports of agency to cope better with challenging parenting moments after the workshop are presented in

Table 14. A main effect of shame was observed in Step 2, $F(4, 234) = 3.1, p = .016$. In Step 3, $F(5, 233) = 4.45, p = < .001$, main and interaction effects of both shame and guilt were observed and explained 8.7% of the variation in agency. There were small to medium effect sizes, with part correlations of shame, guilt and the interaction term being $r(230) = -.24, r(230) = .15$, and $r(230) = .19$ respectively.

Table 14.

Results of Hierarchical Regression Analysis Predicting Agency from Sex, Condition, Shame and Guilt (N=239)

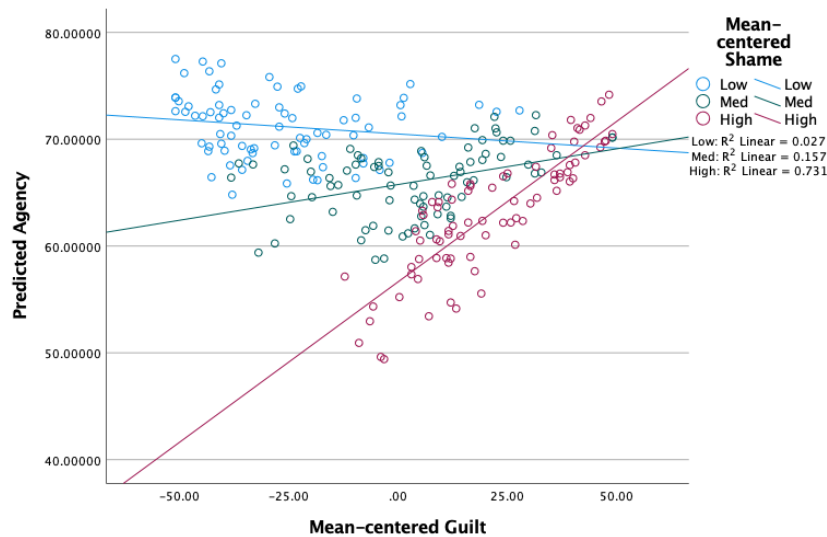
	b	SE B	Beta	R ²	ΔR ²
Step 1				.012	
Constant	65.13	1.70			
Sex	-1.26	3.11	-0.03		
Condition	3.82	2.32	0.11		
Step 2				.05	.038
Constant	65.05	1.68			
Sex	-0.67	3.14	-0.01		
Condition	3.52	2.29	0.10		
Shame	-0.22	0.08	-0.28 **		
Guilt	0.09	0.07	0.13		
Step 3				.087	.037
Constant	61.68	1.98			
Sex	0.32	3.10	0.01		
Condition	3.93	2.26	0.11		
Shame	-0.31	0.08	-0.39 ***		
Guilt	0.17	0.07	0.25 *		
Shame x Guilt	0.01	0.00	0.21 **		

* $p < .05$. ** $p < .01$. *** $p < .001$

To better understand the interaction, simple slopes analysis was conducted using a categorical variable with shame (see Figure 3).

Figure 3.

Simple Slopes of Shame by Guilt Interaction on Predicted Agency Scores



Similar to findings observed for receptivity, simple slopes analysis indicated that the difference in agency between those feeling more shame than those feeling little shame depended on how much guilt they were feeling. For those who reported low shame, feeling guilt as well was detrimental to their sense of agency. Yet for those who reported high levels of shame, feeling guilt led to higher levels of agency.

Shame predicting knowledge test scores. Results of the regression model predicting participant scores on a post-workshop knowledge test are presented in Table 15. Main effects of sex, condition, shame and guilt were evident in Step 2, $F(4, 231) = 17.3, p < .001$ and Step 3, $F(5, 230) = 24.2, p < .001$, which also indicated a significant interaction effect of shame and guilt. In line with previously reported results of group differences in knowledge test scores, results of the regression analysis showed the effect of condition groups to be significant, $b = .624, t(230) = 3.08, p = .002$ in step 3. Together these variables explained 34.5% of the variation in knowledge test scores. Part correlation statistics indicated medium to large effects of shame ($r(230) = -.45$),

guilt ($r(230) = .35$) and the interaction term ($r(230) = .34$), with small effect sizes for condition ($r(230) = .17$) and sex ($r(230) = .20$).

Table 15.

Results of Hierarchical Regression Analysis Predicting Test Scores from Sex, Condition, Shame and Guilt (N=236)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.11	
Constant	5.70	0.17			
Sex	-1.44	0.31	-0.29***		
Condition	0.59	0.23	0.16*		
Step 2				.23	.12
Constant	5.67	0.16			
Sex	-1.23	0.30	-0.24****		
Condition	0.55	0.22	0.15**		
Shame	-0.04	0.01	-0.53***		
Guilt	0.03	0.01	0.37***		
Step 3				.34	.11
Constant	5.04	0.18			
Sex	-1.04	0.28	-0.21***		
Condition	0.62	0.20	0.17**		
Shame	-0.06	0.01	-0.76***		
Guilt	0.04	0.01	0.58***		
Shame x Guilt	0.00	0.00	0.37***		

* $p < .05$. ** $p < .01$. *** $p < .001$

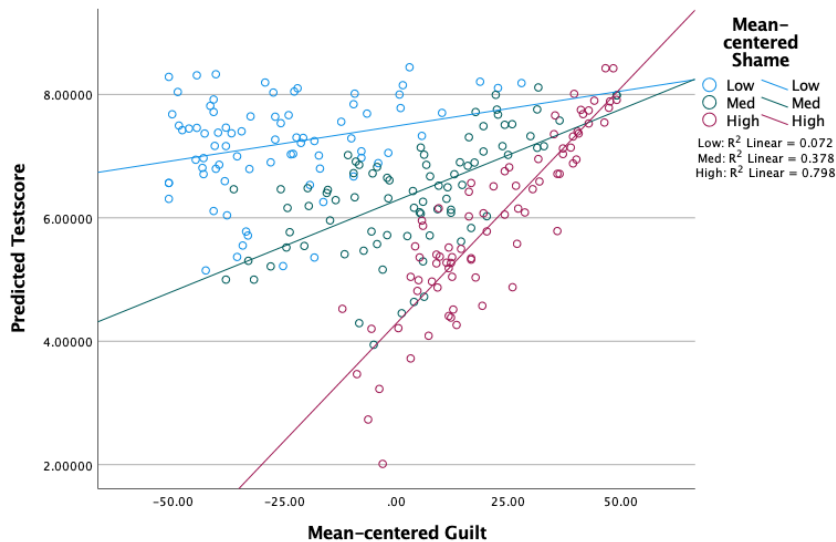
A visual check of the standardized residual histogram showed the distribution to be fairly normal, with a slight negative skew. However, the normal probability plot showed some deviation from normality, with a substantial number of data points not falling along the line. The Durbin-Watson value for this model was .619, which indicated that the assumption of independent errors was not tenable. The model was re-run using bootstrapping (bias-corrected, based on 1000 bootstrap samples) and showed the same variables as significant, with 95%

confidence intervals not crossing zero. Another regression analysis was run using log-transformed values for test scores, confirming similar results.

As there was a significant interaction effect, simple slopes analysis was run, and showed similar relationships as those described earlier for receptivity and agency (see Figure 4). In general, parents with lower levels of shame had higher knowledge test scores, with levels of guilt having little impact for them. However, for parents reporting high shame levels, feeling guilty as well was adaptive for better performance on the knowledge test. For this latter group, higher levels of guilt seemed to dramatically increase the likelihood of higher scores.

Figure 4.

Simple Slopes of Shame by Guilt Interaction on Predicted Test Scores



Shame predicting motivation to change the self. Results of the regression model predicting participant's motivation to change are presented in Table 16. Only guilt ($b = .48$, $t(234) = 5.70$, $p < .001$) was found to be a significant predictor in both Step 2, $F(2, 235) = 16.6$, $p < .001$ and Step 3, $F(5, 234) = 13.7$, $p < .001$, explaining 22.7% of the variation in

motivation to change scores. Part correlation statistics show a medium effect sized unique contribution of guilt to the motivation to change self, $r(234) = .35$.

Table 16.

Results of Hierarchical Regression Analysis Predicting Motivation to Change Self from Sex, Condition, Shame and Guilt (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.05	
Constant	45.00	7.43			
Sex	13.30	3.92	0.22***		
Condition	-0.06	2.93	0.00		
Step 2				.22	.17
Constant	53.98	6.90			
Sex	8.37	3.65	0.14*		
Condition	0.24	2.66	0.01		
Shame	-0.10	0.09	-0.11		
Guilt	0.43	0.08	0.50***		
Step 3				.23	.01
Constant	53.28	6.90			
Sex	7.79	3.66	0.13*		
Condition	0.41	2.66	0.01		
Shame	-0.16	0.10	-0.16		
Guilt	0.48	0.08	0.55***		
Shame x Guilt	0.00	0.00	0.09		

* $p < .05$. ** $p < .01$. *** $p < .001$

Shame predicting motivation to repair. Results of the regression model predicting participant's motivation to repair is presented in Table 17. Significant main effects of sex, shame and guilt were found in Step 2, $F(2, 235) = 14.7, p < .001$, as well as a significant interaction effect Step 3, $F(5, 233) = 13.17, p < .001$. Together these variables explained 22% of the variation in participant's motivation to repair. Part correlation statistics indicated medium effects for shame ($r(233) = -.22$) and guilt ($r(233) = .38$), and small effect sizes for the interaction term ($r(233) = .14$) and sex ($r(233) = .14$).

Table 17.

Results of Hierarchical Regression Analysis Predicting Motivation to Repair from Sex, Condition, Shame and Guilt (N=240)

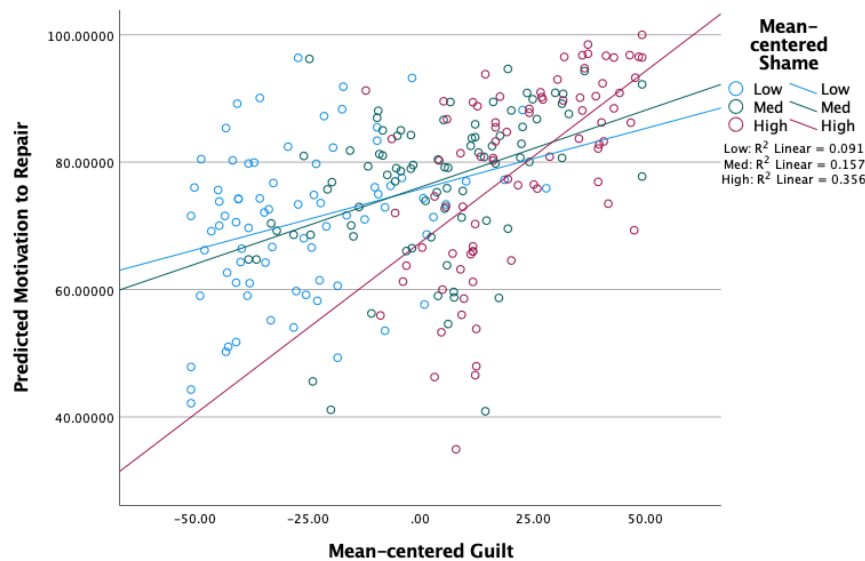
	b	SE B	Beta	R ²	ΔR ²
Step 1				.06	
Constant	50.52	6.87			
Sex	13.89	3.63	0.24***		
Condition	-0.72	2.70	-0.02		
Step 2				.20	.14
Constant	59.03	6.50			
Sex	9.22	3.44	0.16**		
Condition	-0.61	2.50	-0.01		
Shame	-0.25	0.08	-0.27**		
Guilt	0.44	0.07	0.55***		
Step 3				.22	.02
Constant	57.94	6.45			
Sex	8.32	3.42	0.15*		
Condition	-0.34	2.48	-0.01		
Shame	-0.34	0.09	-0.37***		
Guilt	0.51	0.08	0.64***		
Shame x Guilt	0.01	0.00	0.15*		

* $p < .05$. ** $p < .01$. *** $p < .001$

Slopes analysis shows that the contribution of guilt to the motivation to repair is substantially greater for parents who report feeling high levels of shame than those reporting little shame (see Figure 5).

Figure 5.

Simple Slopes of Shame by Guilt Interaction on Predicted Motivation to Repair Scores



To summarize, shame was found to be a significant predictor of receptivity, engagement, agency, knowledge test scores, and motivation to repair, even after accounting for sex, condition and guilt. At the same time, guilt made a significant contribution to all learning outcomes. Interaction effects of shame and guilt were found for receptivity, test score, agency and motivation to repair.

Hypothesis 5: Self-related appraisals parents make during the workshop are predictive of shame

There is little research to date examining self-related appraisals parents may make in a context of learning about parenting. Guided by shame theories, a suite of self-related appraisals was developed specially for this study and expected to be predictive of shame. In particular, the factor tapping appraisals of inadequacy was expected to predict greater feelings of shame.

To explore the hypothesis, shame was regressed simultaneously onto both appraisals of *inadequacy* and *self-improvement*. Results of this regression model is presented in Table 18. No

significant effect of either condition or sex was observed in Step 1, $F(2, 237) = .292, p = .747$. However, there was a substantial F-value in Step 2, $F(2, 235) = 54.51, p < .001$, indicating a significant effect of appraisals of inadequacy on shame, explaining 48.1% of the variation in participant's reported shame³. Part correlation statistics indicated a large effect size ($r(237) = .51$). No main effects were found for appraisals of self-improvement. As expected, relating to the workshop as reminding one of being an inadequate and flawed parent in the eyes of oneself and others, was predictive of shame.

Table 18.

Results of Hierarchical Regression Analysis Predicting Shame from Sex, Condition, Inadequacy and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.00	
Constant	32.98	2.22			
Sex	2.57	4.06	0.04		
Condition	-1.35	3.03	-0.03		
Step 2				.48	.48
Constant	33.57	1.61			
Sex	-0.74	2.98	-0.01		
Condition	-3.41	2.20	-0.07		
Inadequacy	0.71	0.06	0.68***		
Self-improvement	0.02	0.06	0.02		

* $p < .05$. ** $p < .01$. *** $p < .001$

To further examine the relationships between appraisals and moral emotions, guilt was also regressed onto sex, condition, inadequacy and self-improvement. Results of this regression model is presented in Table 19. Significant, medium-sized effects of both appraisals of

³ All two-way interaction terms between sex and conditions with Inadequacy and Self-improvement appraisals were examined and found to be non-significant, and thus dropped from analyses.

inadequacy ($r(237) = .29$) and appraisals of self-improvement ($r(237) = .23$) were found in Step 2, $F(2, 234) = 43.21, p < .001$, explaining 42% of the variation in participant's reported guilt⁴. Interestingly both types of appraisals predicted guilt, in the same (positive) direction. The more parents appraised the workshop as having revealed their inadequacies, *and* as needing to be a better parent, the more guilt they felt.

Table 19.

Results of Hierarchical Regression Analysis Predicting Guilt from Sex, Condition, Inadequacy and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.03	
Constant	53.04	2.51			
Sex	-12.09	4.58	-0.17**		
Condition	-1.02	3.41	-0.02		
Step 2				.43	.40
Constant	53.20	1.94			
Sex	-6.68	3.58	-0.09		
Condition	-2.90	2.64	-0.05		
Inadequacy	0.45	0.08	0.38***		
Self-improvement	0.35	0.08	0.31***		

* $p < .05$. ** $p < .01$. *** $p < .001$

Durbin-Watson statistics for both models were close to 2 (2.02 for shame model, 2.13 for guilt model) and shrinkage values were acceptable (0.9% for shame model and 10% for guilt model). Maximum Cook's Distance values were well below one (0.53 for shame, 0.49 for guilt), and there were only 3.2% and only 5.3% of cases had residuals beyond a standard deviation of 2.

⁴ All two-way interaction terms between sex and conditions with Inadequacy and Self-improvement appraisals were examined and found to be non-significant, and thus dropped from analyses.

The square roots of the variance-inflation factors (VIFs) fell well below 10 and tolerance values were above the cutoff of 0.1, showing little collinearity within the data (Field, 2009). There were no normality concerns, with most of the data points falling on the line in the normal probability plot.

To summarize, appraising the workshop as reminding one of being an inadequate and flawed parent was predictive of both shame and guilt. Appraisals of needing to improve oneself was predictive only of guilt.

Hypothesis 6: Self-related appraisals parents make during the workshop are predictive of learning outcomes.

The degree to which parents felt that the information provided revealed one's *inadequacy* as a parent was hypothesized to predict lower engagement, receptivity, agency and knowledge test scores. How these appraisals impact motivation to change and/or repair the self was exploratory, given the mixed findings in the literature reviewed earlier.

A series of regression analyses was conducted, with each learning outcome variable regressed simultaneously onto appraisals of inadequacy and self-improvement. As appraisals and learning outcomes were measured after the manipulation, condition (0 = shame-prime, 1 = shame counter) was entered in Step 1 of the model to control for any possible influences. Sex (0 = Female, 1 = Male) was also entered as a co-variate⁵. Mean-centered variables for appraisals of inadequacy and self-improvement were computed to reduce the collinearity that can emerge from

⁵ All two-way interactions were explored for sex and condition effects on appraisals of inadequacy and self-improvement, as well as between sex and condition, and were found to be nonsignificant (none below $p=.01$) and dropped from analyses for the sake of parsimony

forming interaction terms with continuous variables (Aiken & West, 1991), and added in Step 2⁶. Interaction terms for mean-centered appraisals of inadequacy and self-improvement were added in Step 3.

Table 20 shows the parameters for the following regressions. There were no maximum values for Cook's Distance above one, suggesting there is no undue influence of a single case on the models. Durbin-Watson statistics were all close to 2. Unless otherwise noted, the square roots of the variance-inflation factors (VIFs) for the following models were observed to fall well below 10 and tolerance values were above the cutoff of 0.1, showing little collinearity within the data (Field, 2009). Shrinkage values were acceptable, indicating very little variance if the model was derived from the population rather than a sample.

Table 20.

Summary of Parameters for Regressing Outcome Variables onto Appraisals (N=243)

Outcome Variables	Durbin-Watson	Max Cook's distance	Percentage of shrinkage for each significant regression equation	Percentage of cases with residuals outside 2 SD
Receptivity	1.73	0.07	1.5	6.1
Engagement	1.83	0.05	2	3.3
Agency	0.56	0.09	1.5	4.9
Test Scores	2.19	0.03	1.8	2.5
Motivation to change self	1.96	0.08	1.3	5.8
Motivation to repair	1.94	0.08	1.3	6.9

⁶ 2-way interactions were explored for sex and condition with shame and guilt, as well as between sex and condition, and found to be insignificant (above $p=.01$), and subsequently dropped from analyses for the sake of parsimony.

Appraisals predicting receptivity. Results of a model regressing receptivity scores on to appraisals of inadequacy and self-improvement are presented in Table 21. No significant effects of either condition or sex were observed. Significant main effects for both appraisals were found in Step 2, $F(4, 235) = 13.23, p < .001$, and Step 3, $F(5, 234) = 19.46, p < .001$. A significant interaction of appraisals of inadequacy and appraisals of self-improvement was also observed. Together this model explained 29.4% of the variation in receptivity scores. Part correlation statistics indicated medium to large effects of inadequacy ($r(234) = -.36$), self-improvement ($r(234) = .47$) and the interaction term ($r(234) = .33$), and a small effect size of sex ($r(234) = .12$).

Table 21.

Results of Hierarchical Regression Analysis Predicting Receptivity from Sex, Condition, Appraisals of Inadequacy, and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.03	
Constant	79.54	1.65			
Sex	-7.75	3.01	-0.17*		
Condition	1.40	2.24	0.04		
Step 2				.19	.16
Constant	64.70	3.27			
Sex	-5.20	2.81	-0.11		
Condition	1.57	2.07	0.05		
Inadequacy	-0.30	0.06	-0.37***		
Self-improvement	0.40	0.06	0.53***		
Step 3				.30	.11
Constant	75.73	3.32			
Sex	-5.61	2.62	-0.12*		
Condition	0.40	1.94	0.01		
Inadequacy	-0.33	0.06	-0.42***		
Self-improvement	0.50	0.06	0.66***		
Inadequacy x Self-improvement	0.01	0.00	0.35***		

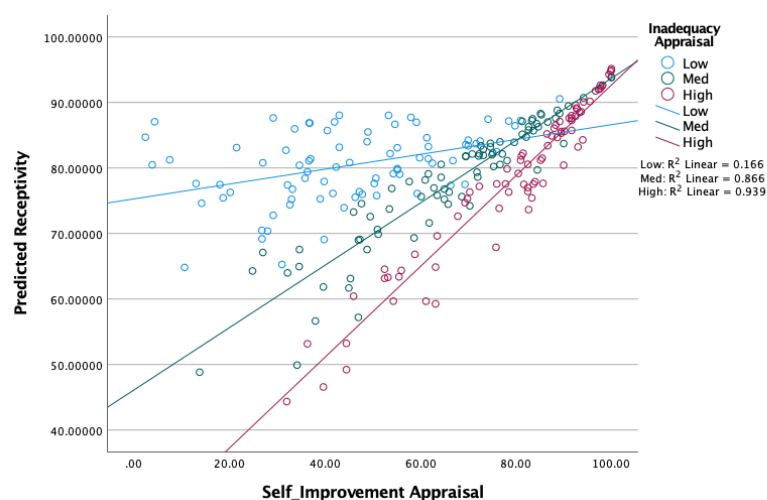
* $p < .05$. ** $p < .01$. *** $p < .001$

Appraisals of inadequacy were negatively predictive, and self-improvement appraisals positively predictive of receptivity. In other words, parents who evaluated the workshop less as a reminder of their flaws and the judgment of others, and more as a reminder to be better parents, were likely to find the workshop more useful, interesting and relevant.

As the interaction term for appraisals of inadequacy and self-improvement had a significant effect on receptivity, a simple slopes analysis was conducted with a categorical variable, with appraisals of inadequacy recoded into with tertile groups (see Figure 6). There were 81 participants in each of the groups (low, medium and high inadequacy). Results indicated that the difference in receptivity between parents who reported high appraisals of inadequacy and those who reported low appraisals of inadequacy depended on how much they also endorsed appraisals of self-improvement. In other words, parents who had a strong tendency to feel that their inadequacies were revealed during the workshop were much more receptive if they also had appraisals that reminded them that they should do better as parents.

Figure 6.

Simple Slopes of the Interaction of Inadequacy and Self-Improvement Appraisals on Predicted Receptivity Scores



Appraisals predicting engagement. Results of the regression model predicting participant engagement with the workshop are presented in Table 22. A significant main effect for self-improvement appraisals was found in Step 2, $F(4, 235) = 5.578, p < .001$, and Step 3, $F(5, 234) = 6.743, p < .001$. In addition, there was also a significant effect of the interaction of appraisals of self-improvement and inadequacy. Together this model explained 12.6% of the variation in engagement scores. Part correlation statistics indicated small effects of self-improvement ($r(234) = .28$), inadequacy ($r(234) = -.19$), the interaction term ($r(234) = .20$), and sex ($r(234) = .14$).

Table 22.

Results of Hierarchical Regression Analysis Predicting Engagement from Sex, Condition Appraisals of Inadequacy, and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.03	
Constant	74.6	1.889			
Sex	-9.16	3.448	-0.17**		
Condition	0.69	2.572	0.02		
Step 2				.09	.06
Constant	74.30	1.84			
Sex	-7.24	3.40	-0.13*		
Condition	0.70	2.51	0.02		
Inadequacy	-0.17	0.08	-0.19*		
Self-improvement	0.28	0.07	0.32***		
Step 3				.13	.04
Constant	72.04	1.94			
Sex	-7.52	3.34	-0.14*		
Condition	-0.09	2.47	-0.002		
Inadequacy	-0.19	0.07	-0.22**		
Self-improvement	0.34	0.07	0.40***		
Inadequacy x Self-improvement	0.01	0.002	0.21**		

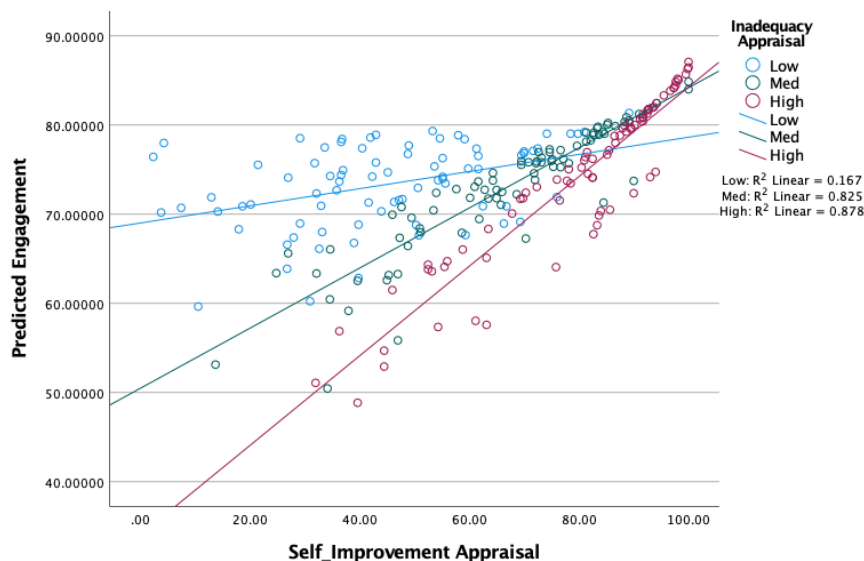
* $p < .05$. ** $p < .01$. *** $p < .001$

Appraisals of inadequacy were negatively predictive of engagement, and self-improvement appraisals were positively predictive of engagement. In other words, parents who appraised the workshop more as a reminder to do better as a parent and less as a reminder of their flaws were likely to be more engaged.

The significant interaction term was graphed with simple slopes (see Figure 7). Results suggest that parents who had a strong tendency to focus on their inadequacies reported much more engagement if they also had appraisals that reminded them they should do better. Appraisals of self-improvement did not matter as much to engage parents with little tendency to make appraisals of inadequacy.

Figure 7.

Simple Slopes of the Interaction of Inadequacy and Self-Improvement Appraisals on Predicted Engagement Scores



Appraisals on knowledge test scores. Results of this regression model predicting participant knowledge test scores are presented in Table 23. Significant effects of condition, sex and both appraisals were observed in Step 2, $F(4, 231) = 18.5, p < .001$. Significant main

effects for sex, both appraisals and the interaction term were found in Step 3, $F(5, 230) = 21.52$, $p < .001$. Together this model explained 31.9% of the variation in engagement scores. Partial correlation statistics indicated medium to large effects of inadequacy ($r(234) = -.41$), self-improvement ($r(234) = .38$), and medium effect sizes of the interaction term ($r(234) = .28$), and sex ($r(234) = .26$). Visual inspection of the normality plot found many of the points off the line, suggesting concerns with normality. The model (for both sexes) was re-run using bootstrapping (bias-corrected, based on 1000 bootstrap samples) and showed the same variables as significant, with 95% confidence intervals not crossing zero.

Table 23.

Results of Hierarchical Regression Analysis Predicting Test Scores from Sex, Condition, Appraisals of Inadequacy, and Self-improvement (N=236)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.11	
Constant	5.70	0.172			
Sex	-1.44	0.312	-0.29***		
Condition	0.59	0.234	0.16*		
Step 2				.24	.13
Constant	5.66	0.16			
Sex	-1.29	0.29	-0.26***		
Condition	0.63	0.22	0.17**		
Inadequacy	-0.04	0.01	-0.47***		
Self-improvement	0.04	0.01	0.43***		
Step 3				.32	.08
Constant	5.36	0.16			
Sex	-1.32	0.28	-0.26***		
Condition	0.53	0.21	0.14*		
Inadequacy	-0.04	0.01	-0.51***		
Self-improvement	0.04	0.01	0.54***		
Inadequacy x Self-improvement	0.001	0	0.29***		

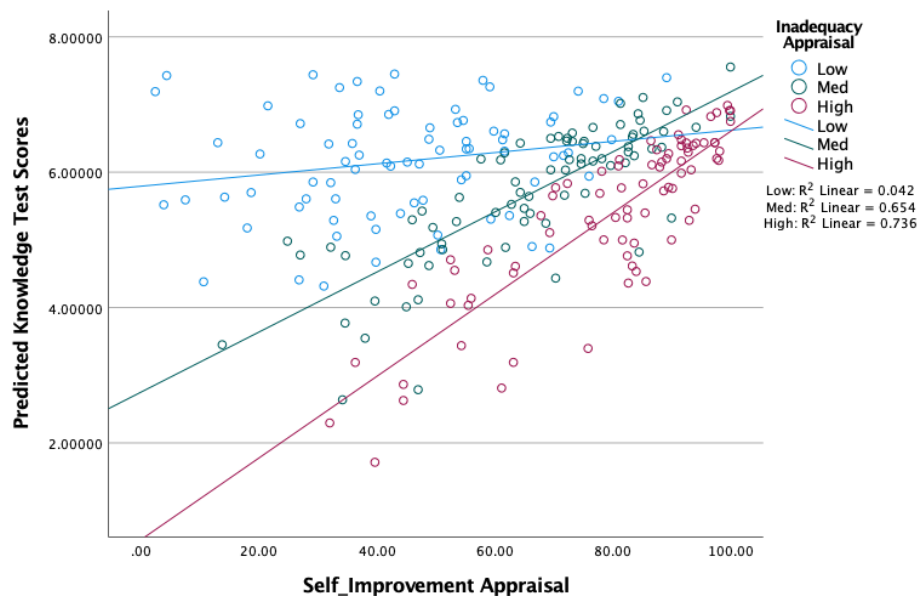
* $p < .05$. ** $p < .01$. *** $p < .001$

Appraisals of inadequacy were negatively predictive, and self-improvement appraisals positively predictive of test scores. In other words, parents who thought about the workshop less as a reminder of their inadequacies and more as a reminder to do better were more likely to score better on the knowledge test.

As the interaction term was significant, a simple slopes analysis with a categorical variable for appraisal of inadequacy was conducted (see Figure 8). Results indicate that parents who did not think the workshop exposed their inadequacies tend to score higher, and whether they also think they should be better parents did not matter much for test scores. However, for parents who had a strong tendency to focus on their inadequacies, making appraisals that reminded them they should do better contributed greatly to higher scores.

Figure 8.

Simple Slopes of the Interaction of Inadequacy and Self-Improvement Appraisals on Predicted Test Scores



Appraisals predicting agency. Results of the regression model predicting agency scores from appraisals are presented in Table 24. Significant main effects for both types of appraisals were found in Step 2, $F(4, 234) = 8.69, p = <.001$, and Step 3, $F(5, 233) = 10.55, p = <.001$. In addition, there was also a significant interaction between appraisals of inadequacy and self-improvement. Together this model explained 18.5% of the variation in agency scores. Partial correlation statistics indicated medium effects of inadequacy ($r(234) = -.39$), self-improvement ($r(234) = .31$), the interaction term ($r(234) = .24$).

Table 24.

Results of Hierarchical Regression Analysis Predicting Agency from Sex, Condition Appraisals of Inadequacy, and Self-improvement (N=239)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.01	
Constant	65.13	1.704			
Sex	-1.26	3.111	-0.03		
Condition	3.82	2.324	0.11		
Step 2				.13	.12
Constant	64.63	1.61			
Sex	-0.24	2.97	-0.01		
Condition	4.32	2.19	0.12		
Inadequacy	-0.37	0.07	-0.46***		
Self-improvement	0.27	0.06	0.35***		
Step 3				.19	.06
Constant	62.20	1.68			
Sex	-0.59	2.88	-0.01		
Condition	3.55	2.14	0.10		
Inadequacy	-0.39	0.06	-0.48***		
Self-improvement	0.34	0.06	0.44***		
Inadequacy x Self-improvement	0.01	0.002	0.25***		

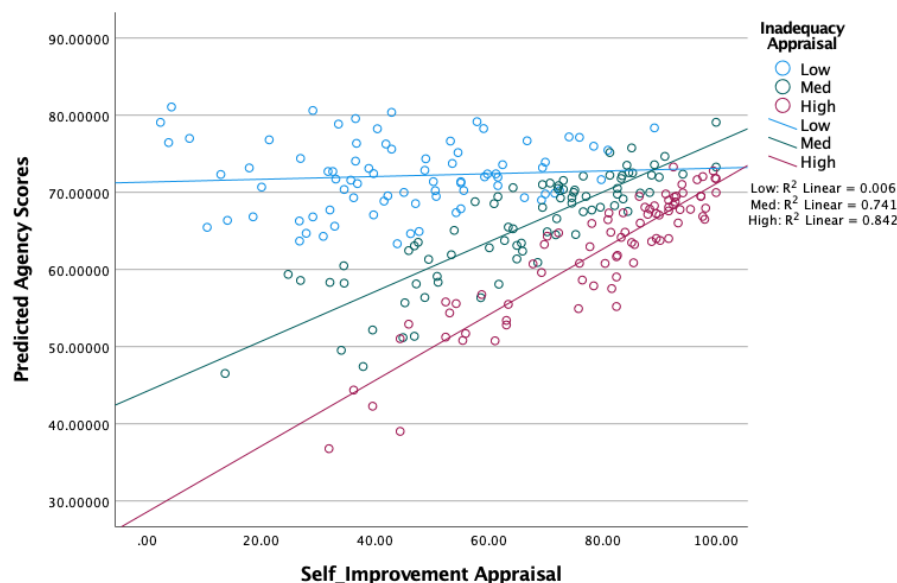
* $p < .05$. ** $p < .01$. *** $p < .001$

Echoing the patterns previously observed, appraisals of inadequacy were negatively predictive and self-improvement appraisals positively predictive of agency. Parents who evaluated the workshop less as a judgment of their flaws, and more as a reminder to be better, were more likely to feel greater agency to manage challenging parenting moments ahead.

A simple slopes analysis was conducted to examine the significant interaction effect (see Figure 9). Results suggest that parents with who did not appraise the workshop as having revealed their inadequacies reported higher levels of agency overall, whether they also felt they should be better parents did not matter. However, for parents who had a strong tendency to focus on their flaws, having appraisals that reminded them they should do better strongly contributed towards reporting a higher sense of more agency.

Figure 9.

Simple Slopes of the Interaction of Inadequacy and Self-Improvement Appraisals on Predicted Agency Scores



Appraisals predicting motivation to change the self. Results of the regression model predicting Motivation for Self-change from appraisals are presented in Table 25. A significant main effect of self-improvement appraisal was found in Step 2, $F(4, 235) = 34.16, p < .001$, and with a significant interaction effect in Step 3, $F(5, 234) = 28.79, p < .001$. No main effects of appraisals of inadequacy were found. Together this model explained 38% of the variation in motivation to change the self scores. Part correlation statistics indicated medium to large effects of self-improvement ($r(234) = .43$), and small effect sizes of the interaction term ($r(234) = .12$), and sex ($r(234) = .13$).

Table 25.

Results of Hierarchical Regression Analysis Predicting Motivation to Change the Self from Sex, Condition, Appraisals of Inadequacy, and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.05	
Constant	71.60	2.15			
Sex	-13.30	3.92	-0.22***		
Condition	-0.06	2.93	-0.001		
Step 2				.37	.32
Constant	71.24	1.76			
Sex	-7.88	3.25	-0.13*		
Condition	-1.01	2.40	-0.02		
Inadequacy	0.01	0.07	0.01		
Self-improvement	0.56	0.07	0.57***		
Step 3				.38	.01
Constant	69.74	1.87			
Sex	-8.07	3.22	-0.13*		
Condition	-1.54	2.39	-0.03		
Inadequacy	-0.01	0.07	-0.01		
Self-improvement	0.60	0.07	0.61***		
Inadequacy x Self-improvement	0.01	0.002	0.12*		

* $p < .05$. ** $p < .01$. *** $p < .001$

Only self-improvement appraisals were predictive of agency. Parents who related to the workshop as a reminder to do better were more likely to be more motivated to change the self.

Appraisals predicting motivation to repair. Results of the regression model predicting Motivation to repair are presented in Table 26. Significant main effects of sex and self-improvement appraisal were found in Step 2, $F(4, 235) = 31.76, p < .001$, and Step 3, $F(5, 234) = 27.51, p < .001$. Together this model explained 37% of the variation in motivation to repair scores. Part correlation statistics indicated a large effect of self-improvement ($r(234) = .50$), and small effect sizes of inadequacy ($r(234) = -.16$), the interaction term ($r(234) = .14$), and sex ($r(234) = .16$).

Table 26.

Results of Hierarchical Regression Analysis Predicting Motivation to Repair from Sex, Condition, Appraisals of Inadequacy, and Self-improvement (N=240)

	b	SE B	Beta	R ²	ΔR ²
Step 1				.06	
Constant	78.30	1.99			
Sex	-13.89	3.63	-0.24***		
Condition	-0.72	2.70	-0.02		
Step 2				.35	.29
Constant	77.77	1.66			
Sex	-8.91	3.06	-0.16**		
Condition	-1.24	2.26	-0.03		
Inadequacy	-0.16	0.07	-0.17*		
Self-improvement	0.59	0.07	0.65***		
Step 3				.37	.02
Constant	76.08	1.76			
Sex	-9.12	3.02	-0.16**		
Condition	-1.83	2.24	-0.04		
Inadequacy	-0.18	0.07	-0.19**		
Self-improvement	0.64	0.07	0.70***		
Inadequacy x Self-improvement	0.01	0.002	0.15**		

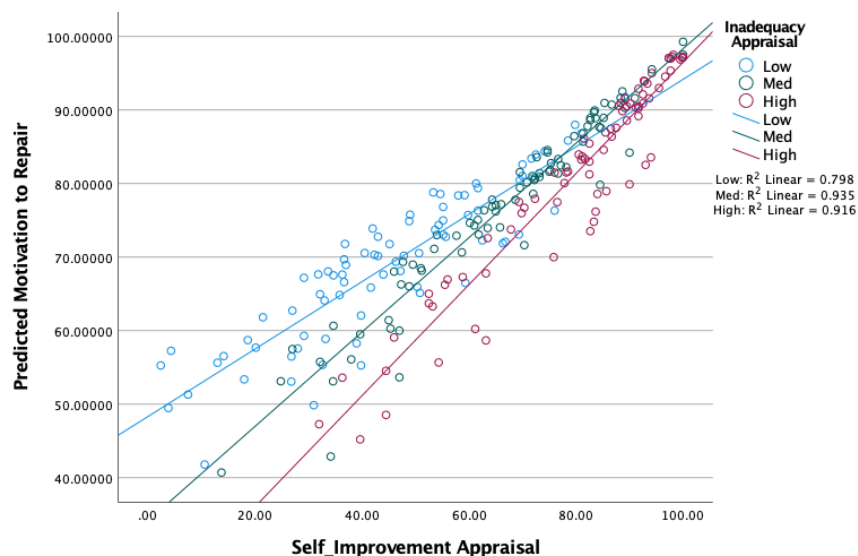
* $p < .05$. ** $p < .01$. *** $p < .001$

Appraisals of inadequacy were negatively predictive and self-improvement appraisals positively predictive of Motivation to Repair. In other words, parents who thought about the workshop less as a reminder of their flaws and more as a reminder to do better, were more likely to feel motivated to take action to repair harm done.

With a significant effect of the interaction term, simple slopes were graphed (see Figure 10). Motivation to repair scores between parents with high and low tendencies to focus on their inadequacies were not substantially different, but the interaction pattern previously seen with other variables holds, with appraisals of self-improvement seemingly contributing more to motivation to repair, for those with high levels of negative self-focus.

Figure 10.

Simple Slopes of the Interaction of Inadequacy and Self-Improvement Appraisals on Predicted Motivation to Repair Scores



To summarize, a higher focus on the workshop as a reminder to do better (self-improvement appraisal) significantly predicted higher receptivity, engagement, knowledge test scores, agency and the motivations to change and repair. Appraisals of inadequacy were

significantly but negatively predictive of receptivity, engagement, knowledge test scores, agency and motivation to repair. Significant interaction effects of appraisals of self-improvement and inadequacy were observed on parents' receptivity, engagement, test scores, agency and motivation to repair.

Chapter 5: Discussion

One of the goals of this study was to investigate whether providing a shame-countering message within a potentially shame-evoking learning context impacts parent's levels of receptivity and engagement, understanding of the content, their sense of agency to manage future challenges, and motivation to change following the workshop. Specifically, I predicted that parents would report better learning outcomes if they received a message that countered appraisals of failing and attributions of parenting challenges to being a globally flawed parent (hypothesis one). Results indicated that this intervention contributed positively to parents' performance on a knowledge test. Parents who received the message scored higher in the post workshop test, reflecting more effective acquisition of the workshop content.

I also predicted that the group of parents who received shame countering messages will report lower shame levels than the group who did not (hypothesis two). Surprisingly, results indicated that parents in both groups did not differ in levels of shame experienced during the workshop, thus making it unlikely that shame mediated the effects the manipulation had on parents' learning (hypothesis three). In other words, the conditional effects on knowledge test scores were likely not due to changes in shame, but possibly shifts in other factors. The manipulation involved messaging that was designed to normalize parent struggles, shifting attributions of failings from the self to focus on behavior, and challenging unrealistic expectations and perceived negative judgment of parents. Perhaps the compassionate nature of these messages led parents to feel validated for their struggles, which motivated them to pay more attention. Perhaps simply inviting an attributional shift away from the self led to more engaged parenting behaviour (Justice, Purtell, Bleses, & Cho, 2020) and activated more effective learning during the parenting workshop.

Whether they received the shame-countering intervention or not, parents reported equally high levels of receptivity and engagement with the workshop content and the presenter, and similar levels of agency and motivation to change and repair. One reason for the lack of group differences in these outcomes may be the high relevance and quality of the workshop. The topic of dealing with difficult emotions during parenting was chosen as it was believed to be relevant and timely for many parents today, and the content and materials were well-designed and delivered by an experienced facilitator. This may have resulted in a ceiling effect garnering overall highly positive responses that covered over effects of more nuanced varied affective responses.

The brief nature of this “add-on” intervention may be another reason for the lack of group differences in shame and some of the learning outcomes. This intervention was intentionally designed to be brief and simple, to make it practical for educators to add to existing curricula, but the brevity of its design may have worked against it in this study. Even with the intentional use of two mediums to strengthen the messaging, two short written messages and one 27-second video message may not have been powerful enough to have an effect on what participants were thinking or how they were feeling during the workshop.

Another purpose of this study was to explore whether shame affects parent learning outcomes in the context of an online parenting workshop. Prior research has shown that parents likely carry parenthood-related shame or guilt, and that shame has been associated with learning contexts. I predicted that parent participants would report feeling some shame, and that shame would negatively impact learning (hypothesis four). As expected, parents who reported higher levels of shame were less receptive and engaged, and scored lower on the knowledge test. These results made sense in light of avoidance-oriented responses that have been associated with shame

(e.g., Tangney & Dearing, 2002). Higher levels of shame were likely accompanied by the urge to ignore, withdraw and disconnect, which made parents more likely to find the workshop less interesting, relevant, or useful, and feel less connection with the presenter. Attention was likely directed inwards and away from the workshop, which may explain the lower test scores.

Shame was also predictive of a lower sense of agency. Agency was assessed in this study in terms of participants' confidence that they could better manage the next emotionally challenging incident that came up with their kids, having been provided with strategies to manage tough emotions in the workshop. Such confidence hinges on a belief that things can change as a result of different actions taken, and thus is conceptually opposite to appraisals of a static, globally flawed self typically associated with shame (e.g., Tracy & Robin, 2006). It follows that parents who felt higher levels of shame would also report lower levels of agency. Together, these findings suggest that feeling shamed is maladaptive for the cognitive and attitudinal aspects of learning in an online parenting workshop.

With regard to motivations, parents who reported greater shame were less likely to be motivated to take action to repair harm, which was expected as repair requires an approach orientation which would be at odds with theorized avoidance-oriented responses to shame. In contrast to findings by Lickel and colleagues (2014) of shame being a stronger predictor than guilt of a motivation to change the self, in the present study shame was found to be unrelated to, and guilt significantly predictive of a motivation for self-change. Is it possible that shame and guilt functions differently with parents⁷ in a context of learning? Findings from this study

⁷ In the two studies described in the 2014 paper by Lickel and colleagues, the first had a sample of 174 young undergraduates, and the second a sample of 53 participants recruited on Amazon's Mechanical Turk, it was unknown whether participants were parents.

suggests that parent guilt may be a broader construct that motivates not just a desire to take action to repair harm done, but also to change aspects of the self towards becoming a better parent.

While shame was the primary emotion of interest in this study, guilt was also included not simply to control for its effects, but also as a factor of interest to explore in this context, and for its relation to shame.

Guilt may be a particularly salient emotion to consider in the context of parent education. Guilt is theorized to be most strongly and frequently felt in relation to ruptures in *close communal relationships* defined by a concern for the other's welfare, where it functions to motivate relationship-enhancing behaviours such as repair or expressions of caring and nurturance (Baumeister, Stillwell, & Heatherton, 1994). With the attachment-driven, emotionally intense and long-term nature of parent-child relationships, it is not surprising that guilt is known to be commonly experienced by parents (e.g., Sutherland, 2010). It was thus expected that the study's participants would feel some guilt during a workshop focused on how parents can do better during difficult parent-child interactions.

Indeed, guilt emerged as a significant factor underlying parent's learning processes in this context of an online parenting workshop and made unique contributions to positive learning outcomes. Parents who reported higher levels of guilt were more receptive and engaged, scored higher on the knowledge test, and as previously discussed, felt greater motivation for both repair and self- change. These results suggest that feeling guilt is adaptive in this context, which is unsurprising as guilt is consistently associated with an approach orientation (e.g., Schmader & Lickel, 2006; Tangney et al., 1996; Wicker et al., 1983) that would be adaptive for learning.

Guilt has been found to commonly co-occur with shame (Schmader & Lickel, 2006; Tangney, 1999; Tangney et al., 1996; Tracy & Robins, 2006). Indeed, most of the parents in the current study reported a combination of shame and guilt. When the focus is on the self, it may be hard to distinguish if it is simply one's actions in the moment, or if it is something at the core of one's self, that is the cause of a problem (Schmader & Lickel, 2006). The workshop, which focused on the parent as the active agent for enacting behaviours that promote positive child and relationship outcomes, could lead parents to feel guilty for what they did or did not do, *and* also to feel ashamed for the parent they were.

The contributions of shame and guilt to learning outcomes were consistently in opposite directions to each other. Examining the interactions between shame and guilt in this context of a parenting workshop context yielded some novel findings. In general, parents who reported higher levels of guilt and lower levels of shame felt more receptive, engaged and motivated. Interestingly, it would seem that the contribution of guilt to learning outcomes depended on how much shame parents reported. For parents who felt high levels of shame, feeling guilty as well was highly adaptive for learning. As a group, these high-shame parents had the lowest levels of receptivity, agency and test scores compared to the two other groups. However, parents in this group who reported feeling guilt in addition to shame reported much higher levels of receptivity, agency, test scores and motivation to repair, at levels comparable to parents who reported little shame. These findings suggest that, for parents feeling high levels of shame, guilt may help to buffer the impact of shame on learning outcomes. Perhaps in activating a motivation to pay attention and take action, guilt helps to alleviate some of the distress of parents experiencing high shame levels, and provide a way forward for regulating shame.

On the other hand, guilt did not seem to matter as much for parents who reported low levels of shame, who had more positive learning outcomes in general. Feeling guilty as well gave this group the least boost to ratings of receptivity and motivation to repair, made little difference to their test scores, and actually *decreased* their sense of agency. That is, for parents who reported little shame, feeling guilty worked in the opposite direction of the other groups, making them *less* confident that they would be able to exercise strategies learnt and manage their emotions better.

The final purpose of this study was to explore self-appraisals parents may make in the context of learning, using a novel measure developed specially for this study. The first noteworthy observation is in regard to parents' responses to appraisal items in the measure. Participants reported on the extent to which they were thinking about each of the appraisals. Notable is the fact that, across participants, the full range of the scale (0 to 100) was used (i.e., some participants had moved the slider from 50 all the way to 0, and to 100). The observed range suggests that many participants had strong affective reactions to the items; while some parents fully endorsed an appraisal, others completely rejected the same one. This finding supports my proposition (described at the start of this thesis) that the phenomenon of parents' highly varied emotional responses to the same parenting information is likely due to wide variations in how parents related the information to themselves. However, even with such extreme variations in responses, the means for all eighteen appraisal items observed in this sample were not extreme (falling within the range of 31.6 to 72.1) indicating that these appraisals were relevant and resonant for many parent participants, supporting its utility as an instrument for tapping the underlying thought processes of parents in a learning context.

Two types of appraisals emerged from the data: thinking that one is inadequate, flawed and judged as a parent (appraisals of inadequacy) and thinking that one needs to be better (appraisals of self-improvement), which were highly related to each other. Findings using this novel measure of parent appraisals support existing relationships research has identified with regards to self-conscious emotions (e.g., Tracy & Robin, 2016). Specifically, I had predicted that appraisals of the workshop as a reminder of one's flaws, failures or inadequacy as a parent would be predictive of feeling shame (hypothesis five). As expected, appraisals of inadequacy predicted shame.

Interestingly, both appraisals of inadequacy *and* appraisals of self-improvement contributed to guilt. This relationship was expected of the appraisal to improve oneself, which focused on what one *should* do (considered to activate prescriptive moral regulation; Janoff-Bulman et al., 2008) and had been associated with feelings of guilt (Sheikh & Janoff-Bulman, 2010; Tracy & Robins, 2006). The finding that appraisals of inadequacy uniquely predicted guilt was more surprising, as appraisals of a static globally flawed self is at odds with the focus on malleable behaviors commonly associated with guilt. Some research has shown that mothers use shame and guilt interchangeably, for failings or transgressions attributed to self (Sutherland, 2010). It is possible that the present findings reflect this overlap of labelling, but it may also be possible that parental guilt in a context of learning may be a broader construct that encompasses appraisals of being flawed and judged as well, which would align with the other unusual finding on guilt from this study, that guilt predicted a motivation for self change.

Finally, as predicted, these self-appraisals had distinct effects on learning outcomes (hypothesis six). The more parents perceived the workshop as having exposed their inadequacies and failings (appraisals of inadequacy), the less receptive, engaged and motivated to repair they

felt, and the lower they scored on the knowledge test. This finding is consistent with previous findings regarding self-related appraisals in that participants who focused on failings and deficiencies in themselves, and who felt judged by others were likely to turn away, disconnect or feel defensive (e.g., Tangney & Dearing, 2011; Tracy & Robins, 2006). Such responses in turn would lead to paying less attention, rating the workshop as less interesting, relevant, or useful, and feeling less engaged with the content or the presenter, as was observed in this study. Parents who focused on their failings also reported being less confident that they can employ strategies learnt and do better next time (assessed as agency in this study), which would be an important goal for parent education resources. This finding is unsurprising, thinking about oneself as being globally flawed is at odds with a sense of confidence that things can change as a result of different actions taken.

Parents who related to the workshop as a reminder to do better (self-improvement appraisal) reported greater receptivity, engagement, agency, and motivations for self-change and repair, as well as better performance on the knowledge test. It was likely that such appraisals activated an approach orientation, directing attentional resources and regulating emotional resources towards learning and engagement. These findings support Janoff-Bulman and colleagues' (2008) theory on prescriptive moral regulation, which posits that focusing on what one should do, or be, activates a prescriptive morality that promotes doing the 'right' thing.

A similar pattern of interaction between these two kinds of appraisals was observed across all learning outcomes. For parents who highly endorsed appraisals focused on a flawed and judged self, thinking that they needed to do better was adaptive for learning, with higher levels of such self-improvement appraisals substantially contributing to higher ratings of receptivity, engagement, agency, motivation to repair and test scores. This interaction effect was

most marked in the prediction of a sense of agency. Parents who did not appraise the workshop as having revealed global personal flaws reported high levels of confidence in themselves to engage the strategies learnt and manage future difficult parenting moments, whether they also thought they should be better parents did not matter. However, parents who were highly focused on their flaws only reported comparably high agency scores if they also thought they should be better parents.

These findings suggest that thinking that one needs to be a better parent or do better as a parent during a workshop has an important role to play in parent learning. Not only did thinking that one should be better contribute directly to positive learning outcomes, but it seemed these thoughts may also buffer the impact of appraisals that one is inadequate, flawed and judged negatively as a parent.

Implications of this Study

In testing an intervention developed from existing theories of cognitive appraisals and shame, this study is a novel exploration of self-related appraisals parent learners make, and how they relate to shame and guilt. Findings add to the literature on moral emotions, parenthood and adult learning, and have practical implications for the field of parent education.

As noted above, the relationships found in this study between the parent-reported appraisals, shame, guilt and learning outcomes do lend support to existing theories in the field of moral emotions, but they also raise important questions for future research. For instance, in the present sample of parents, some findings on guilt run counter to relationships identified in emotion literature. Guilt was found to be the strongest predictor of the motivation to change oneself (with no relationship to shame, countering findings in the 2014 paper by Lickel and colleagues of shame being the strongest motivator of self-change). Feelings of guilt were also

found to be related to parents' self-appraisals of inadequacy, which are not commonly associated with guilt in the literature (e.g., Tracy & Robins, 2006). Such findings suggest that guilt may function differently with parents in a context of learning. It would be valuable for future studies to more closely examine antecedents and response tendencies of *parent* guilt, and to more deeply explore the role guilt plays in a context of learning.

Shame and guilt are both salient emotions in parenthood. Based on the conceptualization of guilt as an interpersonal emotion evoked by ruptures in close communal relationships (Baumeister et al., 1994), the intimate, attachment-based nature of the parent-child relationship makes it likely that any shame elicited by perceived parenting transgressions or shortcomings would be laced with guilt. By examining this interplay of shame and guilt in a context of parent learning, this study opens up a novel angle for future research and design of innovative strategies to enhance the efficacy of parent training programs. In the field of counselling, theory-driven strategies designed to help clients transform shame to guilt have shown promise (Koerner et al., 2011). If indeed future research supports the finding that guilt is adaptive for learners with high shame, such strategies may have useful applications to educational settings too.

This is the first empirical examination of appraisals that parents make in a learning context. This study of parent appraisals integrates three fields of enquiry, 1) parenthood literature suggesting that parents as a population may be more shame prone than others (e.g., Sutherland, 2010), 2) research on shame and learning suggesting that response tendencies associated with shame impact adult learning (Walker, 2017), and 3) research on self-conscious emotions indicating that shame is associated with appraisals of negative self-evaluations (e.g., Tangney & Dearing, 2020; Tracy & Robin, 2006). Against this backdrop, the present findings regarding the

appraisals parents make during a parenting workshop provide important and novel contributions to these three fields, with valuable implications for parent education.

A potential contribution to the field is the appraisals measure developed in the present study to assess the extent to which parents make appraisals of inadequacy, and self-improvement in a context of learning. Building on findings in this study, future research may benefit from extending these measures into a broader scale assessing various self-related appraisals in parenting, and validating those measures in multiple contexts and populations to assess their reliability and predictive validity. Parenting research can benefit from having such an instrument that taps parent's self-related appraisals, to better understand parents' emotions and their impact on behavior.

Today it is widely accepted that emotions play a critical role in learning, and research on emotions in adult learning is growing (e.g., Dirkx, 2008; Rowe & Fitness, 2018). However, research on the emotional underpinnings of parent education is scarce. Parent education resources are heavily accessed, especially online. Relatively little is currently known about how parents feel in a context of learning, and what emotions promote or hinder parent learning. This study adds to the field with findings indicating that most parents reported feeling some level of shame and guilt during an online workshop, and that shame and guilt significantly and differentially affected receptivity, engagement, a sense of agency, motivations to change and take action to repair, and even performance on a learning test. Findings support past research showing that parents are vulnerable to shame (e.g., Sutherland, 2010) and adds to the sparse literature on the role of shame in adult learning contexts (Walker, 2017).

Finally, the study's findings on appraisals have important practical implications for the field of parent education. If as a population, parents are indeed prone to making globally

negative appraisals about themselves (as discussed in chapter two), then addressing appraisals can be a powerful tool for interrupting a cycle of emotions that is unhelpful for learning. The intervention in this study was designed to challenge appraisals of the self as inadequate, deficient, failing and judged, which was demonstrated to be effective for boosting knowledge test scores. Other findings (linking guilt and appraisals of self-improvement to positive learning outcomes) suggest that messaging focusing on appraisals of being a better parent may potentially be even more effective in promoting parent learning outcomes, especially for parents who may be prone to high levels of shame or feelings of inadequacy. Intentional cognitive reappraisal (reframing a situation or changing the way one thinks to change the way one feels) as a strategy for regulating emotions has been widely studied and shown to be one of the most effective and adaptive ways to regulate emotions (e.g., Gross, 1998). Offering appraisals that are known to promote learning, or reframing appraisals that negatively impact learning, may be a useful tool in a parent educator's toolbox for supporting parent learners.

Strengths, limitations and future directions

To the author's knowledge, this is the first study to test an add-on intervention designed to counter shame in a context of parent learning. The present study's finding, that including even a very brief intervention (of three messages delivered in under a minute) can significantly impact how much of the subsequent information was retained is promising, and pave the way for innovative ideas to promote more efficacious parent learning through addressing shame and self-related appraisals. Future studies could build on these results by exploring and testing interventions of *approach-oriented* appraisals of doing better, as well as furthering the research on countering shame-related appraisals.

The intervention was designed to be short and straightforward for parent educators to easily add on to existing curricula, with the goal of encouraging parents to resist making self-related appraisals that may get in the way of learning, in the moment. The efficacy of such brief and simple shame-countering messages is limited, and may not have much impact on highly shame-prone parents who may already be strongly conditioned to respond to even the most ambiguous events as reflecting one's flaws or of others' negative judgment of them.

It would be valuable for future studies to explore the efficacy of longer or extended shame-countering interventions and examine these in relation to trait shame-proneness. Would a higher 'dose' of shame-countering messaging be enough to shift appraisals made by parents with high levels of shame-proneness during a workshop? It may also be likely that highly shame-prone parents may require support that is not possible in the context of a workshop, and more specialized interventions such as counselling may be needed to ease their suffering and support their growth as parents.

A strength of this study was its use of a self-paced online format. Not only was this design attractive and convenient for parent participants, allowing them to participate in their own time and space, but importantly, it was part of an intentional design to test an intervention in a 'real-life' setting, so results could be representative of the way many parents seek information and experience learning today (Plantin & Danebeck, 2009). However, the nature of online learning leaves little control of participant attention. While participants were asked to find a quiet place and fully focus on the workshop, it is possible that participants were distracted or multitasking and caught only part of the shame-countering messages, diluting the effects of the intervention. Challenges with participant attention and engagement with online training is not uncommon. Some research on internet-based health trials have found that maintaining

engagement in online psychological interventions can be difficult as they tend to be more cognitively and emotionally demanding than face to face encounters, in part because social cues and commitments that support positive learner behaviors (such as the presence of an educator) are absent (Andersson, 2009; Mathieu, McGeechan, Barratt, & Herbert, 2013). Future studies testing and comparing such interventions in ‘live’ (synchronous instead of self-paced) online workshops, and in-person parent workshops may reveal more insights. These formats, which are more social in nature, would also present an opportunity to study how a learner community may affect the associations of shame and learning.

Using an experimental design allowed for robust conclusions to be drawn about the impact of the present study’s intervention on learning. However, as correlational analyses were used to investigate the relationships between shame, guilt and appraisals on learning outcomes in this study, making causal interpretations between these factors would be inappropriate. Future research should consider employing causal designs, such as eliciting shame or guilt before a workshop (such as using narrative recall paradigms to evoke these emotions in response to their own experiences; Lickel et al., 2014), to investigate these relationships.

This study helped shed light on the thoughts and feelings parents experienced during an online workshop. Using self-report measures were helpful and necessary in giving voice and form to these subjective emotional processes that are usually hidden from sight. However, these measures are subject to potential self-report bias, especially those assessing learning outcomes. Future studies could utilize more sophisticated and objective ways of assessing attention, receptivity and engagement that some modern online survey platforms offer, such as tracking the eyeline, click-responses or even heart-rate monitoring as a proxy for engagement.

A limitation of the present study was the highly uneven gender groups that participated. With a small male sample, findings may not be generalizable to fathers, and while some main effects of sex were observed (for guilt and appraisals of self-improvement, as well as in receptivity, engagement, knowledge test scores and motivations for repair and self-change) sample groups were too uneven for meaningful interpretation and further exploration. Interesting gender differences in the experiences of shame and guilt have been found in the field, such as research indicating women in general are more prone to feeling shame (Benetti-McQuoid & Bursik, 2005; Brown, 2006), which may possibly be due to having higher levels of interpersonal sensitivity than men (Ferguson & Eyre, 2000; Nyström et al., 2018). It will be valuable for future studies to explore whether shame and guilt functions differently for mothers and fathers, and to develop and test gender-specific learning interventions for parents. Future shame research with parents who identify as non-binary will also be a highly valuable and novel addition to the field.

Although the current sample was sufficiently large to address the study's hypotheses, one shortcoming was that participants were recruited through predominantly Canadian networks and online platforms. Although the sample was ethnically diverse, most of the participants lived in Canada. More research is needed to examine if these findings can be generalized to other cultural contexts. Existing cultural research on shame is intriguing; currently most studies are conducted with Western samples, and findings paint shame as a dreaded emotional experience widely associated with negative emotional and behavioral outcomes (e.g., Brown, 2006; Tangney & Dearing, 2011). However, some research conducted in cultures with more collectivist orientations paint shame in a gentler light, suggesting that feeling and expressing shame may be adaptive and an important motivator of self-change, particularly for the maintenance of social

relationships and peace (e.g., Wong & Tsai, 2007). Future work should involve cross-cultural comparisons of shame's role in learning.

Concluding thoughts

Different responses to the same parenting advice tell us that there are underlying emotional processes that promote engagement with the information, allowing parents to feel empowered and hopeful, or triggers withdrawal and disengagement, leaving some feeling worse about their parent selves. What matters is not simply the information parents receive, but how they are receiving it and the emotion-linked appraisals that result. For an educator like me, this is salient information. I realize that it is not what I say, but how I make them feel, that can make a difference, especially for supporting learners who are already struggling.

What does it mean to teach with such an awareness? If, as the literature suggests, parents are more vulnerable to feeling shamed, and learning can be shaming, I could weave in encouraging messages that focus doing better as parents, or compassionate messages inviting *reappraisals* that uncouple the self from behavior or that challenge unrealistic expectations or perceived judgment by others. Findings from this study suggest that such actions can be adaptive for positive learning outcomes.

The context of learning can be a vulnerable space for parents; seeking information, advice and support may well be an act of courage for a parent learner. In bringing shame out of the shadows and drawing appraisals into the light, I hope the findings of this study can help guide the development of parenting resources that are more compassionate and supportive in generating positive learning outcomes.

"Maybe I'm not as bad of a parent as I thought"- study participant

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Appendices

Appendix A Recruitment letter

Dear _____,

My name is Angela Low, and I am a PhD student at the University of British Columbia (UBC). Together with Dr. Shelley Hymel, a professor in the Faculty of Education at UBC, I am conducting a study about parents' online learning. This important study can help us understand what helps or gets in the way of parents' learning online and can help to guide the development of more effective and useful learning resources for families.

We are asking for your help in recruiting participants (parents of children ages 3 – 16) for this study. Study participants will attend a **free 30-minute online parenting workshop on supporting children's emotional well-being with emotional intelligence**. This workshop will provide parents with 6 research-based strategies that can promote emotional intelligence and help them manage big feelings during challenging moments with their children in positive ways. As part of the study, parents will be asked to answer some questions before, during and after this workshop.

The workshop will be presented by me. I am a researcher in emotional intelligence and child development and have been developing educational resources and facilitating workshops for parents and youth for well over a decade in China and Canada.

We think that this could be an interesting and valuable study for parents in your network. They can view the workshop at their own convenience using their own devices. All study participants will also be provided with a download link for further parenting tools for emotional

intelligence and have an opportunity to enter a draw to win one of 30 \$50 Amazon Gift Vouchers.

We attach the flyer for this study, and hope that you can help us by promoting this in your network in the following ways: 1) posting this on your bulletin boards online or in the building, 2) including this in any newsletters that you may have, 3) emailing this to your network of parents, or 4) posting about this study on your social media feeds.

Your support and promotion will contribute to the success our project; we hope you will help us invite parents to participate. Every participant and organization may opt to receive a summary of the results of the study. We look forward to sharing with you the lessons we learn from our study participants, and how we can use that information to make learning resources for parents more enjoyable and effective!

Yours sincerely,

Angela Low, M.A.

Co-Investigator

Doctoral Candidate

Educational and Counselling Psychology, and

Special Education

University of British Columbia

Shelley Hymel, Ph.D.

Principal Investigator

Professor

Educational and Counselling Psychology,

and Special Education

University of British Columbia

Appendix B Study flyer

**FREE ONLINE PARENTING WORKSHOP
ON EMOTIONAL INTELLIGENCE**

Seeking parents to attend a 30-minute workshop
and complete a 15-minute survey as part of a
study on online parent learning. Participate using
your own device whenever you like.

ALL PARTICIPANTS RECEIVE A TOOLKIT FOR PARENTING WITH EMOTIONAL
INTELLIGENCE, AND ENTER A DRAW FOR 30 CAD \$50 AMAZON GIFTCARDS!

Limited spaces available until Jan 31st. To join,
Go to <https://tinyurl.com/ubcparentstudy>
Or scan QR code





LEARN 6 STRATEGIES TO
DE-ESCALATE
CHALLENGING MOMENTS
WITH YOUR CHILD.

Sp Adobe Spark



THE UNIVERSITY OF BRITISH COLUMBIA

Appendix C Survey

Emotional Processes in Online Parent Learning

- Consent form and Survey -

Emotional Processes in Online Parent Learning

Purpose: Many parents today depend on online resources (e.g., workshops, videos, articles) for help with parenting. Sometimes, the same resources can be helpful and empowering to some parents, yet others may find them unhelpful and de-motivating. We are conducting a study to learn how parents feel about and respond to an online parenting workshop, and how this may affect learning. By participating in this study, you will be helping us understand what helps or hinders parents learning online, and how we can develop more effective and useful learning resources for parents. Information gathered will be used for the doctoral dissertation of co-investigator, Angela Low. Results of this study may be presented at research conferences and published in scientific journals.

What's involved: We are seeking parents to complete a free, self-paced online parenting workshop and survey. The workshop, **Mind the Heart: Supporting children's well-being with emotional intelligence during challenging times**, provides parents with practical strategies for handling difficult moments with their child with emotional intelligence. This 30 minute workshop includes a reflection activity, a short video about managing difficult emotions in parenting, and a presentation of 6 research-based strategies for emotionally intelligent parenting.

You will be asked to respond to questions (10-15 mins) before, during and after the workshop (30 mins). The length of your participation is expected to be around 40 to 50 minutes.

Eligibility: To participate, you must be a parent to at least one child between 3 to 18 years old.

Benefits and Risks: In the workshop, you will learn practical emotion regulation strategies to use with your children that research has shown to promote emotional intelligence and positive parent-child relationships. We believe that the risk in participating in this study are minimal. Included in the workshop is a reflection activity about a difficult interaction with your child and an animated video explaining the impact of yelling at children, which can make some feel uncomfortable. That said, this video is highly viewed on youtube.com and typical of a mainstream parenting video.

To thank you for your participation: You will receive a download link for a 12-page toolkit of research-based tools and resources for Parenting with Emotional Intelligence, as well as an opportunity to enter a draw for one of 30 CAD \$50 Amazon Gift Vouchers. All participants can access these on the last page of the survey.

Confidentiality: The information in this study will be used for research purposes only and in ways that will not reveal who you are. Your responses will be made anonymous by removing any identifying information. After the study is completed, results may be used for academic presentations, publications and teaching. We have no plans to share the data obtained and if required would only share completely anonymous data.

Participation is entirely up to you. If you decide to participate, you may stop at any time and information you provided will not be used.

By clicking the button below, you acknowledge:

- Your participation in the study is voluntary.
- You are 18 years of age or older.
- You are aware that you may choose to terminate your participation at any time for any reason.

☐ I consent, begin the study.

☐ I do not consent, I do not wish to participate.

Principal Investigator

Shelley Hymel, Ph.D.

Professor

**Dept. of Educational and Counselling
Psychology, and Special Education
University of British Columbia**

Co-Investigator

Angela Low, M.A.

Doctoral Candidate

**Dept. of Educational and Counselling
Psychology, and Special Education
University of British Columbia**

Pre-workshop Survey

1. **What is your age? ____ years**

2. **What best describes your racial/ethnic identity?**

- ☐ Aboriginal/ Native People
- ☐ African
- ☐ Asian
- ☐ Caribbean
- ☐ European
- ☐ Latin American
- ☐ Middle Eastern
- ☐ South Asian
- ☐ Mixed _____
- ☐ Other _____

3. **What best describes your gender?**

- ☐ Male
- ☐ Female
- ☐ Prefer not to answer
- ☐ Prefer to self-describe ____

4. **What is your marital status?**

- ☐ Married/Common Law
- ☐ Separated
- ☐ Single (Never Married)
- ☐ Divorced
- ☐ Widowed
- ☐ Prefer not to answer

5. **What is your education level?**

- ☐ High school diploma
- ☐ Masters Degree
- ☐ Prefer not to answer
- ☐ College/Technical School
- ☐ Professional Degree
- ☐ Other
- ☐ PhD

- ☐ Bachelors Degree

6. How many years have you been a parent? _____ years.

7. How many children do you have?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ More than 6

8. Age of your child/children (select all that apply)

- ☐ 0-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ 16-18
- ☐ Over 18

9. What share of the parenting load do you carry?

0 100

None Half All

10. How often do you access online parenting resources (e.g., websites, videos, podcasts, articles)?

0 100

Never Rarely Often Everyday

The following questions tell us a bit more about you as a parent, and your relationship with your child. If you have multiple children, please think of only one child when you answer.

11. What is your relationship to these children?

- ☐ Parent
- ☐ Grandparent
- ☐ Other (please specify __)

- ☐ Step-parent
 ☐ Adoptive parent
 ☐ Prefer not to answer

12. Overall, how easy versus difficult would you say it is to care for your child?

0	100
Extremely Easy	Neither difficult nor easy
	Extremely difficult

16. When interactions with your child get frustrating, how often do you:

A. Find it hard to stay calm?

0	100
Never	About half the time
	Always

B. Act in ways you regret?

0	100
Never	About half the time
	Always

C. React emotionally (e.g., yelling or saying something hurtful) towards your child?

0	100
Never	About half the time
	Always

17. As a parent to my child, I think I am:

0	100
A bad parent	An average parent
	A good parent

Mid-Workshop Survey:

18. To what extent did you experience the following emotions *right now*?

	Not at all	Moderately	Extremely
Interested	0	-----	100
excited	0	-----	100
confident	0	-----	100

enthusiastic	0 -----100
inspired	0 -----100
determined	0 -----100
upset	0 -----100
guilty	0 -----100
worried	0 -----100
defensive	0 -----100
irritable	0 -----100
ashamed	0 -----100
humiliated	0 -----100
embarrassed	0 -----100
disgraced	0 -----100
sorry	0 -----100
remorseful	0 -----100
regret	0 -----100
sad	0 -----100

19. It is common to find ourselves thinking or saying things to ourselves when we are taking in information. The following are thoughts that parents may have during a workshop. To what extent do you have the following thoughts?

a) Others probably think I'm not a good parent.

0				100
Not at all		A little	Quite a bit	A lot

b) I should be more patient with my kid.

0			100
Not at all	A little	Quite a bit	A lot

c) I should work harder to be a good parent

0			100
Not at all	A little	Quite a bit	A lot

d) I do the best I can as a parent.

0			100
Not at all	A little	Quite a bit	A lot

e) If people saw how I sometimes act towards my kids they would probably think I'm a bad parent.

0			100
Not at all	A little	Quite a bit	A lot

f) Other parents are probably much better with their kid than I am with mine.

0			100
Not at all	A little	Quite a bit	A lot

g) Others probably judge me for how I react to my kids sometimes.

0			100
Not at all	A little	Quite a bit	A lot

h) I work hard at parenting.

0			100
Not at all	A little	Quite a bit	A lot

i) I feel like a terrible parent.

0		100
---	--	-----

Not at all

A little

Quite a bit

A lot

r) I should be a better parent than I am.

 $\overline{0}$

Not at all

A little

Quite a bit

100

A lot

s) I am probably not doing enough for my kid.

 $\overline{0}$

Not at all

A little

Quite a bit

100

A lot

t) As a parent I may be letting everyone down.

 $\overline{0}$

Not at all

A little

Quite a bit

100

A lot

u) I need to do things better as a parent.

 $\overline{0}$

Not at all

A little

Quite a bit

100

A lot

v) Others probably control themselves better around their child than I do around mine.

0

Not at all

A little

Quite a bit

100

A lot

What other thoughts go through your mind?

--

Thank you. Please click on the following video.

Post- Workshop Survey

20. How useful was this workshop for you?

 $\overline{0}$

Not at all useful

100

Extremely

21. How interesting did you find this information?

0	100
Not at all	Extremely

22. How relevant did you find the advice provided?

0	100
Not at all	Extremely

23. To what extent do you think the strategies provided will work for you?

0	100
Not at all	Extremely

24. How much did you relate to the presenter?

0	100
Not at all	Extremely

25. How interested would you be to attend more workshops by this presenter?

0	100
Not at all	Extremely

26. How engaging did you find this workshop?

0	100
Not at all	Extremely

27. How likely are you to recommend this workshop to others?

0	100
Not at all	Extremely

28. After learning these strategies, how confident are you that you...

a) can keep calm when things get frustrating with your child?

0	100
Not at all confident	Very confident

b) can do better at not reacting emotionally towards your kid, even when you are really upset?

0	100
Not at all confident	Very confident

c) can respond in ways you will not regret later, even when strong emotions arise?

0	100
Not at all useful	Very confident

29. How true is the following for you? At the end of this workshop....

a) I feel the urge to be a better parent.

0	100
Not at all true	Very true

b) I feel the need to change myself.

0	100
Not at all true	Very true

c) I feel I should change certain aspects of myself so that I can do better.

0	100
Not at all true	Very true

d) I feel there are things about myself I need to change.

0	100
Not at all true	Very true

e) I feel like I should apologize for some of my parenting behavior.

0	100
Not at all true	Very true

f) I feel like I should do something to make things better in my parenting.

0	100
Not at all true	Very true

g) I will try to do something different in my parenting after this.

0	100
Not at all true	Very true

h) Attending this workshop makes me want to disappear.

0	100
---	-----

Not at all true

Very true

i) I feel like hiding and being alone after hearing all this.

0

100

Not at all true

Very true

j) This workshop makes me want to escape from being a parent, even just for a little.

0

100

Not at all true

Very true

30. Recall Accuracy Workshop quiz

What are the three most important messages you have gotten from this workshop?

Please answer the following 8 questions, which can help you review what you learnt.

1. When we use the strategy Pause, we focus on...

- Naming our emotions
- Wondering how our child is feeling
- Taking a conscious breath
- Focusing on connection

2. One way to activate emotional intelligence in challenging moments is to bring to mind the parent you want to be. Which of the following is NOT helpful for helping you identify your

Best Parent Self?

- Thinking of words that describe qualities we want to have
- Thinking about our imperfections as parents
- Thinking about the reputation we want to have
- Picturing a person in our life that we admire

3. Name it to Tame It refers to the idea that when we name our _____ we can manage them better:

- Behaviours
- Thoughts

- Parenting Goals
- Emotions

4. To exercise empathy, it is helpful to develop a well-rehearsed Empathy Reflex we can use in place of our usual responses. Which of the following should NOT be part of the empathy reflex?

- I say what I think my child is feeling.
- I validate my child's feelings.
- I offer my child a solution.
- I guess why my child might be feeling this way.

5. Using the strategy Sense in a difficult moment helps to build emotional awareness. The most important question we ask ourselves with this strategy is...

- Am I being a good parent?
- How am I feeling?
- What do I do now?
- How should I be feeling?

6. Which of the following is LEAST useful when you want to focus on strengthening your connection with your child?

- Assuring them you love them
- Saying "I am here"
- Offering a solution to their problem
- Being fully present with them

7. Doing acts that focus on love and connection is important for children's well-being because.....

- It shows them how people should behave.
- They will love you more.
- It helps them feel secure.

- It helps them move on from the problem faster.

8. When you feel yourself wanting to react to uncomfortable emotions during an interaction with your child, a good way to activate your emotional intelligence is to think...

- “What am I doing wrong?”
- “Why is my child doing this?”
- “How do we get past this quickly?”
- “What would my best self do?”

Closing Survey

A focus of this study is on the emotion of SHAME.

Shame is an uncomfortable feeling that occurs when we think we have failed to meet expectations or standards that others have of us, when we feel we are not good enough, or that there is something wrong with us. We may feel shamed when we think others are judging us. Shame usually makes us feel small, with an urge to distance ourselves (for example, to disconnect, hide, run away); but shame can also make us feel defensive or angry, and want to fight or argue.

31. To what extent did you feel this way during the webinar?

0		100
Not at all		Extremely

32. What aspects of this workshop causes you to feel shame in these situations (e.g., the context, the video, the way it was communicated etc.)?

33. How often have you felt shame like this when accessing parenting resources (e.g., books, workshops, videos, blogs etc.)?

0
Never

100
Always

34. Can you tell us a bit more about these experiences? (e.g., When did you to feel shamed and what caused it?)

35. Let's end on a bright note... what sparks joy for you in parenthood?

Thank you very much for your participation in this important research on parent's online learning processes.

We hope you found the workshop helpful. Having strong, difficult feelings, and struggling to manage them is very common among parents. It doesn't mean you are failing at parenting, or that you are a bad parent. No one can be calm and nurturing all the time. Most of the people around you know how hard parenting can be.

Here is a [download link for a toolkit for Emotionally Intelligent Parenting](#).

If you would like to enter a draw for 30 \$50 Amazon giftcards, please provide a contact email address below. The draw will take place when the study closes on the 15th of February 2021, and winners will be notified by email.

If you would like to learn about the results of this research, please check the box below, and provide a contact email address.

- ☐ I would like to receive the results of the research.
Email address for a report of the results:

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics.